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# Pageflex<sup>®</sup> Studio User Guide

Version 7.6



PAGEFLEX<sup>®</sup>

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# Introduction

# 1

Pageflex Studio is a project and template design application for variable data publishing. You can use it to create variable documents rendered from the desktop, network servers, or as part of a Web-to-print workflow. These documents can be generated as print, PostScript, PDF, bitmap, and a large number of additional output formats.

Studio offers a full suite of features and functions to manage publishing design and production in a single application, through a unified graphical user interface for template and project creation.

As you work in Studio, a Document window lets you create and edit templates. The Project panel lets you view a variables list from one tab, preview jobs from another, and view files from a third. A Pages tab presents a summary for master page and layout management. Placeholder icons in the Pages tab represent automatic pages generated by text overflow, variable pages generated by PDFs or inserted documents, and filler pages generated to maintain page count. The Layout tab presents a dynamic list of elements in your template, mapping elements to variables.

# How Pageflex Projects Work

Pageflex projects serve many purposes, from simple Web-based form-filling and preview to full-service marketing-on-demand solutions. Projects allow you to assemble content into unique documents, each customized for a particular use, or personalized for a particular individual.

## Separating Form and Content

A Pageflex project is based on the principle of separating the form of the document from the content in the document. **Content** refers to the raw information — text, images, graphics. **Form** refers to the design of the document — page layout, fonts, and image sizes. Pageflex allows you to encode form into an intelligent template, capturing the look and feel of the design in an abstract way.

A template consists of containers that hold the content, both static and variable. The template's "intelligence" comes from its ability to **flex**. The flex properties of a container allow it to expand, contract, and reposition itself and adjacent containers to accommodate the variable contents of each different document. Flex provides the "springs" and "struts" required for sophisticated variable publishing.

## Personalization with Pageflex

Pageflex combines form and content through two kinds of personalization: profile personalization and content personalization. You decide the level of personalization you want in your documents. Choose from the simple inclusion of words in a database to the complex selection of stories and images based on a set of rules you set up for a project.

Through **profile personalization**, you can add specific information for each individual, much like using a mail merge function in a word processor. This content is retrieved from a **profile data source**. The profile data source contains the information that makes each document unique for each intended reader. For example, the profile data source can contain customer information such as name, address, and interests. In a Web-to-print world, you can capture this information and drive the job that personalizes it from your website.

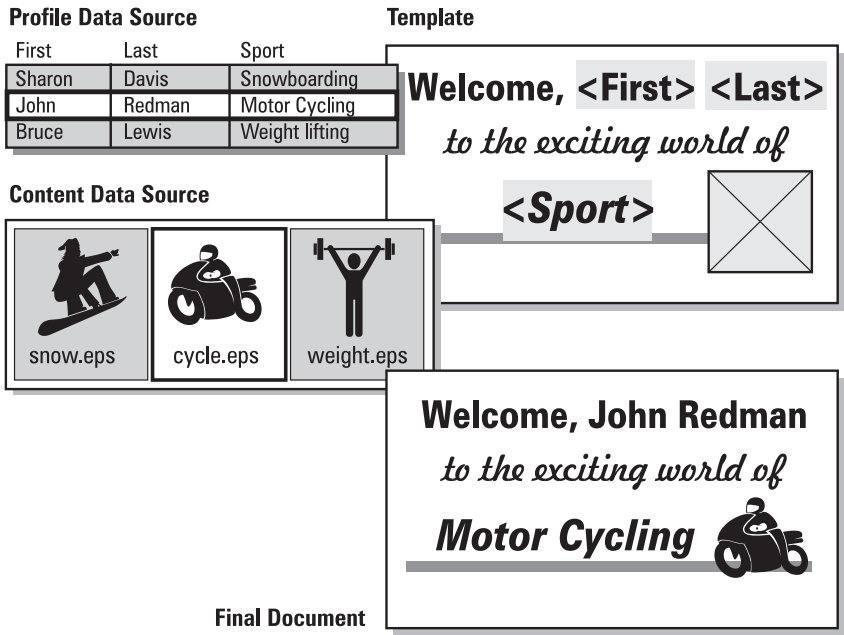
Through **content personalization**, you can use the information in the profile data source to establish rules and conditions for selecting additional content



from the **content data source**. The content data source can be a collection of files stored in an organized hierarchy in your file system, or it can be an asset management database. The reader's profile information within that data source drives the selection of additional personalized content. For example, a customer's profile lists an interest in refrigerators. Through content personalization, Pageflex selects content related to refrigerators, but not dishwashers.

# Understanding Data Ingest

Pageflex adds variable content to each document through a process called **data ingestion**. Through data ingestion, Pageflex gathers each piece of variable content from the profile and content data sources and applies the composition rules defined by the project template.



In the example above, Pageflex uses the profile data source, the content data source, and the template to create each final document. The template includes placeholders for the variables. Pageflex ingests the variables **First**, **Last**, and **Sport** directly from the profile data source. The format for each text variable comes from style information in the template. For the image variable, Pageflex selects the image using a rule that defines the variable. The rule tells Pageflex which image to use based on the **Sport** variable in the profile data source. Studio can also ingest document variables that govern placement of multi-page templates and PDFs and the use of filler pages.



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# Working in the Studio Environment

## 2

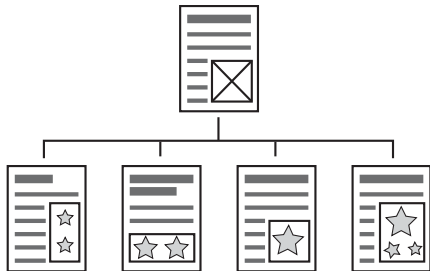
Pageflex Studio is an integrated application for Pageflex project development. It includes capabilities for template, variable, and job creation.

Studio features a Project panel that displays the variables, jobs, and files in the project folder. There also is a document area where template and editing tools are displayed. Users can open a project file and edit it separately from a template, or open a project file and its associated template to preview variable jobs.

This chapter goes over the application interface.

# Templates and Projects

Pageflex Studio enables you to work with the project file and project templates. A **template** is a document form containing the variables, text, images, shapes, and styles that determine the outcome of your variable publishing project. It's called a template because it provides the essential instructions for creating each final document. You work on the templates in the **document area**.



**You create a document template...**

**...to tell the output driver how to create each document instance.**

You can work on individual documents with Studio, just like you would if you were using a static desktop publishing application. However, the power of Studio is that it enables you to create a template with all the instructions to create the final documents. In other words, you create the **document template** that is used to create **document instances**.

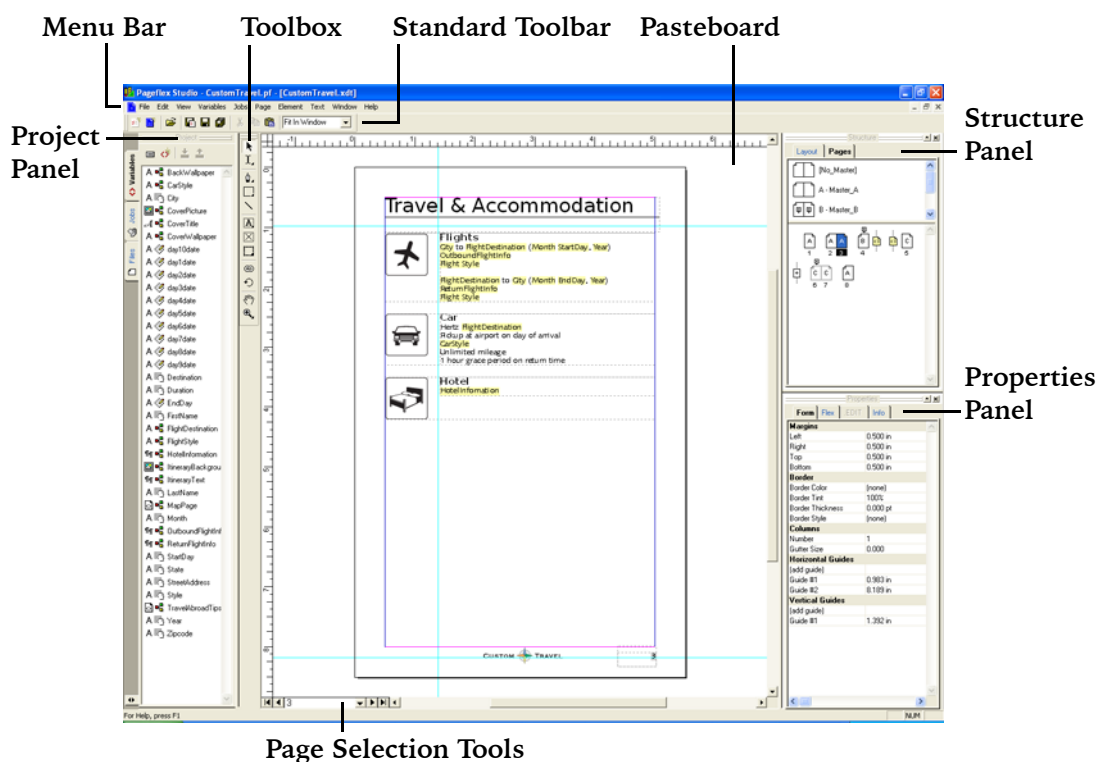
A **project file** contains all the resources for your variable job. It references the definitions and data sources for your variables (if any), specifies the template you are using for output, and contains your output preferences. You can also use Studio to create **transactional jobs**, which use a Web page or another application to collect profile data, to be processed by Pageflex Server or Pageflex Storefront.

# Getting to Know the Studio Workspace

Pageflex Studio can be used for a variety of project tasks. A user can open a project to add a data source, variables, or jobs, or create a new template for variable jobs. Studio also can be used to create formatted text and area templates for use with variable jobs.

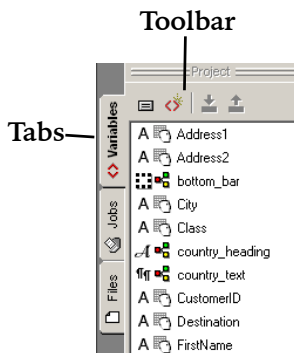
In Studio you can open a project and a template simultaneously. This dual display makes job previewing easier and enables users to better conceptualize variable data productions.

Below is a screenshot of the Studio workspace with an open project and template.




When you first open Pageflex Studio, it displays the **application menu bar** and the **standard toolbar**. Create a new project or template or open an existing project or template using the **File** menu options. View online help topics or Pageflex Web pages from the **Help** menu. In addition to the menu options, you also can use the icons in the toolbar to create a new template or project or open an existing template or project.

## Project Panel



When you create or open a project, you see the Project panel. The Project panel is comprised of the Variables, Jobs, and Files tabs. Click a tab to view, add, or edit project properties on the selected tab. Drag the right hand resizing bar to change the width of the Project panel.

Press the **Open/Shut tab**  at the bottom-left corner of the Project panel to see only the project tabs. Click a tab to see the contents of that tab.

### Variables



The icons in the Variables toolbar let you add a data source, add a variable, apply the highlighted variable to the selected element in the document area, or remove the variable from a selected element in the document area. The window below the Variables toolbar lists the variables in the project. Click a variable to highlight it, or double-click a variable to edit it.

### Jobs



The icons in the Jobs toolbar allow you to add a job, preview a job, preview a job with the current template, or submit a job. The window below the Jobs toolbar lists the jobs in the project. Click a job to highlight it, or double-click a job to edit it.

### Files



The icon in the Files toolbar allows you to refresh the file list. The window below the Files toolbar lists the files in the project. Click a file to highlight it, or double-click a file to edit it.

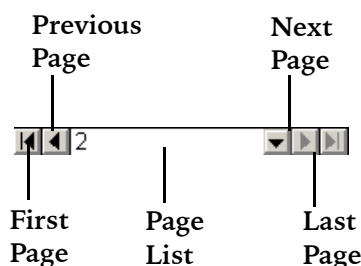
**Note:** The main application menus as well as the right-click context menus offer these and other capabilities.

## Main Document Window

The **Main Document window** is where you create elements and text boxes and preview variable jobs. This window takes up most of the space on the Studio user interface. At the bottom of the main document window are the Page Selection tools.

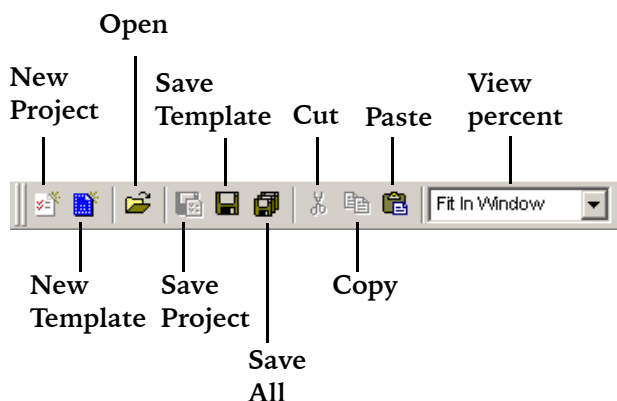
## Page Selection Tools

The Page Selection tools are a quick and easy way of seeing which page you are on and getting to the next page, previous page, or a page from the page list.



## Standard Toolbar

The standard toolbar contains icons for basic operations such as opening and saving a project, and changing the view percent.



## Structure Panel

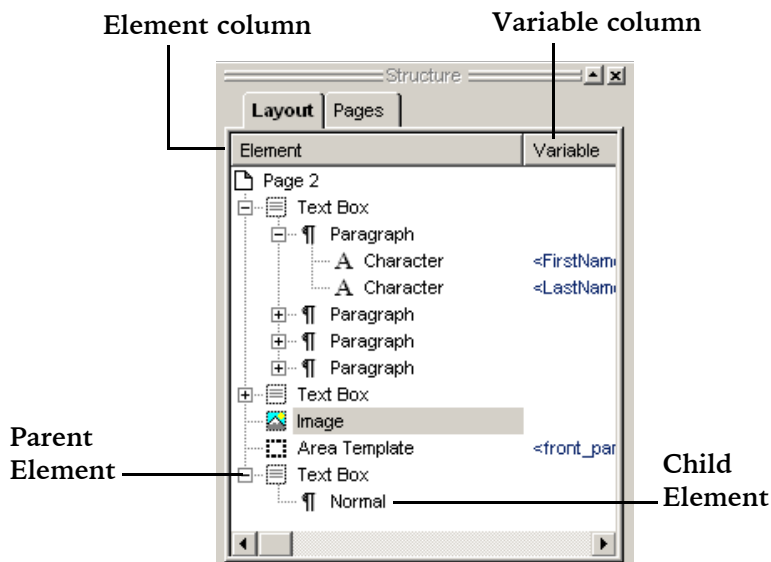
The structure panel contains two tabs, the **Layout** tab which displays the layout structure of your document, and the **Pages** tab, which displays the page structure of your document.

### Layout Tab

The Layout tab allows you to view the structure of a template so that you can see what elements are on each page of the template. Selecting an element in the Layout tab selects it in the Document window. The Layout tab has two columns,

Element and Variable, which display a structural tree of the elements in the document, and associated variables if applicable.

- To view the Layout tab, choose **View > Structure** and click the **Layout** tab in the Structure panel.



### Element Column

This column lists all the elements in a template. An icon in front of the element indicates its type.

The Layout tab displays the parent-child relationship between elements. The highest element in the structure is the Page element, and all other elements are children to the Page element. If an element is a parent to any other elements, the Layout tab displays a plus sign (+) next to that element.

- Click the plus sign (+) to view the child elements.
- Click the minus sign (-) to collapse the view.

For example, in the graphic above, the paragraph “Normal” is a child element to the “Text Box” parent element.

### Variable Column

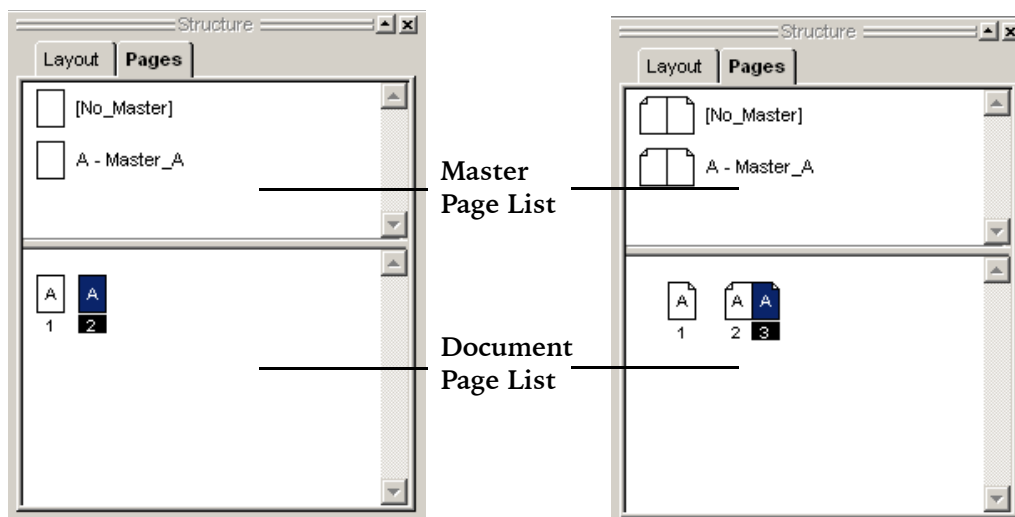
This column displays the names of variables assigned to adjacent elements in the Element column.



## Pages Tab

The Pages tab shows you the Master Page list and the Document Page list.

- To view the Pages tab, choose **View > Structure** and click the **Pages** tab in the Structure panel.



When you first create your template, you can choose between single-page or left/right master pages. If you select single-page masters, pages appear in the single-page format, as shown above on the left. If you select left/right master pages, pages appear as shown above on the right, with facing pages attached to one another.

The **Master Page** list displays representations of the master pages in your document template. The **Document Page** list displays the individual pages of your document template, as well as dynamic pages such as automatic pages, filler pages, and variable pages. The master page assigned to document pages is specified by the letter associated with the master.

You can rearrange the page order in the Pages tab by using drag and drop or menus. When you use menus to rearrange the page order, you do not need to have the Pages tab open.

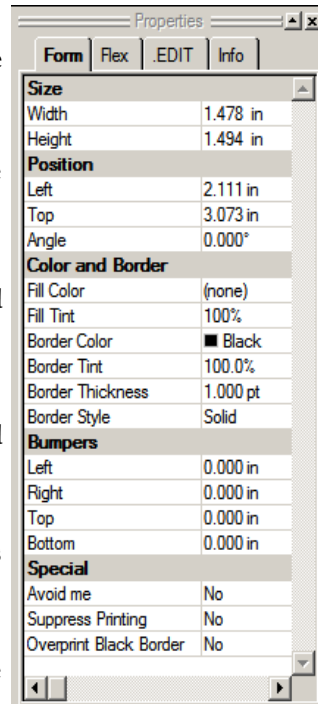
## Properties Panel

From the **Properties** panel, you can edit the properties of any selected element or text range in the displayed document. The **Properties** panel displays the properties or attributes of the current selection. The available properties change according to the type of element selected.

If you select more than one element, the **Properties** panel displays the common properties for the selected elements.

The properties panel has four tabs:

- **Form tab.** This tab displays the properties related to the appearance and behavior of the selected element.
- **Flex tab.** This tab displays the specific properties for the flexible behavior of an element.
- **.EDIT tab.** This tab displays the properties used with Online Design and Editing Sessions and the Free Edit step in Pageflex Storefront.
- **Info tab.** This tab displays static information about elements.



The **Name** property displays the name of a Studio element.

The **Kind** property displays the kind of object the element is.

The **Autochain** property shows whether an element is a chained text box or not.

The **TOC Override Text** can be used to override the text of an entry in the Table of Contents, if you want to provide alternative text from that found directly in the document text.

**Master Element** shows whether an element is part of the master page or not, and **Master Page**, displayed when a page is selected, denotes which master page the page uses.

### ► To navigate the Properties panel using the keyboard

- To move sequentially through the list of properties, press the **TAB** key.
- Press **SHIFT + TAB** to move to the previous property.
- Press **ENTER** to return to the Document window.

## Toolbox

Click a tool in the toolbox to select it. Some tools have additional options to offer more shapes or functions. Click and hold a tool to view additional options. The tools are listed and explained below in the order in which they appear on the toolbox.



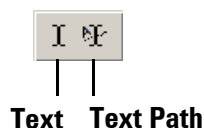
### Selection Tool

With the Selection tool, you can manipulate elements in the Document window. When you select an element, eight handles appear at the edges of the element, and the Properties panel displays the properties of the element.

- To switch from the Selection tool to the Text tool, double-click a text container.

### Text Tool

The Text tool has two options.



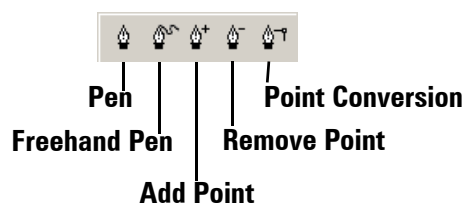
Use the **Text** tool to manipulate text inside text containers. Within a text container, the tool functions like the cursor in a word processing program.

Use the **Text Path** tool to add text on paths, such as lines or around shapes or area templates.

- To switch from the Text Tool to the Selection Tool, hold down the **CTRL** key and click any container or fixed shape.

### Pen Tool

The Pen tool has five options.

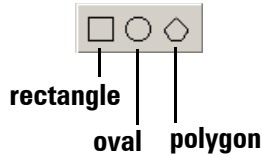


Use the Pen tool to draw lines and Bézier curves, the freehand pen tool to draw freehand curves, the Add and Remove Point tools to add and remove points to

shapes and lines, and the point conversion tool to convert points to Bézier points. See “Creating and Editing Elements” on page 54 for details.

## Shape Tool

Fixed shapes do not contain any other elements. Use them as design elements for a page. There are three tools for adding various shapes.

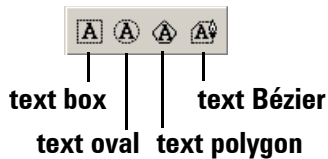


## Line Tool

Use the line tool to add straight lines. Drag to create the line. Hold down the **SHIFT** key to constrain the line at 90° increments.

## Text Container Tool

Text in Studio appears inside a text container. There are four tools for adding various text container shapes.

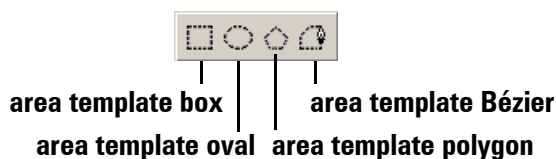


## Image Tool

Image containers contain images. Image containers are displayed as rectangles.

## Area Template Tool

Use area template containers to hold a collection of elements inside a single container. The area template container crops any element that extends past the border of the container. There are four tools for adding area template shapes.





### Chain Tool

Use the Chain tool to create linked text containers or to link together existing text containers.



### Rotation Tool

Use the Rotation tool to rotate elements. Click any element with the tool. Drag one of the four corner handles to rotate the element. Release the mouse button when you are finished.



### Hand Tool

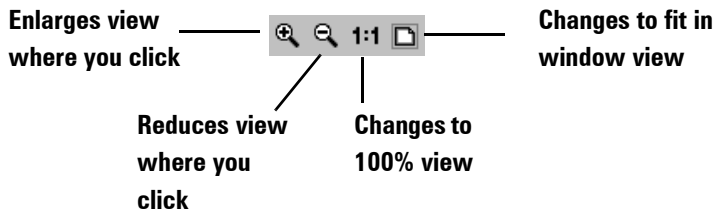
The Hand tool allows you to pan the page.



### Zoom Tool

Use the Zoom tool to reduce or enlarge the magnification factor for viewing the template from 1% to 1200%. With the Zoom tool, you can enlarge a particular area to make more precise edits, or you can reduce the magnification for a complete view of a large document.

The Zoom tool has four tool options.



You can switch between  and  by pressing and holding the **CTRL** key.

## Toolbox Shortcuts

You can use the keyboard shortcuts to access tools, as shown in the table below.

Tool	Key
Selection	A
Text	T (Press ESC to exit text entry)
Pen	P
Shape	M
Line	\
Text Container	O
Image	I
Area Template	X
Chain	C
Rotation	R
Hand	H
Zoom	Z

These shortcuts can appear inactive when the focus is not on the page view and when editing text in a text container. When in a text container, press **ESC** or click another tool to exit. To select the page view, click the page.

## Using Rulers and Guides

Rulers and guides help position elements with precision. **Rulers** appear on the edges of the Document window. The measurement system you select in the Preferences dialog box (on the Edit menu) determines the unit of measure for the rulers.

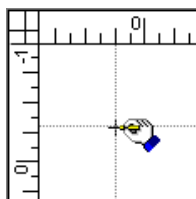
**Guides** are properties of each template page. You can add or adjust them manually or through the Properties panel.

### ► To display rulers

- Choose **View > Rulers** or **CTRL-R**.

### ► To change the ruler origin

The ruler origin is the zero(0) point on both the horizontal and vertical rulers. When you move the ruler origin, Studio recalculates all position measurements relative to the new origin. Objects in the template do not move. However, the values for their position properties may change relative to the new ruler origin.




- To move the origin, click the upper left corner of the Document window where the two rulers intersect. Drag the crosshairs to a new location.
- To reset the origin, double-click the upper left corner of the Document windows where the rulers intersect.

### ► To display guides

- Choose **View > Guides**.

### ► To position guides manually

- Click anywhere on the rulers, and drag a guide into the Document window.
- To reposition the guide, use the Selection tool,  and drag the guide to its new location.

**Note:** If you have selected **Guides in Back** on the **View** menu, the guides may be obscured by elements on the page. To reposition a guide, choose **Guides in Front**, and then reposition the guide.

### ► To position guides with the Properties panel

A guide measurement is its location along either the horizontal or vertical rulers.

- 1 Select the page. This brings up the page properties in the Properties panel.
- 2 On the Properties panel, click **Add Guide** under either **Horizontal** or **Vertical Guides**.
- 3 Enter a measurement in the box next to **Add Guide**.

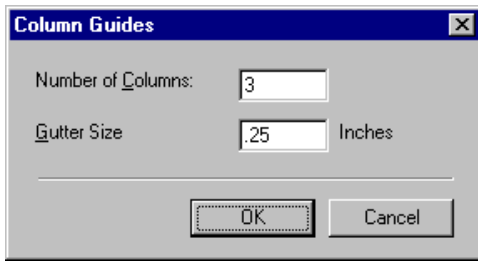
To change an existing guide, change its Measurement property.

**Note:** Changing the ruler origin does not change the location of the guide.

## ► To create column guides

Column guides apply to each page individually. You must create the column guides for each page.

- Choose **Page > Column Guides**.



- Enter the number of columns and the gutter size, the space between the columns.

-or-

Click an empty area on the page to select the page in the Properties panel. On the Properties panel under **Columns**, enter the number of columns in the **Number** property, and the space between the columns in the **Gutter** box.

Columns	
Number	2
Gutter Size	0.250 in

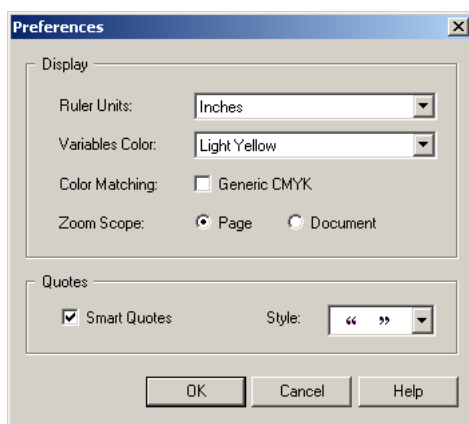


# Setting Preferences

You can change the ruler units, variables highlight color, color matching, and zoom scope from the **Edit > Preferences** menu.

## ► To change the preferences

- 1 Choose **Edit > Preferences**. Pageflex Studio displays the **Preferences** dialog box.



- 2 Choose options for each of the following boxes.

Box Name	Description
<b>Ruler Units</b>	Select the units for measuring the size of elements and for viewing the rulers in the Document window.
<b>Variables Color</b>	Select a non-printing highlight color for indicating variables on template and preview pages. The color is visible when you select the <b>Variables</b> option on the <b>View</b> menu.
<b>Color Matching</b>	Select the <b>Generic CMYK</b> check box to change the color matching preference. When checked, Studio displays CMYK colors using a generic color profile for the screen. The result is color previews that more closely match the CMYK printed output.

Box Name	Description
Zoom Scope	<p>When you change the View percent (the Zoom factor), this option determines how many pages it affects.</p> <ul style="list-style-type: none"> <li>■ <b>Page.</b> This option uses the View percent you select only on the current page. The other pages are not affected.</li> <li>■ <b>Document.</b> This option changes the View percent for all the pages in the document when you change it for one page.</li> </ul>
Smart Quotes	<p>Check the Smart Quotes box and choose the style of quotation marks to use if you want to use curved quotation marks in your documents. Otherwise, your quotation marks will be straight.</p>

- 3 Click **OK** to set the Preferences.

## Customizing Shortcuts

Studio comes preconfigured with a number of shortcut keys:

- **CTRL 0** — View Fit page
- **CTRL 1** — View 100%
- **CTRL - (minus)** — Reduce view
- **CTRL + (plus)** — Magnify view

You can view the assigned shortcut keys or add your own from the **Edit > Shortcut Keys** menu.

### ► To view or add shortcut keys to menu options:

- 1 Click **Edit > Shortcut Keys**.
- 2 Choose a menu item from the macro list.
- 3 Click **Create Shortcut**.
- 4 Press a combination of keys for the new shortcut. Your key combination appears in the text box.

## 5 Click OK

### ► To remove a shortcut

- 1 Select the menu item from the macro list.
- 2 Highlight the shortcut in the Assigned Shortcuts list.
- 3 Click **Remove**.

Click **Reset All** to reset all shortcuts to the default settings.

Click **OK** when you have completed adding your shortcuts, or **Cancel** to cancel your changes.

## Setting View Options

On the **View** menu, you can choose to hide or display the non-printing guides and invisible characters you use to help create the project template. You can change the **View** options at any time.

- **Zoom.** Choose a Zoom option to change the magnification factor of the Document window.
- **Toolbars.** Choose from the following options:
  - **Standard Toolbar.** Displays the Standard toolbar.
  - **Record Selection.** Displays the Record Selection toolbar. This option is only available while previewing a job.
- **Project.** Displays the Project panel. Click the Variables, Jobs, or Files tab to display the project items for that tab.
- **Toolbox.** Displays the Toolbox.
- **Structure.** Displays the Structure panel.
- **Properties.** Displays the Properties panel.
- **Rulers.** Displays the rulers along the sides of the Document window.
- **Guides.** Displays the non-printing column guides, floating guides, and page margins.
- **Snap to Guides.** If this option is selected, any item you drag near any of the guides automatically aligns to the guide. If you drag a guide, it snaps to nearby objects.
- **Guides in Front.** Displays the guides in front of all elements.
- **Guides in Back.** Displays the guides behind all elements. Elements on a page may obscure the guides.

- **Hidden Characters.** Displays the non-printing formatting characters such as the End-of-Paragraph symbol (¶).
- **Variable Highlights.** Displays variables with a highlight color. You can choose the highlight color in the **Preferences** dialog box.
- **Invisible Borders.** Displays a visible, but non-printing, border around any containers that have the **Border Color** property set to **None**.
- **Hide Overlays.** Hides guides and the formatting characters listed above. This is useful for displaying a proof of all printed elements in your document. When this is checked, the views for the other formatting characters become disabled. When unchecked, they revert to their previous settings.





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# Creating Templates

## 3

The template forms the basis of a Pageflex variable publishing project. This chapter explains how to work with template files, how to set them up, and how to modify page properties.

# Working with Template Files

For every template you create, Pageflex Studio creates two files:

- The template file, or XML Document Template (.xdt) file.
- The style sheet, or Template Style Language (.tsl) file.

The template stores the template content, variables, and structure. The style sheet stores the instructions for formatting the contents of the template. Every template must have a matching style sheet.

Templates cannot share a style sheet. However, you can import an existing style sheet when you create a new template. When you import a style sheet, Studio makes a copy of the original file and names it to match the new template file.

**Note:** It is important to keep these two files stored in the same directory with the same name so Studio can associate them with one another.

## Viewing Template Info

Select **Template Info** from the **File** menu to view information about your template. The **Template Info** dialog box displays the following information:

- **Fonts.** The names of fonts used in the template.
- **Styles.** The names of styles used in the template.
- **Colors.** The names of the colors used in the template and whether the template is formatted as RGB or CMYK.
- **Images.** The file names of static images used in the template.
- **Variables.** The names of variables used in the template.
- **.EDIT Names.** The names of any elements, as entered on the Info tab on the Properties panel.

Click the **Copy** icon to copy this information onto your clipboard. Click the **Save** icon to save this information into a text file. Click **Close** to exit.



# Building New Templates

When you create a new template, you set up the page dimensions and margins for all the pages of the template. Follow the steps below to create a template.

## ► To create a new template

### 1 Choose File ➞ New Template

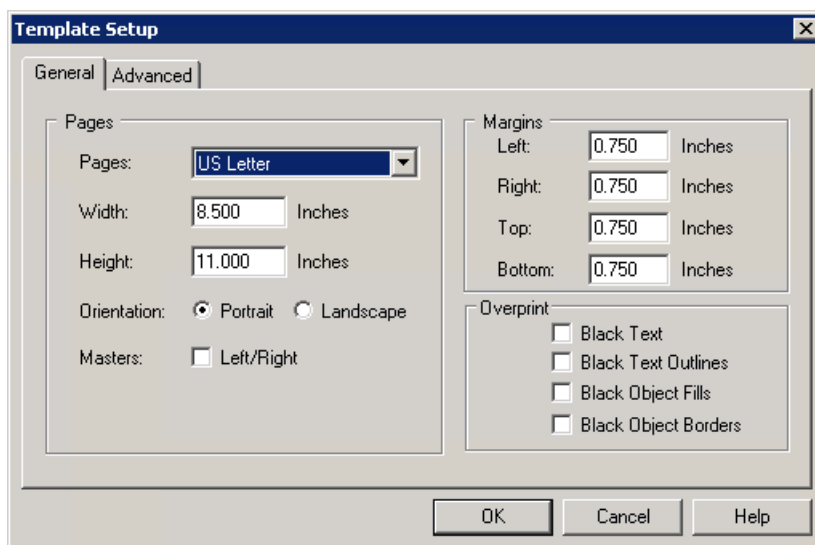
-or-

click the new template icon  in the standard toolbar

-or-

hold down the **CTRL** key and press **N**.

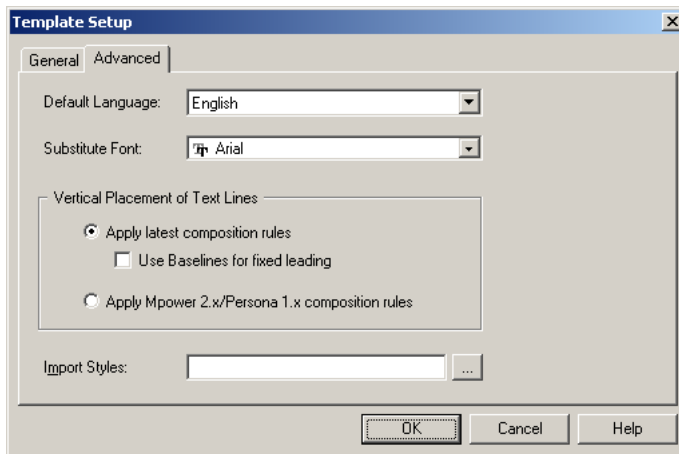
Studio displays a dialog box for setting up a new template.



### 2 On the **General** tab in the **Pages** section, select a page size or enter the page dimensions.

- For a standard page size: In the **Pages** list, select a standard size. Studio enters the page dimensions in the **Width** and **Height** boxes.
- For a custom page size: Enter the page dimensions in the **Width** and **Height** boxes. Studio automatically selects **Custom** in the **Pages** box.

- 3 For **Orientation**, select **Portrait** or **Landscape**. Studio switches the values for **Width** and **Height** based on your selection.
- 4 Click the **Masters Left/Right** selection box if you want to use separate master pages for the left and right pages of your template. Otherwise, leave this box unchecked to use single page master pages.  
**Note:** Once you choose left/right or single master pages, you cannot switch your template between these formats. See **Chapter 8: Working with Master Pages** for more information.
- 5 In the **Margins** section, enter the four page margins. All pages in a template have the same initial page margins. You can also change the margins for individual pages in the **Form** menu of the **Properties** panel.
- 6 In the **Overprint** section, select the default values for each black element you want to overprint. For color overprinting, make changes when editing the template. See “Overprint Border/Fill/Black Line” on page 100 or “Character Properties” on page 124 for details.
- 7 Click the **Advanced** tab.



- 8 In the **Default Language** box, choose a default language to use for the spelling and hyphenation dictionaries. Choose the language you plan to use predominantly. You can set individual words or paragraphs to different languages later using Character and Paragraph properties.

- 9 The **Substitute Font** box lists the font Studio uses for display if the original font is not installed and you have not specified a substitution. See “Missing Fonts” on page 43.
- 10 The **Vertical Placement of Text Lines** section lets you adjust how Studio handles composition features such as leading. Improvements to Pageflex composition applications have changed some of the ways the applications compose text. If you are working with a template created in a older version of a Pageflex product, you have the option to preserve the composition rules from the older applications.

- **Apply latest composition rules.** Choose this option to use the current composition rules. This option is recommended for all new templates. If you are modifying an older template or a Persona 1.x template, this option may cause text to reflow differently than before.
- **Use baselines for fixed leading.** Select this check box to change how Studio calculates leading. If you are importing templates created through such tools as the Pageflex DesignOut plug-in for Adobe InDesign, you may want to select this option so that the leading matches the source document more closely.

Studio usually measures leading from ascender to ascender. Increasing leading adds space below each line. With this check box selected, Studio measures leading from baseline to baseline. Increasing leading adds space above each line; however, you cannot add space before the first line of a text container.



- **Apply Mpower 2.x/Persona 1.x composition rules.** Choose this option if you are opening a template created in an older version of a Pageflex composition application, and you do not want the text to reflow using the latest composition rules.
- 11 Leave the **Import Styles** box empty unless you want to import an existing style sheet. Enter the path name or click the button next to the box to browse for the file. Importing the style sheet creates a copy of the file in the directory where you saved the template. Each template must have its own copy of the style sheet.

**Note:** This is your only opportunity to import an existing style sheet. You can not import a style sheet after the template has been created.

**12** Click **OK** to create the template.


---

## Opening Existing Templates

You can open an existing template at any time, and you can open more than one template simultaneously.

### ► To open a template

There are several ways to open a template:

- On the **File** menu, select **Open**, then choose a template file from the file menu.
- Click the file icon  in the standard toolbar and choose a template file.
- If the template was one of the last six templates you opened, you can select it from the **Recent Templates** submenu on the **File** menu.
- Hold down the **CTRL** key and press **O**.

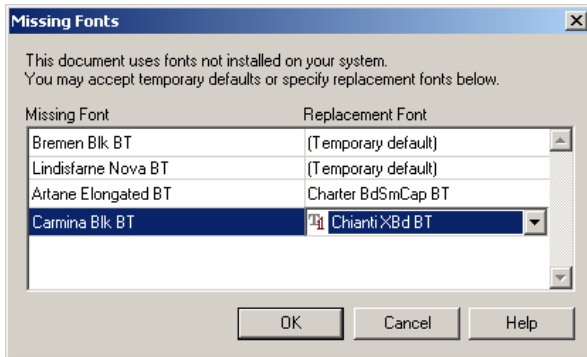
## Missing Fonts

If you open a template, and the fonts for the template are not available, Studio can replace the fonts with a temporary or permanent replacement.

- **Temporary.** Studio uses a temporary substitute font for display purposes only. The Font property continues to list the original font name in brackets to let you know the real name of the font. You can set the **Substitute Font** on the **Advanced** tab of the **Template Setup** dialog box, which is accessible from the **File** menu.
- **Permanent.** Permanent replacements completely replace the original font throughout the template. Studio does not keep track of the original font used.

## ► To open a template with missing fonts

- 1 If you open a template that uses unavailable fonts, Studio displays the **Missing Fonts** dialog box.



- 2 For each missing font, you can choose a temporary or permanent replacement.
  - For a temporary replacement, choose [**Temporary default**].
  - For a permanent replacement, choose a new font from the list.

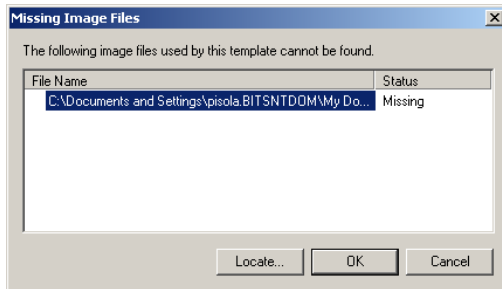
**Note:** A replacement affects all occurrences of the font throughout the template, but it does not affect font occurrences used in formatted content variables.

## Missing Images

If you open a template that uses images Studio cannot find, you see a warning message. You can continue to open the template with missing image placeholders and work with other elements, or you can navigate to the image file and relocate it.

► **To open a template with missing images**

- 1 If you open a template that uses unavailable images, you see the Missing Image Files dialog box:





- 2 Select an image name and click **Locate** to find and load the corresponding image or **OK** to display the template with a placeholder only.

# Saving Templates

Pageflex Studio automatically saves both the template and the style sheet associated with it each time you save your work.

## ► To save a template

There are several ways to save a template or templates:

- Choose **File** ⇨ **Save Template**.
- Choose **File** ⇨ **Save Template As...**
- Choose **File** ⇨ **Close Template** and select **Yes** to save the template.
- Choose **File** ⇨ **Save As** to save the existing template with a new name.
- Click the save icon  in the standard toolbar.
- Click the save all  icon in the standard toolbar to save all the open templates and your project file.
- Hold down the **CTRL** key and press **S**.

## Reverting to a Saved Template

Reverting the template discards all the changes you have made to a template since the last time you used the **Save** command.

## ► To revert to a saved template

- Choose **File** ⇨ **Revert to Saved**.



---

## Changing Template Setup

When you create a new template, you set the initial size and margins for the template. You can change these settings at any time. Changing the template setup changes all pages in the template. Changes made to the page margins on individual pages are reset to the new dimensions.

Change template setup with the template setup window.

**Note:** You cannot import a style sheet into an existing template or change the master page format of an existing template. These options are only available when you create a new template.

### ► To change template setup

- Choose **File** ➞ **Template Setup**. Studio displays the **Template Setup** dialog box.
- See “Building New Templates” on page 39 for steps describing the template options you can change.

# Arranging Pages

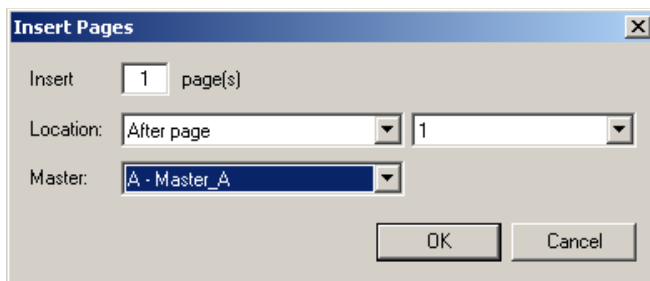
You can arrange the pages in your document using the menus or the Pages window on the Structure panel. You can insert, delete, move, or duplicate pages. These options are available from the Pages menu or by right-clicking on a page in the Pages window on the Structure panel.

## Inserting or Deleting Pages

You can insert or delete pages at any time.

### ► To insert pages

- 1 Choose **Page** ➡ **Insert Pages...** Pageflex Studio displays the **Insert Pages** dialog box.

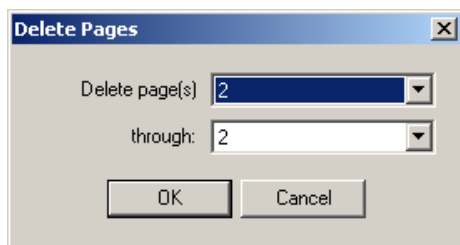


- 2 Enter the number of pages to insert, and then choose a location to insert them. You can insert pages before or after the current page, or you can insert them as the first or last pages of the template.
- 3 Choose a master page format to use for the inserted page. See **Chapter 8: Working with Master Pages** for more information.

### ► To delete pages

Deleting pages is permanent and cannot be undone. Deleting a page also deletes any elements on that page.

- 1 Choose **Page** ➔ **Delete Pages...** Studio displays the **Delete Pages** dialog box.



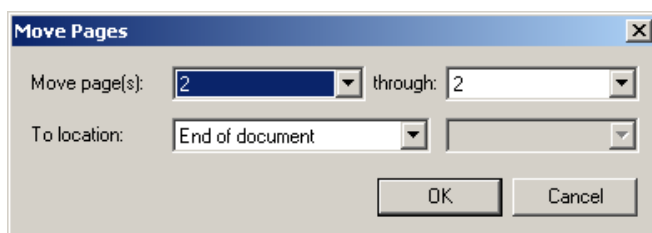
- 2 Enter the range of pages to remove. To remove a single page, enter the same page number in both boxes. Click **OK**.
- 3 Before removing the pages, Studio displays a message to confirm that the pages are to be deleted. Click **Yes** to permanently delete the pages and all their contents.

## Moving Pages

You can move pages using the **Move Pages** dialog box or by rearranging the pages in the **Pages** window on the Structure panel.

### ► To move pages using the Move Pages dialog box

- 1 Choose **Page** ➔ **Move Pages...** Studio displays the **Move Pages** dialog box.



- 2 Select the range of pages to move. If moving a single page, enter the same page number in both boxes.
- 3 Select the location to move the pages. Click **OK**. Pages are moved immediately.

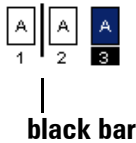
## ► To move pages using the Pages window

You can move only one page at a time using the Pages window on the Structure panel.

- 1 Click the page you would like to move so that it is highlighted.



- 2 With the left mouse button clicked, drag the mouse to where you want to move the page. A black bar appears, denoting where the page can be placed.



- 3 Release the mouse button to drop the page in place.

## Duplicating Pages

Duplicate pages using the Duplicate Page menu option. Studio inserts your duplicate page after the original in your document.

### ► To duplicate pages

- Choose **Page** ➡ **Duplicate Page** from the page you want to duplicate.  
- or -
- Right-click on the page you want to duplication in the Pages window of the Structure panel and choose **Duplicate Page**.

---

# Understanding Page Properties

Each page of a template can have its own properties to control page margins, guides, and borders. To see the page properties, click in an empty area on the page. The Properties panel displays the page properties when no other elements are selected.

## Margins

- **Left, Right, Top, Bottom.** These properties control the position of the guides used for the page margins. The template setup determines the initial values for the page margins, but you can change them independently for any page.

## Border

A page can have its own border. Set the page borders separately for each page in a template.

- **Border Color.** This property applies color to the page border.
- **Border Tint.** This property sets the tint for the color of the page border.
- **Border Thickness.** This property sets the thickness of the page border. Borders are always measured in points.
- **Border Style.** More options for the border are available through the border style. See “Borders and Lines” on page 69 for a description of border style options.

## Columns

Each page can have its own set of column guides. You can set the column guides using the Column properties in the Properties panel, or you can use the Column Guides command. See “Using Rulers and Guides” on page 30.

- **Number and Gutter Size.** Sets the number of equal columns on a page, and the amount of space between the columns

## Horizontal and Vertical Guides

Guides help you position items on the page.

### ► To add guides

- Click **(add guide)** in the Horizontal or Vertical Guides properties section and enter the number of inches from the top left corner that you want the guides to appear.  
- or -
- Click in the horizontal or vertical ruler in the Document window and drag a guide into the Document window.

### ► To remove guides

- Drag guides to the edges of the Document window.

---

# Working with Elements

## 4

This chapter explains how to create and edit elements. Learn how to:

- Create text and image containers, shapes, area templates, borders, lines, and curves
- Create text on a path
- Change element properties
- Define colors
- Layer, align, and lock elements
- Rotate, resize, and group elements
- Create text runarounds

# Creating and Editing Elements

Elements are the building blocks of a template. For example, text containers, image containers, area templates, and shapes are all elements. Paragraphs and characters are also considered elements. Each element has properties to specify characteristics such as size, position, borders, and other attributes. Use the tools on the toolbox to create elements. Edit element properties by modifying the field values on the Properties panel. This section describes how to create the following elements:

- Shapes
- Text containers and paths
- Image containers
- Area Template containers
- Borders and Lines
- Curves

See Chapter 6, “Working with Text,” on page 123 for a details about paragraph and character elements.

## Text Containers

Text can appear inside containers, on text paths, or around shapes. Text containers can be rectangles, ovals, regular polygons, or freeform polygons. You can create text containers using the text container tools, or by selecting a shape with the text tool. Once you change a shape into a text container, it is listed as a text container in the Layout panel, regardless of its original shape.

Text containers and paths can contain static text, variable text, or a combination of both. If the text does not fit inside the container or along the path, Studio indicates the text is overflowing the container by displaying a red box in the bottom handle of the text container, or at the end of a path.


To continue chaining the text containers, click the Chain





The red box indicates the text overflows the container



► **To create a text box using the Text Tool**


- 1 Click the Text Tool  in the Toolbox.
- 2 Drag to create the text box.

► **To create a text container using the Text Container or the Text Oval tool**

- Click the Text Container Tool  or the Text Oval Tool  in the Toolbox and drag to create the container.

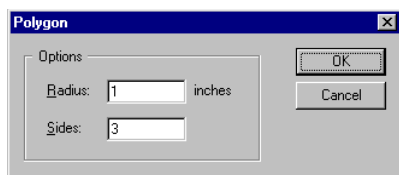
► **To create a text container using the Text Polygon tool**

The polygon tool creates a container with a specified number of equal sides.

- 1 Click the Text Polygon tool  in the Toolbox and drag to create a six-sided polygon.


-or-

Click once to open the **Polygon** dialog box.



- 2 In the Polygon dialog, enter the **Radius** in inches and the number of **Sides**. The radius is the distance from the center of the polygon to the endpoints of each side. The radius must be at least .25 inches.
- 3 Click **OK** to confirm your changes and create the text polygon. Click **Cancel** to exit.


► **To create a text container using the Text Container Bézier tool**

- 1 Click the Container Bézier tool  in the Toolbox.
- 2 Click to set the first endpoint.
- 3 Click to set the next endpoint. Click to create angled corner points, or drag to move the control point and create a curve.

- 4 Set additional points, as desired.
- 5 Position the pointer over the first point and click to close the container.

### ► To insert text within an existing container


This procedure inserts static text, not variable content. You can insert plain text, formatted text, or formatted paragraphs. See “Formatted Content” on page 155 for more information.

- 1 Click the Text tool  in the Toolbox.
- 2 Position the cursor inside a text container where you want to insert the text.
- 3 On the **File** menu, click **Insert Content**.
- 4 Studio displays the Open Content File dialog box. In the **Files of Type** box, choose the format of the text file you want to insert:
  - Text files (.txt);
  - Formatted Text (.xft);
  - Formatted Paragraphs (.xfp).
- 5 Select a file.
- 6 Click **OK** to insert the text.


## Text Paths

Text paths can be set along lines, curves, or around the borders of shapes. Text paths cannot be set around the borders of text containers. See below for details on how to create text paths. See “Creating and Modifying Angles and Curves” on page 72 for details on how to reshape text paths.

### ► To create a text path

- 1 Click the Text Path Tool  in the Toolbox.
- 2 Drag to create a line.


### ► To create a text path on an existing line, curve, or around a shape

- 1 Click the Text Path Tool  in the Toolbox.
- 2 Move the cursor over an existing line or the border of a shape. The cursor changes to show a down arrow.
- 3 Click to create a text path.  
**Note:** You cannot create a text path on the border of a text container.
- 4 You will see a blinking cursor, indicating that you can start typing text on the path.

## Adding Columns

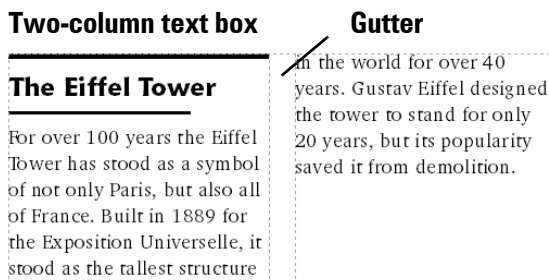
You can add columns to text boxes. You can also balance the text in the columns to make all columns the same height. See the steps below for details.

### ► To add columns to a text box

- 1 Click the Selection tool  in the Toolbox.
- 2 Select a text box.
- 3 In the Properties panel, under **Columns**, enter the **Number** of columns.


Columns	
Number	2
Gutter Size	0.250 in

- 4 Enter a value in the **Gutter Size** property to add a specified space between the columns.

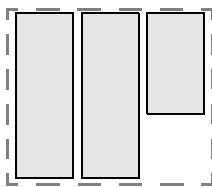


**Note:** If a text container has more than one column, you cannot set the **Flex Width** property to minimize.

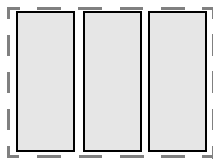
### ► To balance the text columns

- 1 Click the Selection Tool  in the Toolbox.
- 2 Select a multi-column text container.
- 3 In the Properties panel, under **Flex Height** on the **Flex** tab, choose the **Column Balance Behavior**.

Studio balances the text into columns of equal length. The text box maintains the same width, and the height adjusts to fit the text.



**Column balancing off**




**Column balancing**

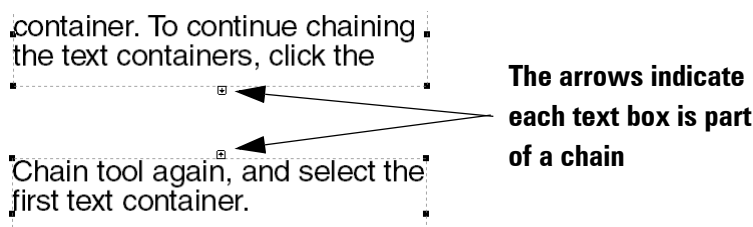
### ► To force a column break

Column breaks force text to flow into the next column or chained container.

- On the **Text** menu, click **Insert** and click **Column Break**.
- or-
- **CTRL + SHIFT + ENTER**

## Chaining Text Containers and Paths


You can link text containers together using the Chain tool . You can chain together any type of text containers even if the containers are different shapes. You can also chain text paths to text containers. Studio shows that text containers are linked by using a down arrow for the output point in the bottom handle of the first container, and an up arrow for the input point in the top handle of the next container.



### ► To identify and select the text containers in a chain



- Hold down the CTRL key, and click the arrow at the top or bottom of a chained text container to select the next or previous container in the chain.

### ► To link text containers or paths using the Chain tool


- 1 Click the Chain tool  in the Toolbox.
- 2 Click the first text container or path.
- 3 When the pointer displays a number 2, click the second text container or path.

**Note:** Text containers and paths must be empty when added to a chain.

### ► To create text boxes using the Chain tool

- 1 Click the Chain tool  in the Toolbox and drag to create the first text box.
- 2 When you finish drawing the first text box, the pointer number changes from a '1' to a '2'. Drag to create the second text box.
- 3 To continue chaining text boxes, click the Chain tool  again, and click the last container you created.
- 4 When the pointer changes to a number 2, drag to create the third text container. Repeat these last two steps to include additional text containers in the chain.

### ► To unchain text containers




- 1 Click the Selection tool  in the Toolbox.
- 2 Click at least one text container or path in the chain to select it.

- 3 On the **Element** menu, click **Unchain**. Studio removes the link between the text containers. The text reflows using only the first text container.

## Shapes


Shapes are graphical elements that can appear anywhere in a template. Shapes can have color fills and borders, but they cannot contain other content. Shapes can be separate elements, or they can be pasted inline within a block of text. Shapes can also be converted into text containers.

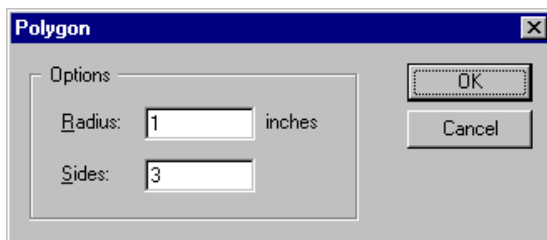
### ► To create rectangles, ovals, and hexagons

- 1 Click the Rectangle tool , Oval tool , or Polygon tool  in the Toolbox and drag to create the shape (the Polygon Tool creates a six-sided polygon).
- 2 Use the Properties panel to edit the container properties.

**Note:** To create a square or a circle, enter the same dimension for **Width** and **Height** in the Properties panel.


### ► To create a regular polygon

- 1 Click the Polygon tool  in the Toolbox.
- 2 Click once to open the **Polygon** dialog box.




Enter the radius and the number of sides. The radius is the distance from the center of the polygon to the endpoints of each side. Click **OK** to create the polygon.

► **To create a freeform polygon or Bézier shape**


- 1 Click the Pen Tool  in the Toolbox.
- 2 Click to set the first endpoint.
- 3 Click to set the next endpoint. Click to create angled corner points, or drag to move the control point and create a curve.
- 4 Set additional points, as desired.
- 5 Position the pointer over the first point and click to close the polygon.

► **To create a freehand Bézier shape**


- 1 Click the Freehand Pen Tool  in the Toolbox.
- 2 Drag to create a line or curve. Studio intermittently creates end points within the line.
- 3 Position the cursor close to the beginning point to close off the shape.


► **To insert an inline shape**

An inline shape appears within a paragraph inside a text container. The inline shape behaves as part of the paragraph. If you edit the text in the paragraph, the shape moves within the text to accommodate the changes.

- 1 Using one of the shape tools, create a shape.
- 2 Select the shape, and on the **Edit** menu, click **Cut**.
- 3 With the Text tool , position the text cursor in the paragraph where you want the shape to appear.
- 4 On the **Edit** menu, click **Paste**.

Studio inserts the image into the paragraph. Because the image is now part of the paragraph, its position in the paragraph is controlled by the paragraph and character properties, not the **Left** and **Top** properties for the image container. If you move the text container, the inline image moves with it.

To adjust the position of the image within the paragraph, select the image container with the Text tool , and adjust the character or paragraph properties.

To adjust image container properties, select the image using the Selection tool . In the Properties panel, edit the values.

## Image Containers


Pageflex Studio supports the following image formats:

- **EPS** (Encapsulated PostScript). This format uses the file extension `.eps`. To preview an EPS image in Studio, you must save it with a TIFF preview for a Windows-based computer. EPS images without previews appear as gray boxes on screen; however, EPS images with and without previews print the same.
- **TIFF** (Tag Image File Format). This format uses the file extension `.tif`. You can save TIFF images with LZW (Lempel-Ziv-Welch) compression if your output device supports it.
- **JPEG** (Joint Photographic Experts Group). This format uses the file extension `.jpg`.
- **GIF** (Graphics Interchange Format). This format uses the extension `.gif`.
- **PDF** (Portable Document Format). This format uses the extension `.pdf`. You can import PDF documents created with Adobe® Acrobat®. For multi-page documents, you pick which page you would like to import.

Images can be static or variable. Text can run around the outside of the image container or, if it includes a clipping path, around the edges of the clipping path. You can specify clipping paths in your images using some high-end applications such as Adobe Photoshop.

You can insert images as inline graphics into a paragraph. Inline images behave as part of the paragraph. If you edit the text in the paragraph, the inline shape moves within the text as you make changes.

### ► To use the Image tool


- 1 Click the Image Tool  in the Toolbox and drag to create an image container.
- 2 Select an image source for the container.

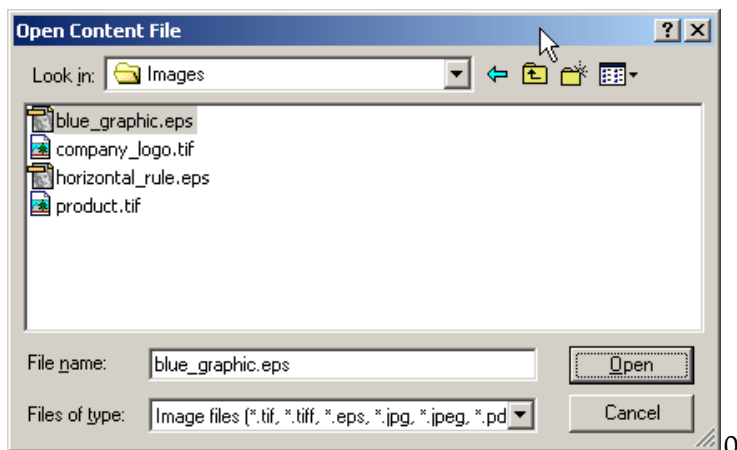
The image source can be static or variable.




- To select a static source for the image, in the Properties panel under **Source**, choose **New**. Studio displays the **Insert Image File** dialog box. Select an image, and click **Open**. Studio inserts the image.
- To select a variable source, drag a variable from the Variables panel into the image container. For more information on using variables, see “Adding or Editing Variables” on page 261.

### ► To insert an inline image

- 1 Using the Text tool , position the text pointer where you want to insert the image within the text container.
- 2 Choose **File** ➤ **Insert Content**.




- 3 In the **Files of type** box, select the **Image files** option. Only image files for supported formats appear in the list.
- 4 Select the image file to insert.
- 5 Click **Open**.

Studio inserts the image into the paragraph. To adjust image container properties, select the image using the Selection tool  and edit the values in the Properties panel. See “Understanding Element Properties” on page 90 for more information.

## ► To crop an image

Image containers always display an entire image. You can use an area template container to crop an image.

- 1 Select the image you want to crop, using the Selection tool .
- 2 Choose **Element ⇨ Group in Area template**. Studio groups the image in an area template box.
- 3 Drag the image within the area template to position it. Select the area template to change the size or shape of it to crop the image inside it.

## Importing Images from the Mac OS

The Mac OS operating system software does not require a file extension to identify the file type. Since the Windows platform requires a file extension, you must add the appropriate three-letter file extension to each image file you plan to use with Pageflex Studio.

EPS images created on the Mac OS operating system by default have a PICT preview instead of a TIFF preview, although an EPS image with a TIFF preview displays and prints properly on the Mac OS operating system. The Windows operating system does not support the PICT format. These images preview as gray boxes in Studio.

To preview EPS images created in an image editing application on the Mac OS operating system, you must do one of the following:

- Open your image editing application on the Mac OS operating system, and save each image choosing the TIFF preview option when you choose the EPS format. This option may be called “Windows” or “PC” format in some applications. For best results, choose 8-bit TIFF preview if possible.
- Open your image editing application on the Windows operating system, and save each image. For best results, choose the 8-bit TIFF preview.

PDF documents, TIFF images, and JPEG images created on the Mac OS operating system display and print properly in Studio.

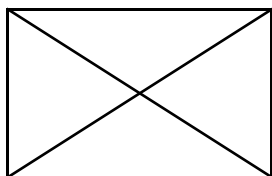
## Scaling Images

Pageflex Studio can scale both static and variable images. The value under the **Image Fit** property for the image container and the size of the image container determine how the image is scaled. The **Image Fit** property has the following choices:

- **Fit Image.** The image container adjusts to fit the image at the **Horizontal** and **Vertical Scale** percentages specified in the Properties panel.

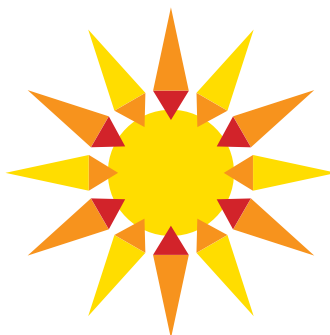
**Note:** If you intend on using this template in Online Design and Editing Sessions or the Free Edit step in Pageflex Storefront, be aware that if you replace the image using these technologies, they will place the new image at a 100% Horizontal and Vertical scale percentage.

**Image Container**



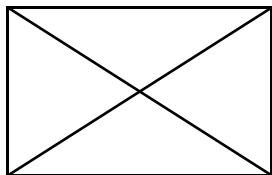
**Horizontal and  
Vertical Scale set  
to 100%**

**Image scales to 100%**



- **Fit Width.** Studio scales the image to the width of the container. The height of the container adjusts accordingly. The image maintains its original proportion.

**Image Container**

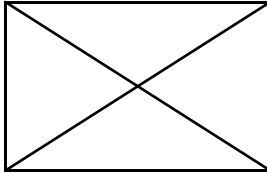


**Image scales to container width**

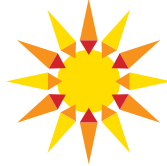


- **Fit Height.** Studio scales the image to the height of the image container. The width of the container adjusts accordingly. The image maintains its original proportion.

**Image Container**

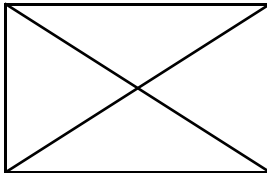


**Image scales to container height**

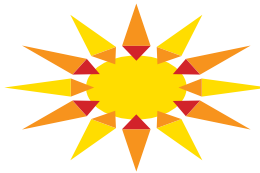


- **Stretch to Fit.** Studio scales the image to fit the container. The width and height of the container remain constant. The image may appear distorted.

**Image Container**

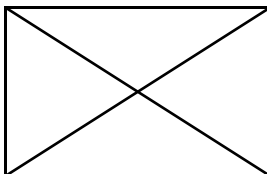


**Image scales to match container size**

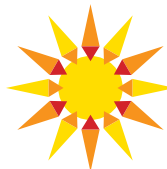


- **Scale to Fit.** Studio scales the image to be as large as possible while staying within the specified maximum width and height. The image maintains its original image proportion.

**Image Container**



**Image scales to fix maximum container width or height**



- **Scale to Fit (Page Relative).** Studio scales the image to be as large as possible while staying within the maximum width and height, specified as a percentage of page size.

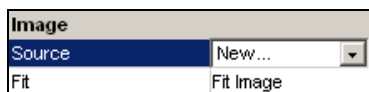
For example, in creating a print ad for a number of publications, you may need to resize certain ads depending on the specifications of each publication. You can use flex properties to change the properties of shapes and text, but if you need to change the size of images, you would use the Scale to Fit (Page Relative) property.

## Inserting PDF Pages

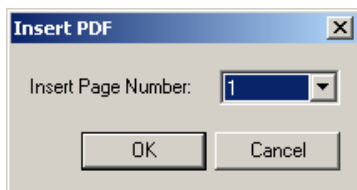
With Studio, you can insert specific pages or multi-page PDFs as images into your variable-length documents.

### ► To insert a PDF as an image

- 1 Create an image using the image tool.
- 2 On the Form tab of the Properties panel, under Image, choose the Source of the image by choosing **New** in the list box.




- 3 In the **Insert Image File** dialog box, choose the PDF file you would like to import and click **Open**.
- 4 If the PDF file has more than one page, Studio displays the Insert PDF dialog box.



Select a page number from the drop-down list and click **OK**. Studio imports the page you specified into the image container.



### ► To change the source page

- 1 Select the image container for the PDF containing the page you would like to show.
- 2 On the Form tab of the Properties panel, under Image, click the **Source Page** box.
- 3 Click the Page Selection button  to display the Insert PDF dialog box.
- 4 Select a page number from the drop-down list and click **OK**. Studio imports the page you specified into the image container.

## Area Template Containers

Area Template containers can hold any other type of element. An area template groups elements together and maintains their relative positions to each other. You can use area templates to create sections of content on a template page. You can also use an area template container to crop images, since the area template container can crop any part of its contents that extends past the boundaries of the container.

### ► To create an area template box or oval

- Click the Area Template Box  or Area Template Oval Tool  in the Toolbox and drag to create a container.
- Draw the area template container on top of any other elements to select those elements and include them inside the area template container. Studio displays a dialog to confirm that you want to include these elements.
- Select an element or group of elements and on the **Element** menu, click **Group in Area template**. Studio groups the elements in an area template box.


### ► To add a new element to the area container

- To add a new element, draw the element inside the borders of the area template container.

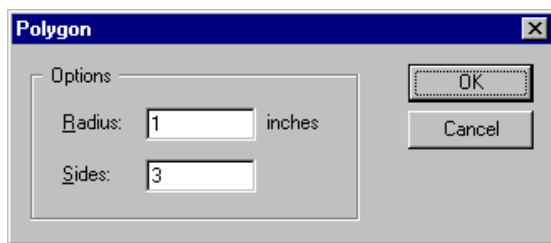
### ► To add an existing element to the area container

- 1 Select the element and on the **Edit** menu, click **Cut**.
- 2 Select the area container, and on the **Edit** menu, click **Paste**. Studio pastes the element inside the area container.

### ► To create an area template polygon


- Click the Area Template Polygon Tool  in the Toolbox and drag to create a six-sided area template polygon.
- or-

- To specify the size and number of sides, using the Area Template Polygon Tool, click once to open the **Polygon** dialog box.



Enter the radius and the number of sides. The radius is the distance from the center of the polygon to the endpoints of each side. Click **OK** to create the polygon.

### ► To create an area template Bézier shape


- 1 Click the Area Template Bézier Tool  on the Toolbox.
- 2 Click to set the first endpoint.
- 3 Click to set the next endpoint. Click to create angled corner points, or drag to move the control point and create a curve.
- 4 Set additional points, as desired.
- 5 Position the pointer over the first point and click to close the container.

## Borders and Lines


Pageflex Studio has many options for creating unique borders and lines. All text containers, image containers, area templates, and shapes can have a border. Vertical and horizontal group containers can also have borders. The border style can also apply to lines.

Lines can appear anywhere in a template as graphical elements. Lines can have color, but they cannot contain other content. To add lines above or below a paragraph, see “Paragraph Rules” on page 142.


## ► To create a line

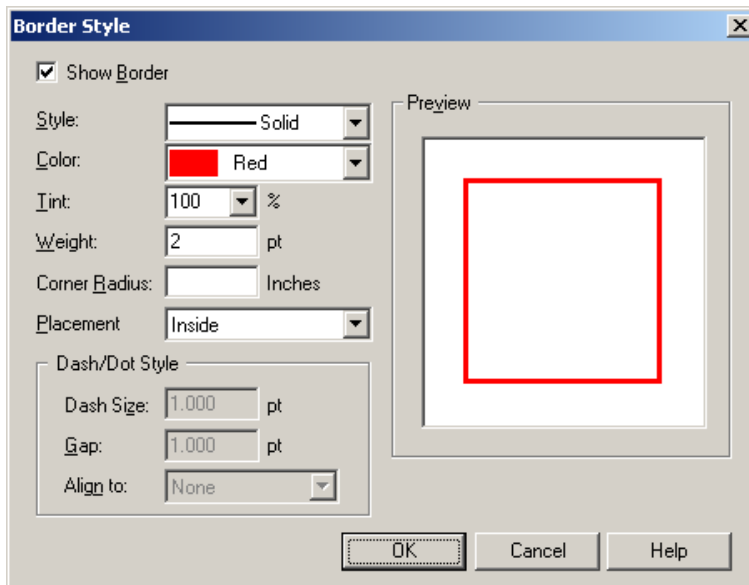
- Click the Line tool  in the Toolbox and drag to draw a line.
- To draw straight lines at 90° increments, hold down the **SHIFT** key while you draw the line.

## ► To create freehand lines

- 1 Click the Freehand Pen Tool  in the Toolbox.
- 2 Click to set the first endpoint and drag to create a line or curve. Studio intermittently creates end points within the line.

## ► To define a border or line style

- 1 Click the Selection tool  on the Toolbox.
- 2 Select a container or shape.
- 3 On the **Element** menu, click **Border Style**. Studio opens the **Border Style** dialog box.







- 4 Click **Show Border** to make the border visible.

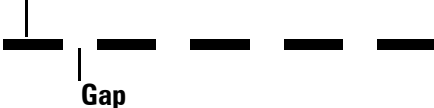


- 5 Choose options for defining the appearance of the border. The **Preview** area shows a sample of the border using the options you select.

**Note:** The on-screen preview may not match the printed border, especially for dashed and dotted borders.

Box Name	Description
Style	Choose <b>Solid</b> , <b>Dashed</b> , or <b>Dotted</b> .
Color	Choose a color from the list, or click <b>New</b> to define a new color.
Tint	Choose or type a percentage to create a tint of the selected color.
Weight	Enter the thickness of the border in points.
Corner Radius	<p><b>Note:</b> Text boxes, area template boxes and rectangles only.</p> <p>To create rounded or concave corners, enter a value for the radius. Positive numbers create rounded corners, and negative numbers create concave corners.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p><b>Positive numbers</b></p> </div> <div style="text-align: center;">  <p><b>Negative numbers</b></p> </div> </div> <p><b>Note:</b> If you set the corner radius on a text box, also adjust the <b>Margins</b> property to prevent the text from appearing outside the box at the corners.</p>
Placement	<p>Choose <b>Inside</b> to have the border form on the inside edge of the container.</p> <p>Choose <b>Centered</b> to have the border form centered on the edge of the container.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p><b>Inside</b></p> </div> <div style="text-align: center;">  <p><b>Centered</b></p> </div> </div> <p>The effect of this setting is most noticeable with thick borders.</p>

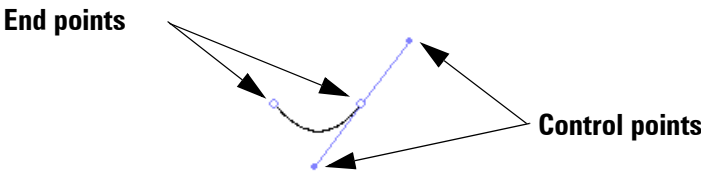
- 6 If you select **Dashed** or **Dotted** for the **Style**, the options under **Dash/Dot Style** become available.

Box Name	Description
Dash Size	<b>Note:</b> For Dashed borders only. Enter the width of each dash in points.
Gap	Enter the amount of space in points between the dashes or dots.  <b>Dash Size</b>  <b>Gap</b>
Align To	Choose how the dashes or dots align along each side of the border. <ul style="list-style-type: none"><li>■ <b>Corner.</b> The dashes or dots on each side of the container meet in the corners.</li><li>■ <b>None.</b> The dashes or dots form with no particular alignment.</li><li>■ <b>Page.</b> The dashes and dots align to a universal page grid. The dashes and dots on all borders on the page align to each other.</li></ul>

- 7 Click **OK** to apply the border style to the container.



## Creating and Modifying Angles and Curves

You can create Bézier curves in Studio for use in text containers, area template containers, shapes, or as lines and text paths. A Bézier curve is a curve defined by two end points, which each have two control points that create a line controlling the direction of the curve.





You can convert rectangles, text containers, area templates, and ovals into Bézier shapes using the Point Conversion Tool. You can convert angles on text containers, shapes, lines, and area templates to Bézier control points by following the steps below.

► **To convert an angle to a Bézier control point**


- 1 Click the Selection tool  in the Toolbox and select a text container, shape, line, or area template that has angle points.
- 2 Click the Point Conversion Tool  in the Toolbox.
- 3 Drag an angle point to give it curvature.

► **To adjust a curve**

- 1 Click the Selection tool  in the Toolbox and select a text container, shape, line, or area template that has end points.
- 2 Click the Point Conversion Tool  in the Toolbox.
- 3 Drag an angle point to adjust the curve, or just click to convert a Bézier point to an angle point.

**Note:** This will also convert an angle point to a Bézier point.

► **To move a point**

- Click the Selection tool  in the Toolbox and select a text container, shape, line, or area template that has angle or Bézier points and drag to move a point.

► **To create a line with angles or Bézier curves**

- 1 Click the Pen Tool  in the Toolbox.
- 2 Click to set an angle point.




- OR -

Drag to set a Bézier point and move the control point to set the direction of the curve.




- 3 Set additional points, as desired.

- 4 Press **ESC** or click another tool to complete the line.

### ► To add a point

- 1 Click the Selection tool  in the Toolbox and select a line or curve.
- 2 Click the Pen Tool  or the Add Point Tool  in the Toolbox.
- 3 Move the tool over the line or curve.
- 4 Click to add a point.

### ► To remove a point

- 1 Click the Selection tool  in the Toolbox and select a line or curve.
- 2 Click the Pen Tool  or the Remove Point Tool  in the Toolbox.
- 3 Move the tool over the line or curve.
- 4 Click to remove the point.

## Converting Elements into Bézier Shapes

You can convert rectangles, circles, text containers, and area templates into different element types using the **Convert to** menu options in the **Element** menu. On the **Element** menu, click:

- **Convert to Bézier shape**—to convert any element, except an Image element, into a Bézier shape with points that can be moved or adjusted. For example, choose this option to convert a text box into a Bézier text container.
- **Convert to Bézier text path**—to convert any element, except an Image element or area template, into a Bézier text path. For example, choose this option to convert a circle shape into a Bézier text path.
- **Convert to Text Container**—to convert any element, except an Image element or area template, into a text container. For example, choose this option to convert a box or circle shape into a text container.
- **Convert to Area template**—to convert any element, except an Image element or text container, into an area template. For example, choose this option to convert a circle shape into an area template.

# Manipulating Elements


There are several options available to manipulate elements. Elements can be layered, aligned, rotated, resized, grouped, and locked. Text can also be set to run around specified elements.

## Layering Elements

Every element has a stacking order. Pageflex Studio stacks the elements in the order you create them, with new elements always going on top. No two elements can occupy the same place in the stacking order.

**Note:** Adjustments to the stacking order are reflected in the content on the Layout tab. The Layout tab shows elements as currently arranged back to front, rather than in the order you created them.

### ► To adjust the stacking order

- 1 Using the Selection tool , select at least one element.
- 2 On the **Element** menu, point to **Arrange**, and then choose one of the following commands:
  - **Bring to Front.** Moves the selected element to the top of the stacking order.
  - **Send to Back.** Moves the selected element to the bottom of the stacking order.
  - **Bring Forward.** Moves the selected element forward by one element in the stacking order.
  - **Send Backward.** Moves the selected element backward by one element in the stacking order.

**Note:** If you select more than one element, the selected elements maintain their stacking order relative to one another.

### ► To select an element located behind another element

If one element is behind another and completely covered by the top element, you cannot select it with the Selection tool. Instead, click the name of the element in the Layout tab to select it in the Document window.





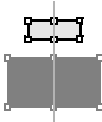
- To open the Layout tab, choose **View** ⇨ **Structure** and click the Layout tab.

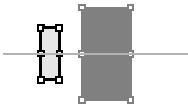
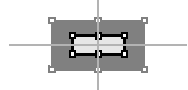
With the element selected, you can change its stacking order or its properties in the Properties panel.

## Aligning Elements

You can control the position of two or more elements in relation to each other. Pageflex Studio aligns elements using their edges. The edges of an element are represented by the eight handles that appear when an element is selected.


You have several options for aligning elements:

Alignment Option	Effect	Appearance
Left Edges	Moves the elements horizontally to line up the left edges.	
Right Edges	Moves the elements horizontally to line up the right edges.	
Top Edges	Moves the elements vertically to line up the top edges.	
Bottom Edges	Moves the elements vertically to line up the bottom edges.	
Horizontally Center	Moves the elements horizontally to line up their centers. The horizontal center is represented by the middle handle on the top and bottom edges of the element.	

Alignment Option	Effect	Appearance
Vertically Center	Moves the elements vertically to line up their centers. The vertical center is represented by the middle handles on the left and right edges of the element.	
Center	Moves the elements both horizontally and vertically to line up the absolute centers of the elements.	

**Note:** If an element is locked, you cannot change its alignment. For instructions on unlocking, see “Locking Elements” on page 83.

### ► To align elements to each other


- 1 Using the Selection tool , hold down the **SHIFT** key and select at least two elements. The first element you select becomes the anchor for aligning the other elements. Studio uses the coordinates of the first element you select to align the rest of the elements.

You can align as many elements as you want, including elements of varying types. For example, you can align a text container and an image container.


- 2 On the **Element** menu, point to **Align**, and then select an Alignment option.

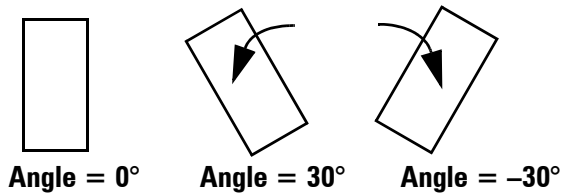
## Rotating Elements

There are two ways to rotate an element or a group.



- Set the **Angle** property in the Properties panel under **Position**.
- Use the Rotation tool 

### ► To set the Angle property

- 1 Using the Selection tool , select an element or a group.
- 2 In the Properties panel under **Angle**, type a number for the rotation. Positive numbers rotate objects counter-clockwise; negative numbers rotate objects clockwise.



### ► To use the Rotation tool

- 1 Click the Rotation Tool  on the Toolbox and select an element or group.
- 2 Move the pointer over one of the corner handles.
- 3 When the pointer changes to look like the Rotation Tool , drag to rotate the element.



**Rotation tool around a corner handle**

- 4 When you release the mouse button, Pageflex Studio displays the new **Angle** property in the Properties panel.

## Resizing Elements


There are several ways to resize an element after you create it. You can resize a single element by adjusting the selection handles for the element or by changing the properties for the element in the Properties panel. You can change the width and height of two elements to match each other using the Resize command.

### ► To resize an element using the Selection tool


- Click the element to activate the selection handles, and drag one of the handles to change the element size.



### ► To resize an element using the Properties panel

- 1 Select an element by using the Selection tool  or by clicking the element name in the Layout tab.
- 2 In the Properties panel, change the values in the **Height** and **Width** properties.

### ► To resize two elements in proportion to each other

- 1 Using the Selection tool , select two elements. Pageflex Studio uses the **Width** and **Height** properties from the first element you select to resize the elements.
- 2 On the **Element** menu, point to **Resize**, and then select one of the following options:
  - **Make Same Height.** Changes the Height property of the second element you selected to match the first element.
  - **Make Same Width.** Changes the Width property of the second element you selected to match the first element.
  - **Make Same Size.** Changes the Height and Width properties of the second element to match the first element.

## Grouping Elements

A group is a collection of elements combined together to function as a single element. Creating element groups helps you organize your template layout. Groups can contain any type of element, including other groups.


Pageflex Studio has three types of groups: **fixed groups** (just called “groups”), **vertical groups**, and **horizontal groups**. The groups differ in the way they treat the position of elements within the group. Vertical and horizontal groups are generally used to group elements with variable content.

- **Fixed Group.** The elements in the group remain in fixed positions relative to each other and to the rest of the template layout. Once you create a group, Studio locks the position of the elements so that you cannot move them using the Selection tool.

- **Vertical Group.** The elements are grouped vertically, one on top of the other in a single column. The positions of the elements in the group can change based on the size of the variable elements and their alignment options within the group. You can edit the elements inside a vertical group at any time.
- **Horizontal Group.** The elements are grouped horizontally, one beside each other in a single row. The positions of the elements in the group can change based on the size of the variable elements and their alignment options within the group. You can edit the elements inside a horizontal group at any time.


► **To group elements in a fixed group**

Before creating a group, arrange the elements where you want them to be in relation to each other. Adjust their properties, size, position, and stacking order before creating the group. If you want to move or edit elements after grouping them, you must ungroup them first.

- 1 Using the Selection tool , select at least two elements. A group can contain as many elements as you want.
- 2 Choose **Element ⇌ Group**.

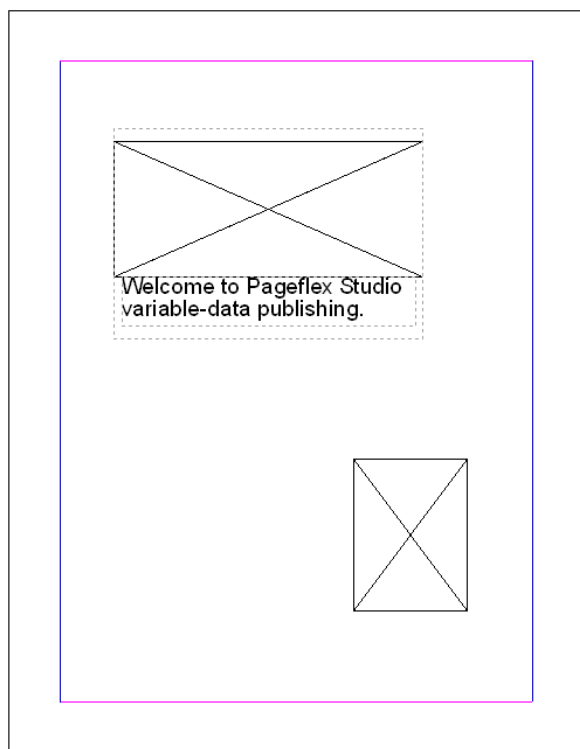
Pageflex Studio groups the elements together.

► **To group elements in a vertical group**

- 1 Using the Selection tool , select at least two elements. A vertical group can contain as many elements as you want.
- 2 Choose **Element ⇌ Vertical Group**.

Pageflex Studio stacks the selected elements into a vertical group. It determines the group order based on the vertical positions of the elements before you grouped them. The top element in the group was the topmost element on the template page.


Your template looks like this, for example, with the vertical grouping of an image and a textbox:



- 3** To set the alignment options for the new vertical group, select **Horizontal Alignment** and **Vertical Alignment** options in the Properties panel under **Special**.
- 4** To create vertical offsets among group elements, increase the amount of space for **Top** and **Bottom** properties in the Properties panel under **Bumpers**. Studio maintains the Bumper space between two elements if the elements change size and position within the group.


If the elements in the group fill the boundaries of the vertical group container, you can still select the container by holding down the **CTRL** key and clicking it.

## ► To group elements in a horizontal group

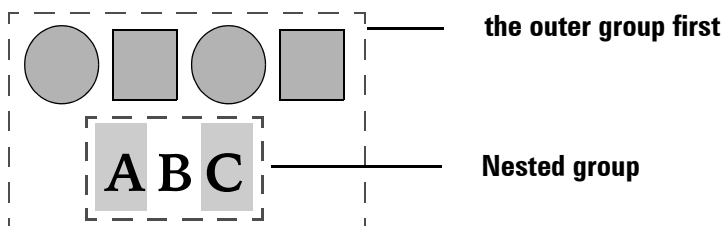
- 1 Using the Selection tool , select at least two elements. A horizontal group can contain as many elements as you want.
- 2 Choose **Element** ⇨ **Horizontal Group**.  
Pageflex Studio creates the group and lines the elements up beside each other. It determines the group order based on the horizontal positions from left to right of the elements before you grouped them. The leftmost element on the template page becomes the first element in the group.
- 3 To set the alignment options for the new horizontal group, select **Horizontal** and **Vertical Alignment** options in the Properties panel under **Special**.
- 4 To create horizontal offsets between the group elements, increase the amount of space for **Left** and **Right** properties in the Properties panel under **Bumpers**. Studio maintains the Bumper space between two elements if the elements change size and position within the group.

If the elements in the group fill the boundaries of the horizontal group container, you can still select the container by holding down the CTRL key and clicking it.

## ► To ungroup elements

- 1 Select the group using the Selection tool .
- 2 Choose **Element** ⇨ **Ungroup**. Pageflex Studio ungroups the elements.

You cannot ungroup a nested group, a group that is inside another group. You must ungroup the outer group first in order to ungroup the nested group.




You can ungroup elements in an area template with the **Ungroup** menu option.


## Locking Elements

Locking an element prevents you from changing its location on the page using the Selection tool. The handles on a locked element appear gray. If you try to drag a locked element, the pointer on the Selection tool changes to a lock symbol. You cannot use the **Alignment** or **Resize** commands if one of the selected elements is locked.

### ► To lock an element

- 1 Using the Selection tool , select at least one element.
- 2 Choose **Element** ⇨ **Lock Position**. Pageflex Studio locks the position of the selected elements.

### ► To unlock an element

- 1 Using the Selection tool , select the element or elements you want to unlock.
- 2 Choose **Element** ⇨ **Unlock**. Studio unlocks the position of the selected elements.

## Creating Runarounds



You can create a text runaround using a combination of a text container and a runaround element. The runaround element can be any other type of element including another text container. You can have more than one runaround element for the same text container. Studio places text around the runaround element.

Creating a runaround requires setting both the **Runaround** property for the text container and the **Avoid Me** property for the runaround element.

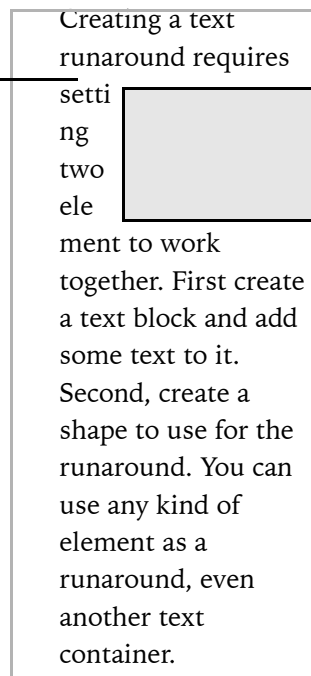
You can control the appearance of a runaround using the **Margins** properties for the text container and the **Bumpers** properties on the runaround element.

- **Margins.** Control the text offset from the edge of the text container.
- **Bumpers.** Controls the offset amount from the edges of the runaround element.

## ► To create a runaround

- 1 Arrange the text container and the runaround element so that they are overlapping each other.
- 2 Select the text container.  
**Note:** If you are selecting the text container in the Document window, use the Selection tool . If you use the Text tool , you cannot change the properties for the text container.
- 3 In the Properties panel, set the **Runaround** property to **Yes**.
- 4 Select the runaround element.
- 5 In the Properties panel, set the **Avoid Me** property to **Yes**.


**Set the Runaround property for the text container to Yes.**




**Set the Avoid Me property for the runaround element to Yes.**

- 6 The text in the text container avoids the runaround element. You can adjust the wrapping effect for the text lines by moving either the text container or the runaround element.

**Note:** Text runs around either the left side or the right side of the runaround element, but not both.

Creating a text runaround requires setting two elements to work together.  First create a text block and add some text to it. Second, text container.

Creating a text runaround requires setting two elements to work together.  First create a text block and add some text to it. Second, text container.

**Text runs around the left side  
or the right side, but not both.**

## Defining Colors

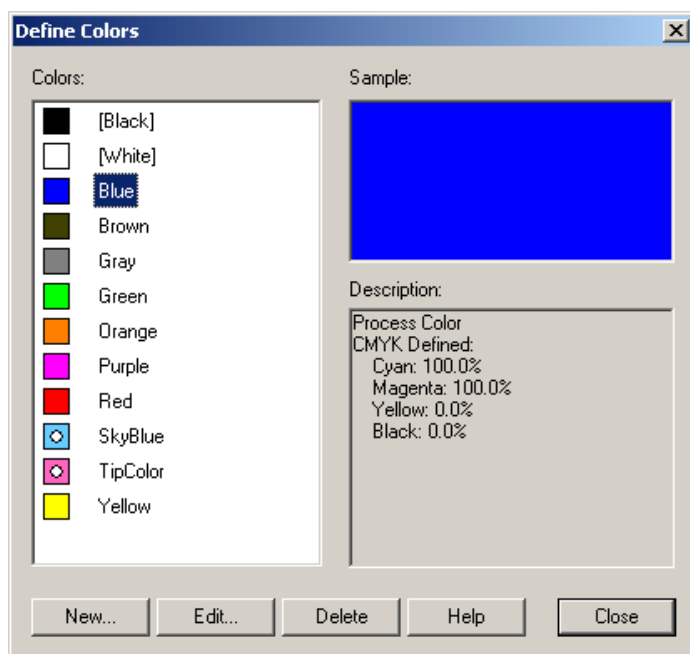
Pageflex Studio lets you define both process colors and spot colors. For process colors, Studio supports two color models:



- **CMYK** (Cyan, Magenta, Yellow, and Black)
- **RGB** (Red, Green, Blue)

You must define each color for your template. All elements use the same color definitions. You can apply colors to container fills and borders and to text characters. Text color can also be part of a paragraph style definition.

### ► To view the list of color definitions

- 1 Choose **Element** ⇨ **Define Colors**. Pageflex Studio displays the **Define Colors** dialog box.



-  **Process colors** appear with solid color blocks in the list.
  -  **Spot colors** appear with a white spot through the color block.
- 2 Select a color in the list to preview a sample of the color. Under **Description**, Studio displays the complete color definition.



## ► To define a color

- 1 On the **Define Colors** dialog box, click **New**.

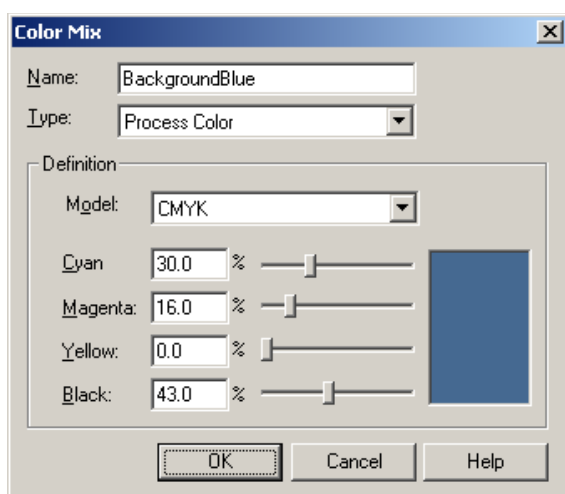
- or -

On the **Character** or **Paragraph Properties** dialog box, in the **Color** box, select **New**.

- or -

On the Properties panel under **Fill Color** or **Border Color**, choose **New**.

Studio displays the **Color Mix** dialog box.



- 2 Type a name for the color in the **Name** box.
- 3 In the **Type** list, choose the type of color you want. The type of color determines how the color is treated in the final output.
  - **Process Color.** When you print a process color, it is made up of the process colors used by your printing device.
  - **Spot Color.** When you print a spot color, it is treated as a single ink color. Only one separation is created for it.

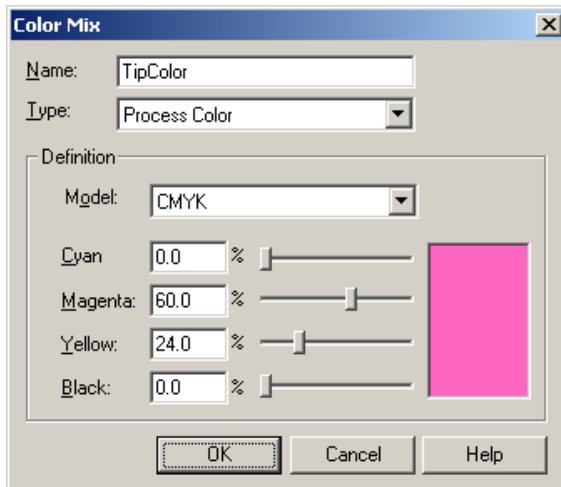
- 4 In the **Model** list, choose a color model for defining the color. The available color definition boxes change according to your selection. For spot colors, the color definition provides a color to use for previewing the color. It has no effect on the final output.
  - **RGB**. Uses Red, Green, and Blue. Color values range from 0 to 255.
  - **CMYK**. Uses Cyan, Magenta, Yellow, and Black. Color values range from 0% to 100%.
- 5 Type values for each color, or use the sliders to adjust the color values. A sample of the color mix appears beside the sliders.
- 6 When you are finished defining the color, click **OK**. Studio adds the new color to the list of available colors.

### ► To edit a color

Editing a color definition changes every occurrence of the color throughout the template. If you change the name of the color, Studio updates the name anywhere it appears in the template. You cannot revert to the original color definition using the **Undo** command.

- 1 In the **Define Colors** dialog box, under **Colors**, select the color, and then click **Edit**.

Studio displays the **Color Mix** dialog box for the color.




- 2 You can edit any information in the dialog box. For example, you can change a process color into a spot color, or a spot color into a process color.
- 3 Click **OK** when you are finished. Studio updates the color definition in the list and in every element that uses the color.


► **To delete a color**

Deleting a color is a permanent change and cannot be undone.

- 1 Choose **Element** ⇨ **Define Colors** to display the **Define Colors** dialog box.
- 2 Under **Colors**, select the color, and then click **Delete**. Studio deletes the color definition from the list.

# Understanding Element Properties

Each element has a set of properties that define it in both appearance and function. The available properties for an element depend on the type of element, and not all properties are available for all elements. When you select an element with the Selection tool , the Properties panel displays the properties for that element. Use the Properties panel to change an element's properties.

**Note:** For Text containers, you must select the container with the Selection tool to see the container properties. If you select text within a container using the Text tool , the Properties panel displays the Text properties. See “Formatting Text” on page 124 for an explanation of both Character and Paragraph Text properties.

The Properties panel has four tabs, **Form**, **Flex**, **.EDIT**, and **Info**. Properties that control the appearance of the element are on the **Form** tab. Properties that control the flexible behavior of an element appear on the **Flex** tab. Properties related to Online Design and Editing Sessions and the Free Edit step in Pageflex Storefront are on the **.EDIT** tab. Properties that describe the element are on the **Info** tab.

**Note:** Settings on the **.EDIT** tab are only applicable when the template is used with Online Design and Editing Sessions and Pageflex Storefront.

The Properties panel groups the properties on each tab by category. All measurements use the units of measure specified in the **Preferences** dialog box. See “Setting Preferences” on page 33.

The Properties panel is described by function in the following pages. The function name is followed by a bulleted list with the following information:

- **Elements:** The elements to which the property can be applied.
- **Description:** A description of the function.
- **Values:** The values that can be entered or that are displayed for this property.

# Form

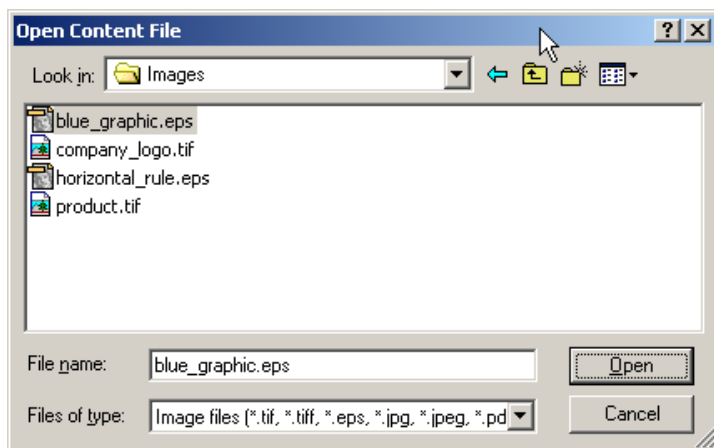
The following items can be found under the **Form** tab in the **Properties** panel.

## Image

When you select an image, the **Form** tab displays the fields below.

### Source

- **Elements:** Images.
- **Description:** Identifies the source for a static image.
- **Values:** Type the path to the image file, or click **New** to locate an image source. For more information, see “Image Containers” on page 62.



In the **Open Content File** dialog box, locate the image, and click **Open**.

To remove an image source, choose **None**.

### Fit

- **Elements:** Images.
- **Description:** Determines how an image is scaled in relation to its container.
- **Values:** Choose one of the following options:
  - **Fit Image.** Scales the image according to the **Horizontal** and **Vertical Scale** percentages in the Properties panel. By default, the image scales to 100%. Scales the container to match the image dimensions.

- **Fit Width.** Scales the image to fit the width of the image container. The aspect ratio of the image is preserved and the height of the image container adjusts so that the image is not distorted.
- **Fit Height.** Scales the image to fit the height of the image container. The aspect ratio of the image is preserved and the width of the image container adjusts to accommodate the height.
- **Stretch to Fit.** Scales the image both horizontally and vertically to fit the height and width of the image container. The image may be distorted. For more information, see “Scaling Images” on page 65.
- **Scale to Fit.** Scales the image to fit within the **Maximum Width** and **Maximum Height** specified. Preserves the aspect ratio so the image is not distorted.
- **Scale to Fit (Page Relative).** Scales the image to fit within the **Maximum Width** and **Maximum Height**, which are specified relative to the size of the page. See “Scaling Images” on page 65 for details.

### Horizontal Scale

The percentage to horizontally scale the image while maintaining its aspect ratio.

### Vertical Scale

The percentage to vertically scale the image while maintaining its aspect ratio.

### Maximum Width

The maximum width, in units or percentage, to scale the image. This reflects the size of the image container.

### Maximum Height

The maximum height, in units or percentage, to scale the image. This reflects the size of the image container.

## Line

When you select a line, the **Form** tab displays the fields below.

### Color

- **Elements:** Lines.
- **Description:** Applies color to a line.

- **Values:** Select a color from the list, or click **New** to define a new color. For an explanation of adding colors, see “Defining Colors” on page 86.


### Tint

- **Elements:** Lines.
- **Description:** Applies a percentage of the Color specified for the line.
- **Values:** Tint is a percentage from 0% to 100%.

### Thickness

- **Elements:** Lines only.
- **Description:** Determines the weight of the line.
- **Values:** Select a thickness from the list, or type a value in points.

### Line Style

- **Elements:** Lines only.
- **Description:** Lines can be solid, dashed, or dotted.
- **Values:** Solid, Dash, or Dot. Click the button  next to the value to open the **Border Style** dialog box. For more information, see “Borders and Lines” on page 69.

### Point X, Point Y

The x- and y-axis locations for the selected point on a line. See “Point X, Point Y” on page 95 for details.

## Size

When you select a container, shape, or group, the **Form** tab displays the fields below.

### Width

- **Elements:** Text containers, images, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** Controls the width of the element.
- **Values:** Enter width as a number. Studio formats the width of the element in the ruler units specified in the **Edit** ➞ **Preferences** menu.

## Height

- **Elements:** Text containers, images, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** Controls the height of the element.
- **Values:** Enter height as a number. Studio formats the height of the element in the ruler units specified in the **Edit** ⇌ **Preferences** menu.

## Position

When you select a container, shape, or group, the **Form** tab displays the fields below.

### Left

- **Elements:** Text containers, images, area templates, shapes, and groups.
- **Description:** This number is the horizontal coordinate of the left side of the element.
- **Values:** Position is relative to the horizontal ruler. Enter a number as a measurement on the ruler. The number can be positive or negative. Changing the ruler origin may change the value for the position, but it does not change the element's location on the template. For elements inside an area template, position is relative to the edges of the area template container.

### Top

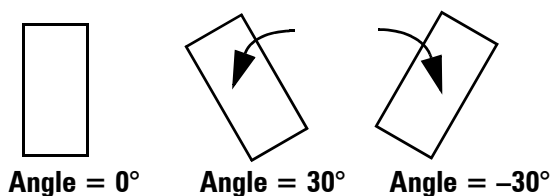
- **Elements:** Text containers, images, area templates, shapes, and groups.
- **Description:** This number is the vertical coordinate of the element.
- **Values:** Vertical position is relative to the vertical ruler. Enter a number as a measurement on the ruler. The number can be positive or negative. Changing the ruler origin may change the value for the position, but it does not change the element's location on the template. For elements inside an area template, position is relative to the edges of the area template container.

### Angle

- **Elements:** Text containers, images, area templates, shapes, and groups.
- **Description:** Controls the rotation of an element or group.



- **Values:** Positive numbers rotate objects counter-clockwise, negative numbers rotate them clockwise.



To rotate an element or group using the Rotation tool, see “Rotating Elements” on page 77.

### Point X, Point Y

- **Elements:** Bézier shapes (including Text Paths, Bézier lines, Bézier text containers, Bézier shapes, and Bézier area templates)
- **Description:** Specifies the horizontal and vertical coordinates for the selected point.
- **Values:** Point X describes the position of the point on the horizontal ruler; Point Y describes the position of the point on the vertical ruler. Select a point and enter a number as a measurement on the ruler. The number can be positive or negative. Changing the ruler origin may change the value for the position, but it does not change the location of the element on the template.

### X1, Y1, X2, Y2

- **Elements:** Lines only.
- **Description:** Specifies the horizontal and vertical coordinates for the two endpoints of a line. The first endpoint is measured by **X1** and **Y1**, and the second endpoint is measured by **X2** and **Y2**.
- **Values:** X values describe positions on the horizontal ruler; Y values describe positions on the vertical ruler. Enter a number as a measurement on the ruler. The number can be positive or negative. Changing the ruler origin may change the value for the position, but it does not change the location of the element on the template.

## Color and Border

When you select a container, shape, or group, the **Form** tab displays the fields below.

## Fill Color

- **Elements:** Text containers, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** Applies color to the inside of the container or shape.
- **Values:** Select a color from the list of pre-defined color names. For an explanation of adding colors, see “Defining Colors” on page 86.

## Fill Tint

- **Elements:** Text containers, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** Applies a percentage of the **Fill Color** to the object.
- **Values:** Tint is a percentage from 0% to 100%.

## Border Color

- **Elements:** Text containers, images, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** Applies color to the element border. Works with the Border Thickness property to create the element border.
- **Values:** Select a color from the list of pre-defined color names. For an explanation of adding colors, see “Defining Colors” on page 86.


## Border Tint

- **Elements:** Text containers, images, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** Applies a percentage of the **Border Color** to the element border.
- **Values:** Tint is a percentage from 0% to 100%.

## Border Thickness

- **Elements:** Text containers, images, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** Determines the thickness of the element border. Works with the Border Color property to create the element border.
- **Values:** Enter a positive number. Studio measures Border Thickness in points.

## Border Style

- **Elements:** Text containers, images, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** The border style can be a solid line, a dashed line, or a dotted line. The **Border Style** dialog box lets you define the style for the line.
- **Values:** Solid, Dash, or Dot. Click the button  next to the value to open the **Border Style** dialog box.

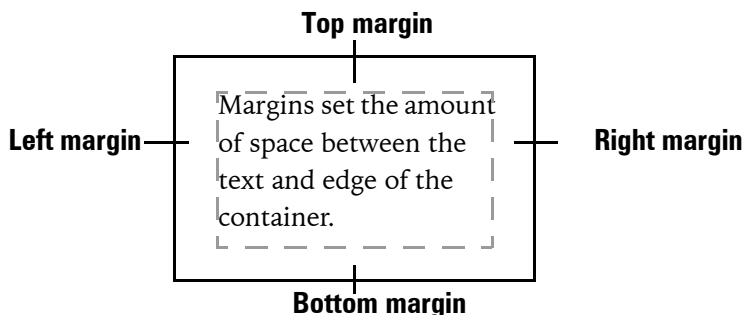
For more information, see “Borders and Lines” on page 69.

## Margins

When you select a container or group, the **Form** tab displays the fields below.

### Left, Right, Top, Bottom

- **Elements:** Text containers, area templates, horizontal and vertical groups.
- **Description:** Sets the amount of space between the contents of the container and the edge of the container.



- **Values:** Enter numbers for each property.

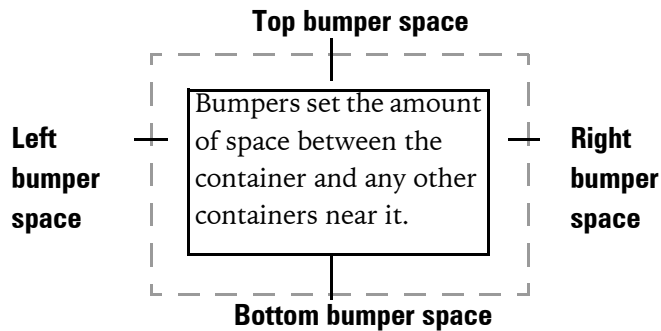
## Bumpers

When you select a container, shape, or group, the **Form** tab displays the fields below.

### Left, Right, Top, Bottom

- **Elements:** Text containers, images, area templates, shapes, and groups.

- **Description:** Specifies a required amount of space to leave around the outside of an element. This property works with the **Avoid Me** and **Runaround** properties to create a text runaround effect. When you overlap the element with a text container, you create a runaround, and the Bumpers are the amount of space between an element and the text that runs around it. When you specify a bumper space for elements within a group, the bumper space determines the distance between the elements. If you are adding flex behavior to an element or group of elements, adding Bumpers preserves a uniform space between elements.



See “Creating Runarounds” on page 83 for more information.

- **Values:** Enter positive numbers for each property.

## Columns

When you select a text container the **Form** tab displays the fields below.

### Number

- **Elements:** Text containers only.
- **Description:** Indicates the number of columns in a text box. For more information, see “Adding Columns” on page 57.
- **Values:** Enter a positive number.

### Gutter Size

- **Elements:** Text containers only.
- **Description:** Measures the distance between the columns in the text box.
- **Values:** Enter a positive number.

## Special

When you select a container, shape, line, or group, the **Form** tab displays the fields below.

### Avoid Me

- **Elements:** Text containers, images, area templates, shapes, lines, and groups.
- **Description:** Indicates whether the text in an overlapping text container should avoid the element. Works with the **Runaround** and **Bumpers** properties to create a text runaround effect.
- **Values:** Choose **Yes** to have text avoid the element, or **No** to prevent any interaction between elements.

### Runaround

- **Elements:** Text containers only.
- **Description:** Indicates whether the text in the container should flow around the edges of any overlapping elements with the Avoid Me property set to **Yes**. Works with the **Avoid Me** and **Bumpers** properties to create a text runaround effect. See “Creating Runarounds” on page 83.
- **Values:** Choose **Yes** to allow the text to flow around another element, or **No** to prevent any text runaround effects.

### Suppress Printing

- **Elements:** Text containers, images, area templates, shapes, lines, and groups.
- **Description:** This property prevents an element from printing. The element still occupies space in the template, including runaround and flex properties, but it is not intended to be included in the final output.  
  
**Note:** When you create a job in Pageflex Studio, you can choose whether the suppressed elements should print or not. For more information, see “Previewing Suppressed Elements” on page 339.
- **Values:** Choose **Yes** or **No**.

## Overprint Border/Fill/Black Line

- **Elements:** Text Containers, images, area templates, shapes, lines, and groups.
- **Description:** This property enables overprinting for selected elements. When printing PostScript or PDF files, you can control how much ink goes over the medium using overprint. When overprint is disabled (the default), each colorant replaces all colorants under it, resulting in less ink on that region. With overprint enabled, the inks beneath the object are emitted, resulting in more ink on the medium.

You can set the default overprint settings for black text and black objects by selecting the appropriate check boxes during template setup. If you enabled the default overprint settings for black text during template setup, it will automatically get the overprint attribute set at template creation time. This same behavior will occur for black objects.

- **Values:** Choose **Yes** or **No** to enable or disable overprinting of the selected element. If you selected the Black Object Fills or Black Object Borders check boxes in the Template Setup dialog box, your choice will be reflected here when you use black fills or borders.

You can also override these settings for black objects in the Job Setup dialog. See “PostScript” on page 318 or “PDF” on page 320 for details.

## Use Clipping Path

- **Elements:** Image containers only.
- **Description:** If an image has a clipping path, Studio uses it to wrap text around the contours of the clipping path. Clipping paths define the transparent parts of the image. If the image file has no clipping path information, setting this property has no effect.

**Note:** This property only applies to runaround, not the actual clipping of the image. You cannot create a clipping path with Studio. Use your image editing application to add a clipping path.

- **Values:** Choose **Yes** or **No** to include the clipping path or to exclude it.

## Clipping Offset

- **Elements:** Image containers that use clipping paths.
- **Description:** For .eps image files with clipping paths, the bumper is the distance between the clipping path of the image and the text that wraps around the image.

If the image file has no clipping path information, setting this property has no effect. To change the offset around an image container with no clipping path, use the **Bumper** property. See “Bumpers” on page 97.

- **Values:** Enter a number.

### Vertical Alignment (for Text Boxes)

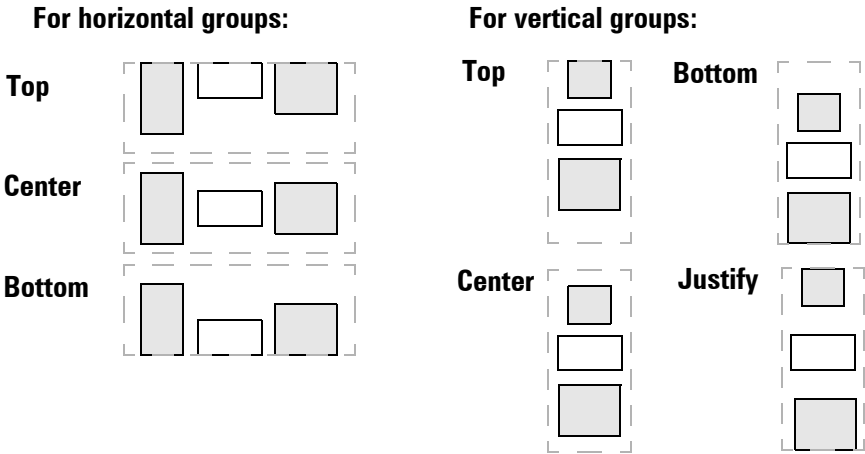
- **Elements:** Text boxes only.
- **Description:** This property sets the vertical alignment of the text within a text box.
- **Values:** Top, Center, Bottom, or Justify.

Top	Center	Bottom	Justify
Vertical Alignment set to Top, the default option.	Vertical Alignment set to Center. Text centers top to bottom.	Vertical Alignment set to Bottom. Text flows from the bottom up.	Vertical Alignment set to Justify. Text fills the container vertically.

**Note:** If you also apply the Runaround property to the text box, the Vertical Alignment must be Top.

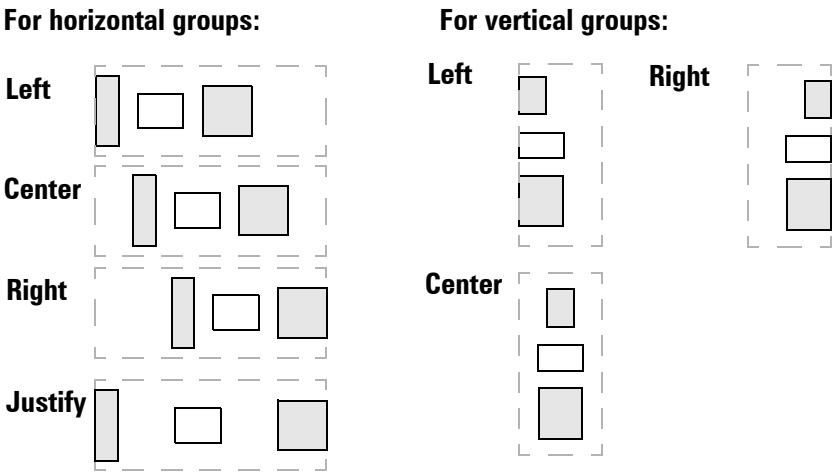
**Vertical Alignment (for Horizontal Groups and Vertical Groups)**

- **Elements:** Horizontal groups and vertical groups.
- **Description:** This property determines the vertical alignment of the elements within the group in relation to the group’s container.
- **Values:** Top, Center, Bottom, Justify.



**Horizontal Alignment (for Horizontal Groups and Vertical Groups)**

- **Elements:** Horizontal groups and vertical groups.
- **Description:** This property determines the horizontal alignment of the elements within the group in relation to the group’s container.
- **Values:** Left, Center, Right, and Justify (horizontal groups only).





## Crop Content

- **Elements:** Horizontal groups, vertical groups, and area templates.
- **Description:** Determines whether the area template container crops the elements inside it or not.
- **Values:** **Yes** and **No**. With this property set to **Yes**, Studio crops any element inside the area template that extends past the edges of the area template container.

With this property set to **No**, Studio does not crop any element that extends past the edge of the container.

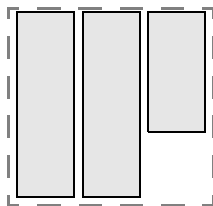
# Flex

The following items can be found under the Flex tab in the Properties panel.

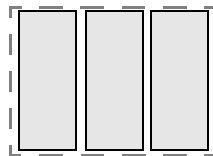
## Flex Height

### Behavior

- **Elements:** Text boxes, area template boxes, rectangular shapes, horizontal groups, and vertical groups.
- **Note:** **Flex Height** does not apply to any kind of oval or polygon.
- **Description:** Indicates how the height of the element can change as the element's contents change. You can use this property with both static and variable contents. When you use **Flex Height**, you cannot enter a number in the **Height** property for the size of the element.
- **Values:** None, Minimize, Maximize, Column Balance.
  - **None.** Turns off the flex behavior.
  - **Minimize.** The element's container height shrinks to fit the size of its contents. For example, if a text box is 5 inches tall, and the text inside the box only needs to be 4 inches tall to fill the container, then the text box shrinks to 4 inches in height.
  - **Maximize.** The element's height expands to fill its container. For example, a rectangle is inside an area box, and the area box is 5 inches tall. With **Flex Height** for the rectangle set to **Maximize**, the rectangle expands to 5 inches tall to fit the area box.
  - **Column Balance** (for text boxes only). The height of the text box expands or contracts so that the text fits in equal columns inside the bounding text box. See "Adding Columns" on page 57 for information on balancing columns.



**Column balancing off**



**Column balancing on**

## Minimum and Maximum

- **Elements:** Text containers, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** Specifies upper and lower limits to control the specified Behavior attribute. For example, with the **Behavior** set to **Minimize**, the value for **Minimum** indicates the smallest possible height for the element. No matter what the flexible behavior is set to, **Minimize** or **Maximize**, the element's height does not shrink smaller than the **Minimum** value or expand larger than the **Maximum** value.
- **Values:** Enter a positive number for each value. The Minimum must be smaller than the Maximum.

## Flex Width

### Behavior

- **Elements:** Text boxes, area template boxes, rectangular shapes, horizontal groups, and vertical groups.
- **Note:** **Flex Width** does not apply to any type of oval or polygon.
- **Description:** Indicates how the width of the element can change as the element's contents change. You can use this property with both static and variable contents. When you use Flex Width, you cannot enter a number for the **Width** property.
- **Values:** None, Minimize, Maximize.
  - **None.** Turns off the flex behavior.
  - **Minimize.** The element's width shrinks to fit the size of its contents. For example, if a text box is 2 inches wide, and the text inside the box only needs to be 1 inch wide to fill the container, the text box shrinks to 1 inch wide.
  - **Maximize.** The element's width expands to fill its container. For example, a rectangle is inside an area box that is 3 inches wide. With **Flex Width** for the rectangle set to **Maximize**, the rectangle expands to 3 inches wide to fit the area box.

## Minimum and Maximum

- **Elements:** Text containers, area templates, shapes, horizontal groups, and vertical groups.
- **Description:** Specifies upper and lower limits to control the specified Behavior attribute. For example, with the **Behavior** set to **Maximize**, the maximum value indicates the widest possible width for the element. No matter what the flexible behavior is set to, **Minimize** or **Maximize**, the width of the element does not shrink smaller than the minimum value or expand larger than the maximum value.
- **Values:** Enter a positive number for each value. The Minimum must be smaller than the Maximum.

## Copy Fit Rule

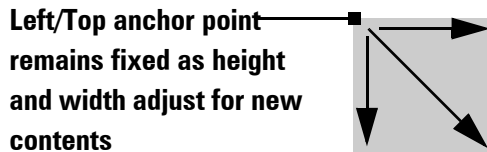
- **Elements:** Text containers only.
- **Description:** This property specifies the Copy Fit rule applied to the container.
- **Values:** Click the button to open the Copy Fit dialog box. You can select a Copy Fit rule or create a new rule to apply to the container. See “Using Copy Fit Rules” on page 163.

## Anchor Flex

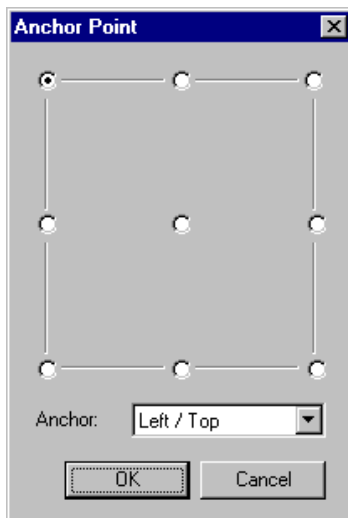
### Anchor, Anchor X, and Anchor Y

- **Elements:** Text boxes, image containers, area template boxes, and rectangular shapes. Horizontal and vertical groups can have Anchor Flex, but the elements contained inside the group do not.  
**Note:** **Anchor Flex** does not apply to any kind of oval or polygon.
- **Description:** The Anchor property sets a fixed point if the container changes its size to accommodate the flex behavior. The **Anchor X** and **Anchor Y** values show the numeric position of the anchor point.

For any container with flex behavior, the size of the container adjusts for the size of the variable content based on the anchor point. For example, if the anchor point is **Left/Top**, and the flex height and flex width are both set to **Maximize**, the position of the left/top handle of the element remains fixed as the height and width change.



- **Values:** Click the button beside the **Anchor** box in the Properties panel to display the **Anchor Point** dialog box.



To select an Anchor Point:

- Click one of the nine buttons.
- or-
- Select a position in the **Anchor** list.

# .EDIT

The following items can be found under the .EDIT tab in the Properties panel. See Chapter 5, “.EDIT Tab,” on page 111 for details.

## Configuration

### UIClass

- **Elements:** Text containers, images, area templates, shapes, and groups.
- **Description:** Lets you configure the options displayed in control applets and Storefront Free Edit tools depending on the item selected by a user of those applications.
- **Values:** Click **New...** and type a name for the UI class, or select a name from the drop-down list, which is compiled from your configuration file in the WebPages folder.

## Constraints

### Selection and Editing

- **Elements:** Text containers, images, area templates, shapes, and groups.
- **Description:** Sets rules specifying whether users of Storefront deployments or Online Design and Editing Sessions can select or edit this element.
- **Values:** Allow or Prevent.

### Size and Position

- **Elements:** Text containers, images, area templates, shapes, and groups.
- **Description:** Sets rules specifying whether users of Storefront deployments or Online Design and Editing Sessions can resize, position, copy, delete, or re-layer this element. Text can still be changed.
- **Values:** Allow Changes or Prevent Changes.

# Info

The following items can be found under the Info tab in the Properties panel.

## Name

- **Elements:** Text containers, images, area templates, shapes, and groups.
- **Description:** Allows control applet actions to select document elements by name.
- **Values:** an XML-compatible string.

## Kind

- **Elements:** Text containers, images, area templates, shapes, and groups.
- **Description:** Displays the generic name for the selected element.
- **Values:** This field cannot be edited. Values include images, area template, rectangle, text polygon, and so on.

## TOC Override Text

- **Elements:** Text containers.
- **Description:** Allows the entry of alternate text to be shown in a table of contents in place of the text in the range selection.  
This is a paragraph-level property, but it cannot be set on multiple paragraphs at once, to avoid placing multiple same text table of contents entries. It is shown only for selections that are one paragraph or less.
- **Values:** Text.

## Master Element

- **Elements:** Text containers, images, area templates, shapes, and groups.
- **Description:** Displays whether a selected element was inherited from the master page or not. See “Working with Master Pages” on page 189 for more information.
- **Values:** This field cannot be edited. The value is **Yes** if the element was inherited from the master, and **No** if it was not.

## Autochain

- **Elements:** Text containers.
- **Description:** Displays whether a text box is an autochain text container or not. See “Working with Master Pages” on page 189 for more information.
- **Values:** This field cannot be edited. The value is **Yes** if the element is an autochain text container, and **No** if it is not.



---

# **.EDIT Tab**

# **5**

The functions on the .EDIT Tab enable you to set element options for use in an Online Design and Editing Session application or the Free Edit step in Pageflex Storefront. You can:

- create custom panels by applying UI Classes to elements;
- add constraints to elements, for example, to limit users from selection and editing or size and position changes;
- create alternate panels to be displayed, depending on the object selected.

---

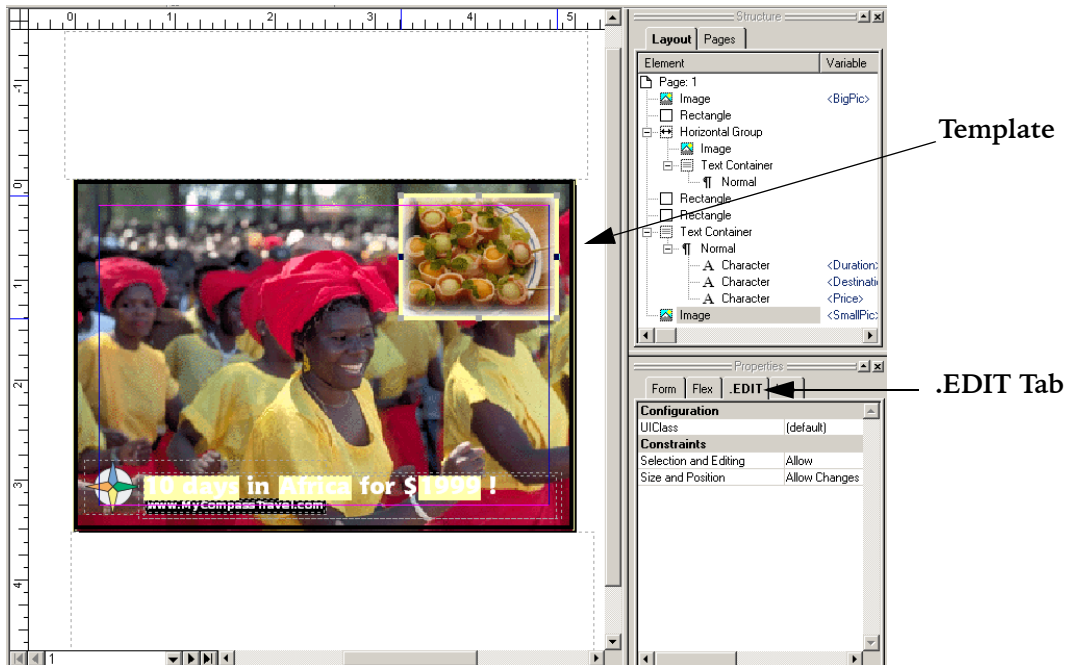
## Using Templates in .EDIT and Storefront

Pageflex .EDIT is the publishing technology behind Online Design and Editing Sessions and the Storefront Free Edit step that enables non-designers to design and edit sophisticated desktop publishing documents with nothing more than a Web browser and an internet connection. This technology enables companies to offer document editing capabilities to customers, employees, marketing partners, and dealers or franchise owners — all through their standard website and without requiring the use of any plug-ins.

Pageflex Storefront is a set of tools and technologies that makes it easy to set up a Web-to-print store for selling customizable document products. Through an easy-to-use Web-based interface, you can publish and manage a catalog of customizable documents, set up user access, determine customization workflows, set site skinning, and define user profile, shipping and purchasing options. Storefront uses .EDIT technology in its Free Edit feature, enabling users to modify documents using a standard Web browser.

Online Design and Editing Sessions and Storefront Free Edit both allow you to create a wide range of user experiences. You can configure these editing solutions so that users can create their own documents or simply make changes to existing documents before going to press. You can offer users a lot of opportunity to make changes or constrain them to making a limited set of changes. Subtle constraints can be implemented by offering a limited number of choices in the Online Design and Editing Session or Free Edit user interface; by exposing only paragraph styles, for example, rather than font names, font sizes, and font styles, in a text panel.

You can use Pageflex Studio to create templates for use in Online Design and Editing Sessions and Storefront. Within Studio, you can apply instructions that govern the extent to which the template can be modified in both of these applications. Give careful thought to the user experience when you create the template. Consider which elements you do not want users to modify at all and which elements you want to limit user control over. For example, you can allow users to edit a headline, but prevent them from moving it on the page. The screen shot below displays a sample template in Pageflex Studio.



The **.EDIT Tab** contains fields to add instructions to the template for use with the control applets and document applet in Online Design and Editing Sessions and Storefront Free Edit. **Control applets** contain controls to add or change elements in the document template. The **document applet** displays the document template.

## Adding Constraints

Constraints limit the elements the user can change. For example, you can choose to allow users to modify every single element of the document, such as moving, adding, or deleting images and text, or you can limit them to making only selected changes. You can allow users to change only the text in a text container, but prevent them from moving it. Or you can prevent users from changing any text, and only allow them to move elements around.

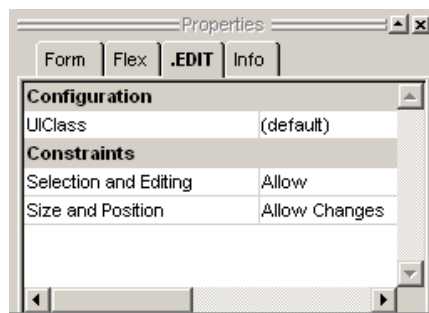
The following are some examples of the ways in which you can add constraints:

- Use the constraints on the .EDIT tab for **Selection and Editing**, or **Size and Position** to restrict your users' ability to directly manipulate objects.
- Use flex and group functionality when designing your template. These features enable you to ensure that the document design remains cohesive regardless of the amount of content a user adds or removes.
- Use variables in your design to constrain users' ability to modify text content.
- Design your control applets to display only the options you want users to be able to change, or limit the selection of editing panels in Storefront Free Edit that you display to the user.

This section discusses constraints in detail, starting with the constraints created specifically for control applets that exist on the .EDIT tab in Pageflex Studio.

## Using Constraints on the .EDIT Tab


The screen shot below shows a .EDIT tab with sample data:



The .EDIT tab contains two sections: **Configuration**, which holds the UIClass field, and **Constraints**, which holds the **Selection and Editing** and **Size and Position** fields. We discuss the constraints section first.

## Selection and Editing


With Studio, you can select an element—a text container, image, area template, shape, or group—and specify whether users can select and edit these elements or not. The default is to **allow** selection and editing. You can also **prevent** selection and editing.

A red circle  with a diagonal bar appears in the document applet when users attempt to click on an element they have been prevented from selecting.

**Note:** If you prevent changes to selection and editing, you automatically prevent changes to size and position as well.

## Size and Position

In your template, you can select a text container, image, area template, shape, or group, and specify whether users can resize, position, copy, delete, or re-layer this element. Text, image source, fill, and border properties can still be changed. The default is to **allow** size and position changes. You can also **prevent** size and position changes.

A lock icon  appears in the document applet when users attempt to move an element for which you have prevented size and position changes.

## Using Flex and Groups as Constraints

**Flex** behavior allows a container to expand, contract, and reposition itself and adjacent containers to accommodate variable content. In Pageflex Studio, you add flex by specifying how containers can expand and contract when variable content is added. See Chapter 7, “Adding Flex,” on page 177 for details about adding flex to your template.

A **group** is a collection of elements combined to function as a single element. See “Grouping Elements” on page 79 for details about grouping elements in your template.

Flex and groups can be used to constrain user options by restricting the layout changes that users can make. For example, the real estate postcard below is

organized with a horizontal group that includes the photo of the house, description, and agent name.



When the user chooses a photo of a different size, the layout automatically adjusts. The user cannot override the automatic layout.

## Using Variables as Constraints

.EDIT Technology prevents users from directly editing text that has been marked as variable. You can release this constraint and let users modify variable values by supplying controls in the control applet that let them type in new text or select new values from a list (this is an advanced function in Storefront Free Edit).

In Pageflex Studio, you can also define rules that specify how to compute the value of a variable based on the values of other variables. This derived variable lets you define subsets of content appropriate to various situations. For example, to present an image of the Eiffel Tower to a prospect for a trip to Paris and a picture of the Grand Canyon to a prospect for a trip to Arizona. See the samples that ship with Pageflex Studio for more information on derived variables.

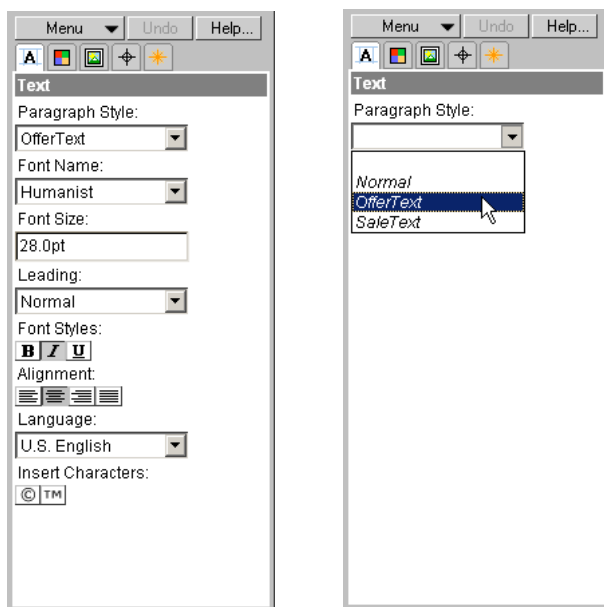
Applications using .EDIT technology can also use the rules-based variables you set up in Studio. To do so, first define the rules for determining variable content in your Studio project by following instructions in Chapter 12, "Defining Content Variables," on page 268. Next, specify a path to the project file relative to the Pageflex Server host with the `projectFileForVariableEvaluation` applet parameter. This parameter instructs the engine to load the project and evaluate

its rules. See the *Pageflex Programming Reference Guide* for more information about this parameter and an example of how to use it.

## Designing Your Control Applet with Constraints

Another way to constrain the choices the user has within your document is by limiting the choices available in the design of the control applet. For example, you can expose the necessary controls in the control applet so that users can change everything about the fonts displayed in the document, such as paragraph style, font size, font name, and font style, or you can expose a limited group of paragraph styles for users to select.

The comparison below illustrates this example.



In the control applet on the left, the user has many options to choose from when formatting text. In the control applet on the right, the user can choose only from a list of available paragraph styles.

# Associating Objects with Alternate Panels

In your control applet, you can specify different panels for editing objects, depending on the object selected. The `uiClass` name of the panel differentiates between generic panels used by the majority of objects the user selects, and alternate panels relevant to certain specific objects. For example, if you have two images in your template that users can replace with alternate images, you may want to create two separate image panels, one for each image. The `uiClass` field in the `.EDIT` tab in Pageflex Studio allows you to label each image so that when a user selects one of the images, the control applet will display the appropriate panel. See the next page for an illustration.

## ► To Create Alternate Panels

- 1 In your configuration file, create a panel that will function as the generic panel to be displayed when objects with no `uiClass` name are selected. This generic panel should specify the `panelButton` to use for the panel, if any.
- 2 Create the panel that will be displayed when an object with a specific `uiClass` is selected. This alternate panel should **not** have a `panelButton`.
- 3 Add a `uiClass` name as a panel attribute (the example below uses `uiClass="photo"`). You may repeat steps 2 and 3 multiple times to create multiple alternate panels. See the code below for an example:

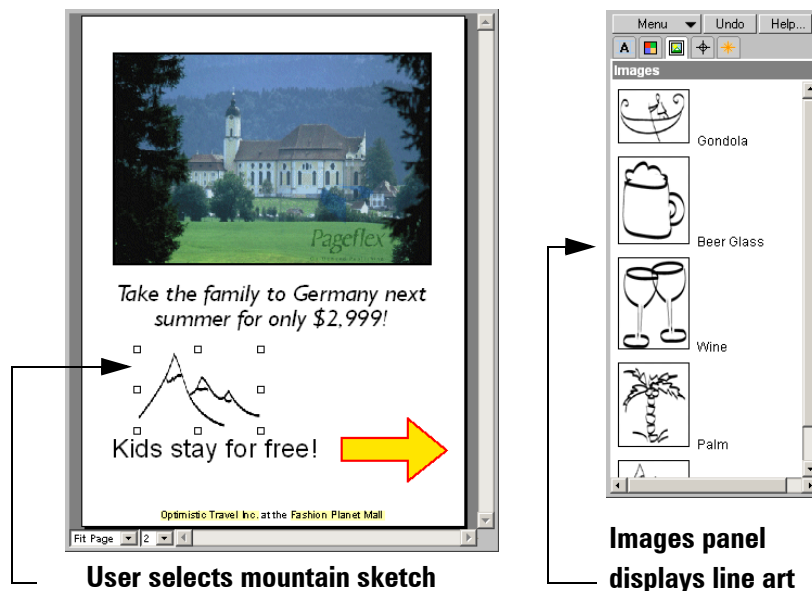
```
<panel label="Images" name="imagespanel" uiClass="photo">
<item class="image source choice" img="KitchenImages/germany_thumb.gif"
  value="bigpic_germany.tif" label="Germany" bold="no"/>
<item class="image source choice" img="KitchenImages/hawaii_thumb.gif"
  value="bigpic_hawaii.tif" label="Hawaii" bold="no"/>
<item class="image source choice" img="KitchenImages/italy_thumb.gif"
  value="bigpic_italy.tif" label="Italy" bold="no"/>
</panel>
```

- 4 Open the template in Pageflex Studio and select the object or objects for which you want this panel to be displayed.
- 5 Select the appropriate `uiClass` from the `.EDIT` tab. Your configuration file must be in the “WebPages” subdirectory of the project directory in order for the `uiClasses` you created to be displayed in Pageflex Studio.
- 6 Save your template.

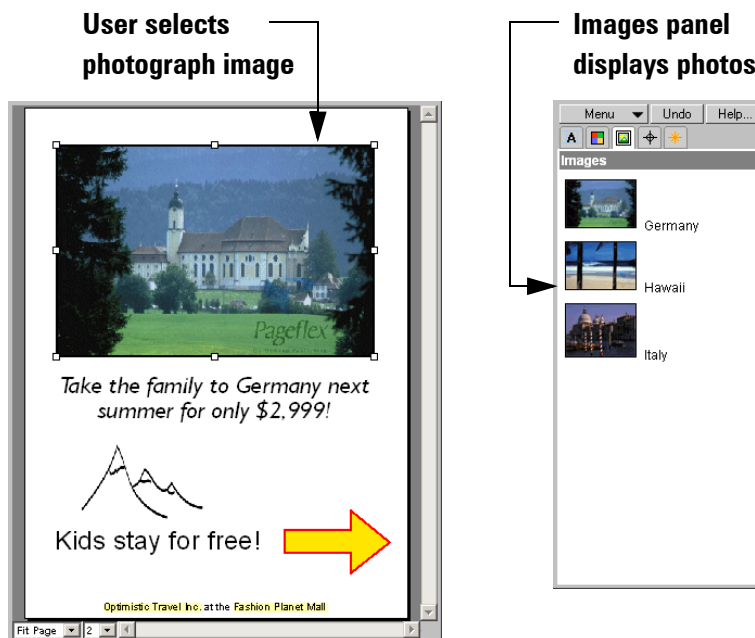
**Note:** Panels with the `uiClass` attribute cannot get panel buttons.



When a user selects a mountain sketch, the **Images** panel displays a list of line art images for the user to select from:

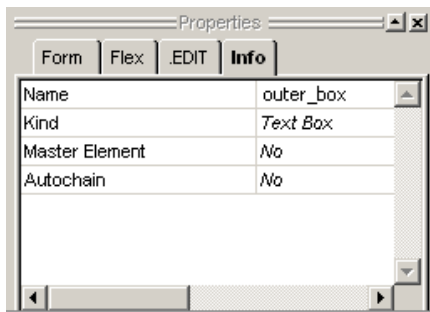


When the user selects the photograph image, the **Images** panel displays a list of photographs instead:



# Naming Elements

The **Info** tab includes a **Name** field to name an element.



Naming elements is useful if you want to use control applet actions to select document elements by name. For example, the `setAttribute` action uses the name field to set an attribute of a named shape. Named elements are also used in the `selection` attribute of choice buttons.

In the example below, one fill-color choice applies a green border around the `outer_box` element, while another applies an aqua border:

```
<row>
  <item class="fill color choice" img="PartyImages/GreenBorder.gif"
    value="green" selection="outer_box" />
  <item class="fill color choice" img="PartyImages/AquaBorder.gif"
    value="aqua" selection="outer_box" />
</row>
```

See the *Pageflex Programmer Reference Guide* for details about these functions.

**Note:** Names must be unique within a document and must follow the syntax of XML names. For example, they must start with a letter and may not contain a space. See the XML specification on the World Wide Web Consortium website for more information about XML syntax.

## Viewing Template Information

When creating your control applet configuration file, you will need information about the fonts and colors used in your template, as well as other characteristics. You can view a list of useful information about your template by selecting **Template Info** in the **File** menu of Pageflex Studio.

This displays the **Template Info** dialog box, containing the information below:

- **Fonts**—the names of fonts used in the template.
- **Styles**—the names of styles used in the template.
- **Colors**—the names of the colors used in the template and whether colors are formatted as RGB or CMYK.
- **Images**—the file names of static images used in the template.
- **Variables**—the names of variables used in the template.
- **Names**—the names of any elements defined on the Info tab.

Click the **copy** icon to copy this information onto your clipboard. Click the **save** icon to save this information into a text file. Click **Close** to exit.



---

# Working with Text

## 6

This chapter explains how to:

- Apply character and paragraph properties to text within a text container
- Create paragraph and character styles to make formatting your template easier and more consistent
- Create and utilize formatted content for variable input
- Create and apply Copy Fit functions for fitting text within specified boundaries
- Modify Asian character settings
- Find and replace text
- Find and replace fonts
- Check spelling
- Insert special characters

# Formatting Text


Pageflex Studio gives you precise control over text with paragraph styles, paragraph properties, and character properties.

- **Character** properties control the appearance, for example, font size, color, and kerning of a selection of text.
- **Paragraph** properties control the appearance of paragraphs. They also provide default character properties for the paragraph. Paragraph properties control the spacing between the lines of a paragraph (leading) and between paragraphs (paragraph spacing).
- **Paragraph Styles** enable you to save customized paragraph properties and use them to format multiple paragraphs. Changes to a paragraph style are reproduced automatically in the paragraphs to which the style is applied.

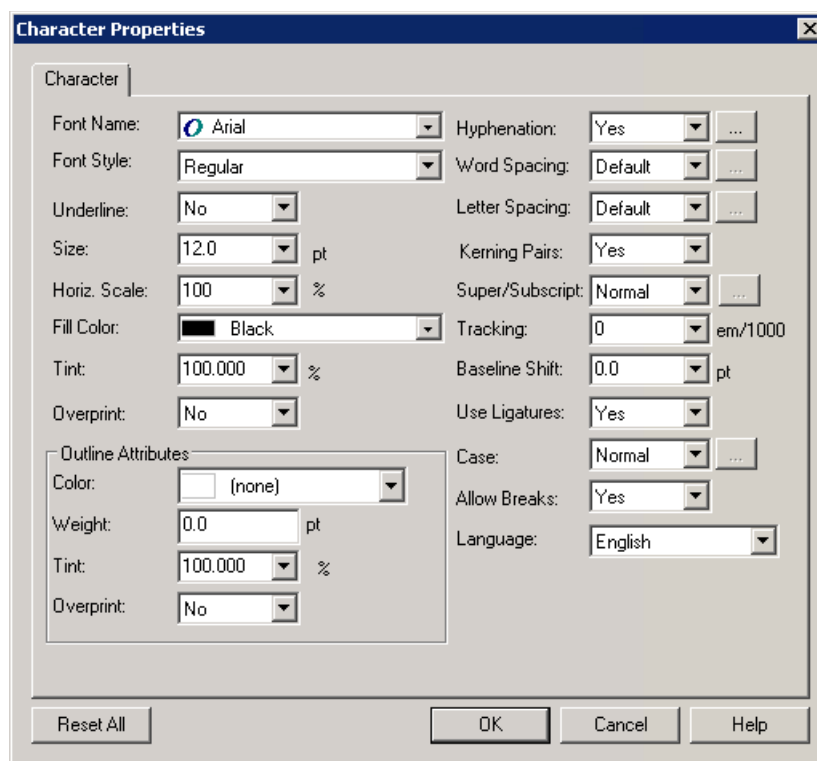
## Character Properties

Character properties apply to sections of type you select with the Text tool. To format an entire paragraph, use the Paragraph properties. You can apply most character properties using the Properties panel, but some are available only through the Character properties dialog box.

### ► To apply Character properties

- 1 Using the Text tool , select a range of text within a text container.
- 2 Choose **Text** ⇨ **Character** or press F8. Pageflex Studio displays the **Character Properties** dialog box.

- 3 Select properties, and then click **OK** to apply them.



### Font Name

Choose a typeface from the list. The list contains all available fonts installed on your system.

### Font Style

Choose a font style from the list. The list contains only the font styles available for the **Font Name** you have selected.

### Underline

Choose **Yes** or **No** to underline the text.

### Size

Type the size, measured in points, or choose a size from the list.

**Horizontal Scale**

This box controls the horizontal scaling of the font. The value 100% leaves the width unadjusted. Values less than 100% reduce the width of each letter, and values greater than 100% increase the width of each letter.

For example:

Horizontal Scale	Font Appearance
100%	Pageflex Studio
80%	Pageflex Studio
120%	Pageflex Studio
150%	Pageflex Studio

**Fill Color**

Choose a color from the list to set the fill color for the text. To define a new color, choose **New Color**. See “Defining Colors” on page 86.

**Tint**

Choose or type a percentage to create a tint of the selected color. Tint values range from 0% to 100%.

**Overprint**

Choose **Yes** or **No** to enable or disable overprinting for the text fill. See “Overprint Border/Fill/Black Line” on page 100 for details about overprint.

**Outline Attributes: Color**

Usually when Studio draws text, each character is fully painted with a single color. Studio allows the interior of a character to be painted with a different color than its outline/border.

Usually when you enter characters into a text container, the outline for each glyph is filled with the current color. However, you can change the outline color in this field. Choose a color for the text outline. You can choose “none” (the default) to display the background through the outlines, but you cannot choose none for color and outline color. When you first change the outline color from “none”, the thickness will automatically be changed from 0 to 1.



### Outline Attributes: Weight (or Thickness)

Choose a thickness for the text outline. The default is one if you choose a color. The maximum thickness is 10% of the point size of the text. If the point size is reduced, the thickness is automatically reduced to this maximum thickness, if necessary. If the thickness is changed to zero, the outline color changes to none. The style of text borders is always solid.

### Outline Attributes: Tint

Choose or type a percentage to create a tint of the selected color for the text outline. Tint values range from 0% to 100%.

### Outline Attributes: Overprint

Choose **Yes** or **No** to enable or disable overprinting for the text outline.

## Language

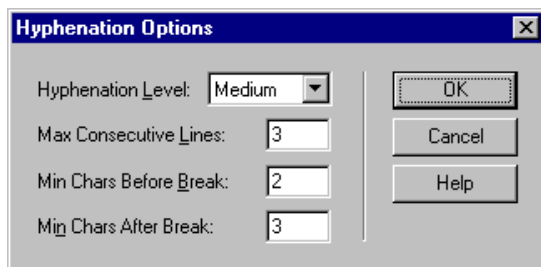
Select a language to use for the spelling and hyphenation dictionaries. When you set up the project template, you select a default language to use. Use the Language property to override the default language.

- If you select **Chinese - Simplified** or **Chinese - Traditional**, you can also set Chinese character settings. See “Using Chinese Character Settings” on page 149.
- If you select **Japanese**, you can also set Japanese character settings. See “Using Japanese Character Settings” on page 151.

## Hyphenation

Under **Hyphenation**, choose whether to allow hyphenation or not.

- Select **No** if you do not want to hyphenate the text.
- Select **Yes**, and then click the button beside the box to select hyphenation options.



Choose or type values for the following:

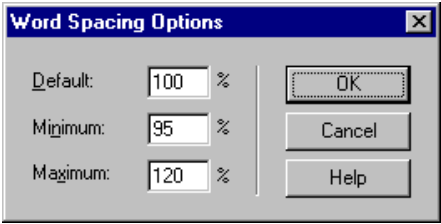
Box Name	Description
Hyphenation Level	<p>Controls how aggressively Studio hyphenates a word. The default level is <b>Medium</b>. Choose <b>High</b> or <b>Low</b> to increase or decrease the amount of hyphenation.</p> <p>The Hyphenation Level is relative. The width of the text container, the letter and word spacing, and the paragraph alignment all affect how Studio uses hyphenation.</p>
Max Consecutive Lines	<p>Controls the maximum number of sequential lines in the same paragraph that can end with hyphens. For example, if you set this to 3, then the paragraph can have no more than 3 hyphenated lines in a row.</p>
Min Chars Before Break	<p>The least number of characters in a syllable immediately before the hyphen.</p> <p>For example:</p> <div><div>「Minimum number be-」   fore a break.</div><div>「Minimum number」   before a break.</div></div> <div><div><b>Min. Before set to 2 characters</b></div><div><b>Min. Before set to 3 characters</b></div></div>
Min Chars After Break	<p>The least number of characters in a syllable immediately following a hyphen.</p> <div><div><b>Min. After set to 3 characters</b></div><div>「Minimum num-」 —  ber after a break.</div></div> <div><div><b>Min. After set to 4 characters</b></div><div>「Minimum」 —  number after a break.</div></div>

Word Spacing

Under **Word Spacing**, you can set the amount of space between words.

- Select **Default** to use standard word space between words.

- Select **Custom**, and then click the button beside the box to set the **Word Spacing** options.



Type values for each of the following:

Box Name	Description
<b>Default</b>	The Default is the preferred amount of word spacing expressed as a percentage of the standard width of the space character for the font.
<b>Minimum</b>	The smallest amount of word spacing, expressed as a percentage of a standard space. Type a number between 10% and 999%. For example, if you set this to 80%, Studio makes a line break and justifies by adjusting the word spacing between 80% of the normal width for the current font and the maximum width. It attempts line breaking first for full words and then performs hyphenation.
<b>Maximum</b>	The largest amount of word spacing, expressed as a percentage of a standard space. Type a number between 10% and 999%.

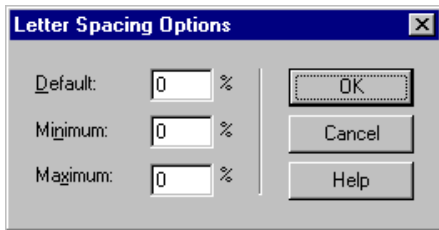
The value for **Default** must be greater than or equal to **Minimum** and less than or equal to **Maximum**.

### Letter Spacing

Under **Letter Spacing**, you can set the amount of space between characters.

- Select **Default** if you do not want to add any additional letter spacing.

- Select **Custom**, and then click the button beside the box to set **Letter Spacing** options.



Type values for each of the following.

Box Name	Description
<b>Default</b>	The preferred space between letters expressed as a percentage of a standard space.
<b>Minimum</b>	If Studio cannot use the Default spacing, the minimum is the smallest amount of letter space it can use.
<b>Maximum</b>	If Studio cannot use the Default spacing, the maximum is the largest amount of letter space it can use.

### ► To add kerning space between two characters

Using the Text tool **I**, click between any two characters.

- To increase the kerning space, press **CTRL + SHIFT + PLUS SIGN (+) ON THE NUMERIC KEYPAD**
- To decrease the space, press **CTRL + SHIFT + MINUS SIGN (-) ON THE NUMERIC KEYPAD**

**Note:** You must press the **PLUS SIGN(+)** and **MINUS SIGN(-)** keys on the numeric keypad to use the shortcut keys to increase or decrease kerning.

To remove kerning space, see “Removing All Style Properties” on page 148.

### Kerning Pairs

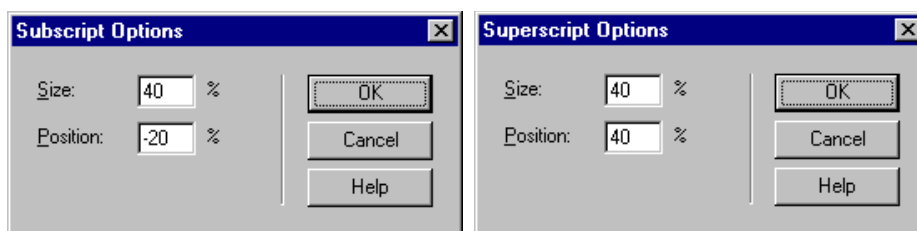
Under **Kerning Pairs**, choose whether Studio should use the kerning pair information for the selected font. The amount of kerning pair information varies from font to font.

- Choose **Yes** to use the kerning information defined in the selected font.
- Choose **No** to prevent using the pre-defined kerning pair information.

## Super/Subscript

Under **Super/Subscript**, you can set the options for creating superscript or subscript characters.

- Select **Normal** to remove any existing superscript or subscript options.
- Select **Subscript** or **Superscript**, and then click the button beside the box to set options for your selection.



Type values for each of the following, and click **OK**.

Box Name	Description
<b>Size</b>	Enter the size of the subscript or superscript characters as a percentage of the font size.
<b>Position</b>	Enter the amount of offset from the baseline as a percentage of the font size, for subscript, enter a negative number to lower the characters. For superscript, enter a positive number to raise the characters.

## Tracking

Choose or type a positive or negative value to adjust the amount of space after each character. Values are measured in thousandths of an em. An em is a horizontal unit defined by the current font. It is called an em because its width is typically the width of the letter 'm'.

## Baseline Shift

Under **Baseline Shift**, you can adjust the amount of offset from the baseline. The amount of baseline shift is measured in points. Enter a positive number to offset the characters above the baseline. Enter a negative number to offset below.

## Use Ligatures

Ligatures are replacement characters for the letter pairs “fi” and “fl.” Studio can automatically insert ligatures in place of these character combinations if the font you are using has ligatures.

- Choose **Yes**, and Studio automatically adds any ligatures defined for the font you selected. If the font does not have any ligatures defined in its character set, this setting has no effect.
- Choose **No**, and Studio does not add any ligatures.

## Case

You can specify case as a character or paragraph formatting option. Choose between the following options:

- **Normal**, for upper and lower case.
- **Small caps**, for small caps. If you choose small caps, you have the option of choosing the size of the small caps, as a percentage of the capital letters. The default is 70%. Click the button beside the box to choose your size option.
- **Upper**, to change all text to upper case.
- **Upper (no accents)**, to change all text to upper case, with no accented characters.

## Allow Breaks

This is a Yes/No attribute. Choose **No** for a range of text that should not break apart across line breaks in a paragraph. You can use this attribute instead of using the special non-breaking characters (non-breaking hyphen and non-breaking space). See “Inserting Special Characters” on page 175.

For example, to have the digits of a telephone number, such as (617) 555-1212 stay together in a paragraph, set this attribute to **No**.

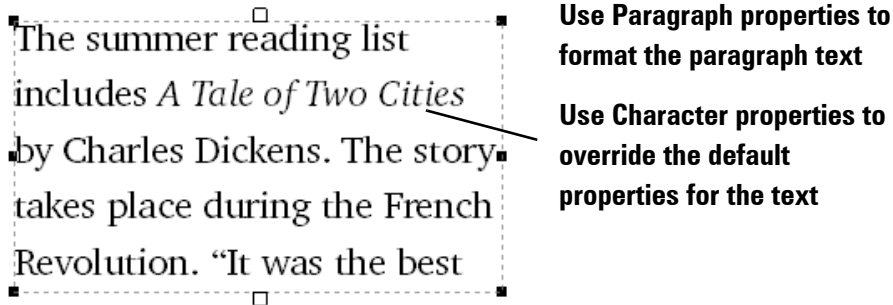
**Note:** This option is available only from the **Character Properties** dialog box. You cannot include this option as part of a paragraph property or style.

## Paragraph Properties

Paragraph properties control the appearance of paragraphs. Paragraph properties control how the text is aligned, and how the paragraph breaks across a page or column break. You can set paragraph rules above and below the paragraph. Paragraph properties provide default Character properties along with additional

formatting properties to control the spacing between the lines of the paragraph and between paragraphs.

If you are formatting an entire paragraph, set the default Character properties on the **Paragraph Properties** dialog box. Use the **Character Properties** dialog box to override the default Character properties for the paragraph. For example, if you want a section of text within a paragraph to appear in italics, use the **Character Properties** dialog box to override the default properties of the paragraph.



You can also access specific paragraph properties from the Text menu, for example, click **Alignment** to open the **Paragraph Properties Format** tab.

### ► To create line breaks

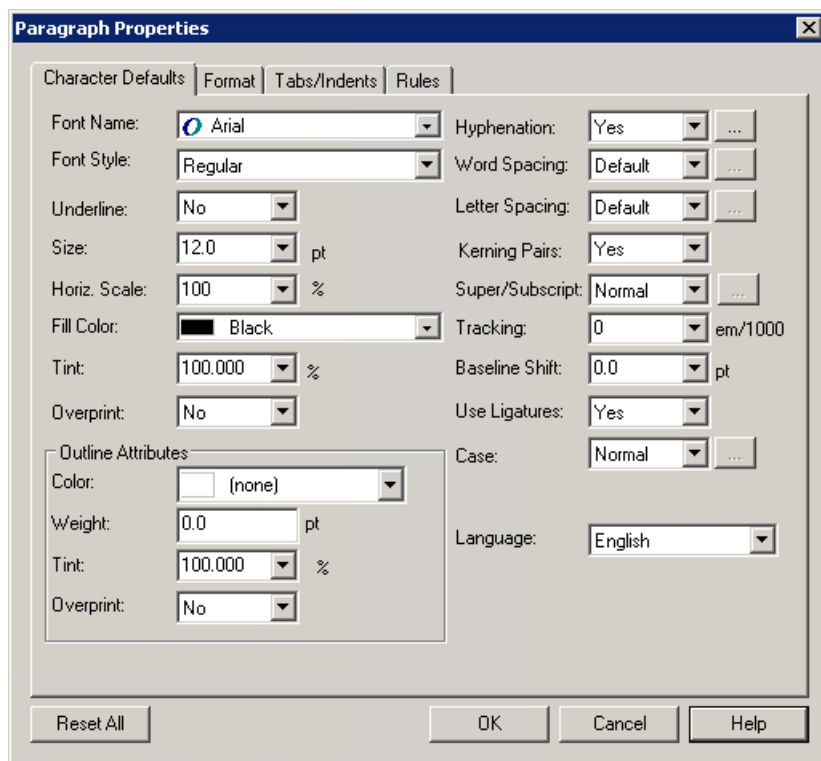
Line breaks force text to flow to the next line without beginning a new paragraph.

- Choose **Text** ⇨ **Insert** ⇨ **Line Break**
- or-
- Press **SHIFT + ENTER**

### ► To apply Paragraph properties

- 1 Using the Text tool **I**, click anywhere within a paragraph. To format more than one paragraph at a time, drag the text tool across several paragraphs.

- 2 Choose **Text** ➔ **Paragraph** or press F9 to display the **Paragraph Properties** dialog box.



- 3 Format the paragraph using the properties on each of the three tabs.
- **Character Defaults.** This tab contains properties for setting the default properties for the appearance of the paragraph text. All the properties from the **Character Properties** dialog box are available except **Allow Breaks**. See “Character Properties” on page 124 for more information.
  - **Format.** This tab contains properties to control the format of the paragraph. The properties on this tab include alignment, leading, paragraph spacing, composition method, and orphan control. See “Paragraph Format Properties” on page 135 for more information.
  - **Tabs/Indents.** This tab contains properties for setting tabs and for indenting paragraphs. See “Paragraph Tabs and Indents” on page 139 for more information.
  - **Rules.** On this tab, you can set up paragraph rules. Paragraph rules can appear before or after the paragraph using the line width, margins, and offset you specify. See “Paragraph Rules” on page 142.

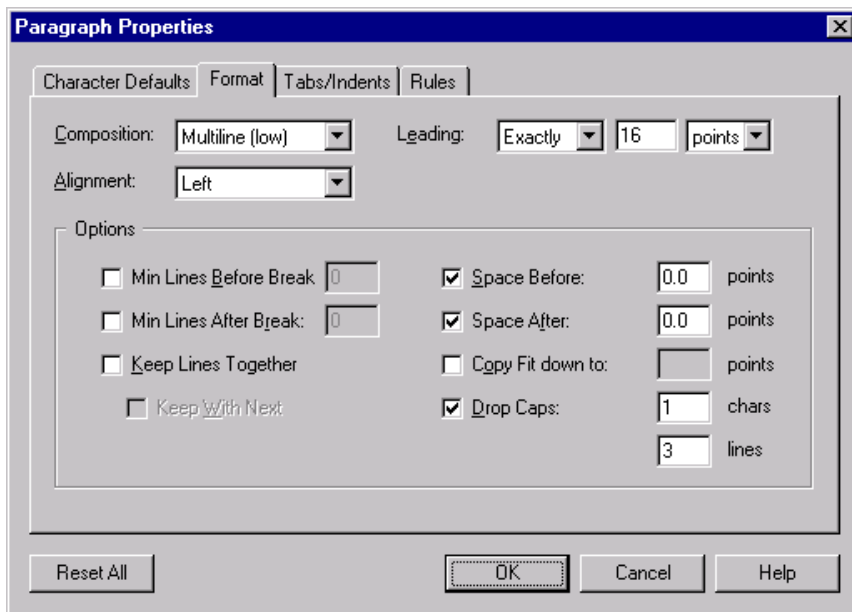


- 4 Click **OK** when you are finished.

Click **Reset All** to restore the settings in the dialog box to their original values.

## Paragraph Format Properties

On the **Paragraph Properties** dialog box, click the **Format** tab or click **Text** ➔ **Alignment** or **Leading** to view the **Paragraph Format** properties.



### Composition

The composition method determines the best possible line breaks using the settings for hyphenation, word spacing, and letter spacing. Studio has two composition methods: single-line and multi-line. Multi-line composition has a high and low setting.

- **Single-line.** This method examines one line at a time. This is the simplest composition method.
- **Multi-line (low).** This method examines several lines at a time to decide how to break each line of text. It measures the amount of space across several lines of a paragraph and adjusts the characters on each line to make the best possible fit.

- **Multi-line (high).** This method examines more lines at a time than the low setting. This is the most complex composition method, and using this method produces the most pleasing breaks.

Multi-line composition produces more even spacing and better line breaks than single-line. However, producing the final output for a job with multi-line composition is slower.

## Alignment

Selects the horizontal alignment of text in the paragraph: **Left**, **Center**, **Right**, **Justify**, or **Force Justify**. Force Justify adjusts the spaces between words in each line so that all lines are justified to both margins.

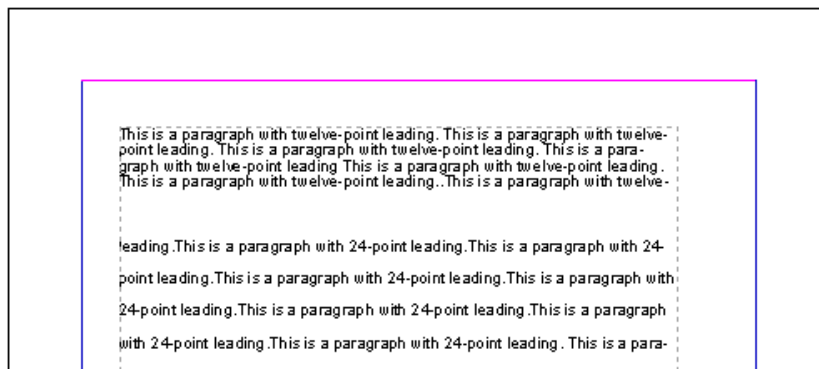
## Leading

Use the **Leading** property to set the amount of space between the lines of the paragraph. Use the three boxes to specify the leading.

- In the first box, choose **Exactly** or **At Least**.  
Choose **Exactly** for absolute leading. No matter what height the characters or inline elements are, the leading remains constant.  
Choose **At Least** to set a minimum leading amount. Studio adjusts the leading on each line of the paragraph to accommodate the largest character or inline element on the line. The benefit is that the lines do not run into each other, but the leading may be inconsistent from line to line so that some lines have more space between them than others.
- In the second box, enter the leading value as a number.
- In the third box, select whether the leading value you entered is measured in points (pts.) or as a percentage of the font size (%). If you use a percentage, then the leading changes if you change the font size.

**Note:** If you choose **At Least** with a percentage, the minimum is 100%.

This example shows the difference in a paragraph with 12-point leading and one with 24-point leading:



### Min Lines Before Break

This property specifies how many lines of a paragraph Pageflex Studio can leave before a page or column break. Studio must leave at least this number of lines before the break or move the entire paragraph after the break.

### Min Lines After Break

This property specifies how many lines of a paragraph Studio can leave after a page or column break. Studio must leave at least this many lines after a page break or move the entire paragraph after the break.

## Keep Lines Together

Selecting this property keeps the lines of a paragraph together across any page breaks or column breaks. If you click **Keep Lines Together**, you can also click **Keep With Next**. This additional property treats the current paragraph and the next paragraph as a single unit, preventing them from being separated across a page or column break.

## Space Before and Space After

These two properties specify the amount of space before and after the paragraph.  
Enter the amount of space in points.

Each paragraph is indicated by the end-of-paragraph symbol (¶), a hidden character. To view the hidden characters, choose **View** ⇨ **Hidden Characters** or **CTRL + I**.

## Copy Fit Down To

This property allows Studio to reduce the size of the text to fit the text container. The value you provide in the **Copy Fit down to** box is the minimum size Studio can use to fit the text. The maximum size is the font size listed in the **Size** box on the **Character Defaults** tab.

If you specify leading as a percentage of the font size, the leading changes when the font size changes.

This attribute applies only to a paragraph. You can have more control over copy fitting by using Copy Fit rules. See “Using Copy Fit Rules” on page 163.

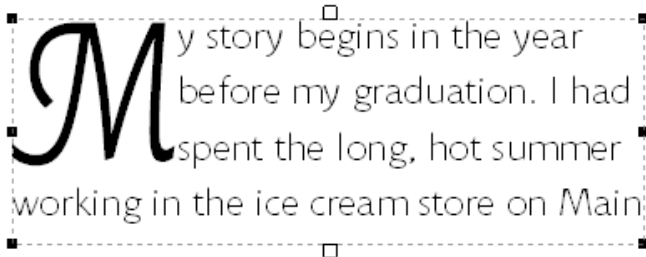
**Note:** Using this property overrides any Copy Fit rules applied to the text container.

## Drop Caps

This property creates an automatic drop cap at the beginning of the paragraph.

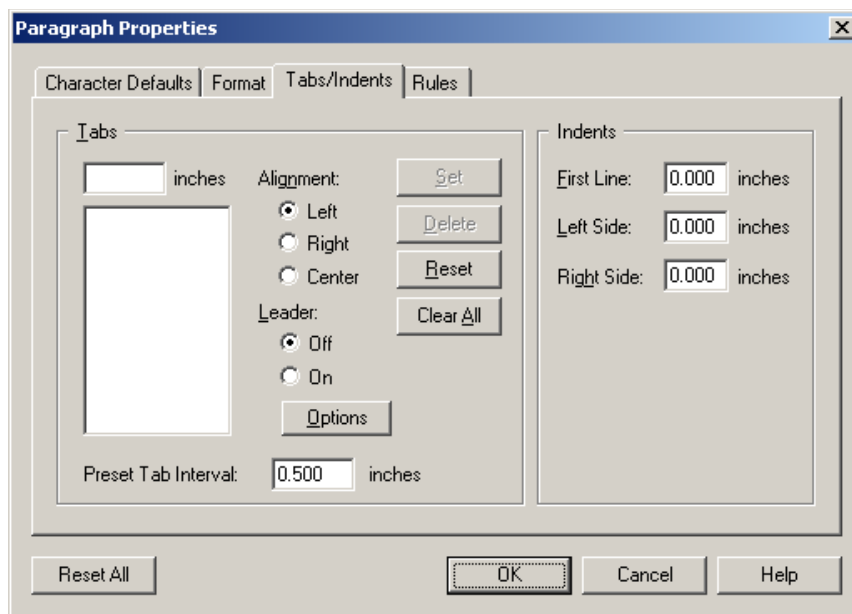
- **Chars.** Specifies the number of characters that form the drop cap
- **Lines.** Specifies the number of paragraph lines it drops into. This controls the size of the drop cap.

**Drop Cap set for one character to drop three lines.**



## Paragraph Tabs and Indents

On the **Paragraph Properties** dialog box, click the **Tabs/Indents** tab or click **Text** ➔ **Tabs/Indents** to set paragraph tabs and indents.



### Tabs

Use tabs to align text in paragraphs. On the **Tabs/Indents** tab, create a list of the paragraph tabs. You can edit the list at any time. Studio measures tabs using the default unit of measure on the **Preferences** dialog box. See “Setting Preferences” on page 33.

The location of a tab is always relative to the left margin of the text container, not the edge of the page. If the text container has its own margins set with the **Margins** property, the tabs are still measured relative to the edge of the container. For example, if you have a left margin for the text container set to 0.25", set the tab at 0.25" or greater.

Note that tabs in Studio behave differently in some respects from tabs in other text formatting applications. In Studio, the *n*th tab character on a line is always associated with the *n*th defined tab stop, even if the text preceding the tab character has passed that tab stop.

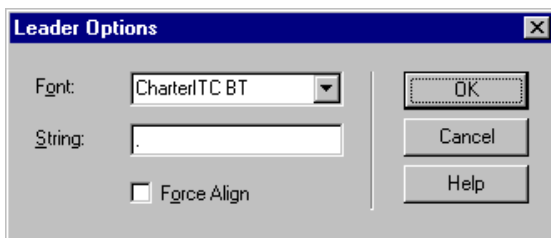
For example, assume you set tab stops for a paragraph at 0.5 inches and 1.0 inches, and type text without tab characters so that the cursor is at 0.7 inches. If

you now type a tab character you might expect the cursor to jump to 1.0 inches, but it does not. Since this is the first tab character on the line it is associated with the first tab stop at 0.5 inches. Since you are past that point, no advance occurs. If you now type a second tab character, the cursor will jump to 1.0 inches since this second tab character is associated with the second tab stop.

Tabs in Studio need to behave this way because of their use in variable-length documents. Studio tabs line up variable data in columns. If a slightly-too-long text variable caused the corresponding text to land in the wrong column, you could commit unintentional blunders like moving an item from the profit column to the loss column on a financial statement.

## ► To set tabs

- 1 Under **Tabs**, enter the location of the tab.
- 2 Choose a tab alignment: **Left**, **Right**, or **Center**.
  - **Left.** Aligns text flush to the left side of the tab location.
  - **Right.** Aligns text flush right to the right side of the tab locations.
  - **Center.** Centers the text at the tab location.
- 3 To add tab leaders, under **Leaders** click **On**, and then click **Options**.  
Tab leaders fill the space between the text and the next tab stop.

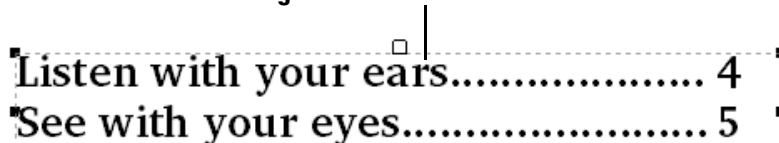


Enter information into each of the following:

- **Font.** Select a font for the leader from the list.
- **String.** Type a character or series of characters to use for the leader. For example, type a period to add a dot leader. Studio repeats the string as many times as necessary to complete the tab leader.

- **Force Align.** Clicking this option keeps the characters in the tab leader in alignment with each other from paragraph to paragraph. For example, if you specify **Force Align** with a period (.) as a dot leader, all the periods line up vertically on the page.

#### Set the Font and the String for the tab leader



- 4 Click **Set** to add the tab to the list. The dialog box remains open so that you can continue setting tabs. Your other options are as follows:
  - **Delete.** To remove a tab, select it in the list and click **Delete**.
  - **Reset.** To undo any changes to tabs that you have made since you opened the **Paragraph Properties** dialog box, click **Reset**.
  - **Clear All.** To clear all the tabs from the list, click **Clear All**.
- 5 Studio presets tabs at an interval you specify in the **Preset Tab Interval** text box. The default preset tab interval is .5 inches, 1.27 centimeters, or 36 points, depending on your preferences. Enter a new preset tab interval in the text box to change this value.
- 6 Click **OK** to close the dialog box. Studio applies the tab settings to the paragraph.

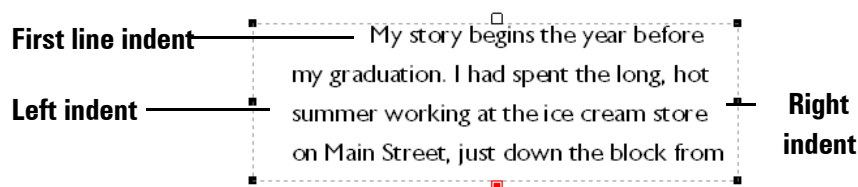
## Indents

Paragraph Indents are like margins for paragraphs. These settings are independent of the Margins property for the text container. However, the net result of using text container Margins and Paragraph Indents is cumulative.

**Note:** Although you can enter negative numbers for Paragraph Indents to create a hanging indent, you cannot enter a number which would move any lines of the paragraph outside the bounding Text container.

- **First Line.** Controls the indent for the first line of the paragraph relative to the value you enter for Left Side. Enter a negative number to outdent the first line.
- **Left Side.** Controls the indent from the left side of the paragraph.


- **Right Side.** Controls the indent from the right side of the paragraph.

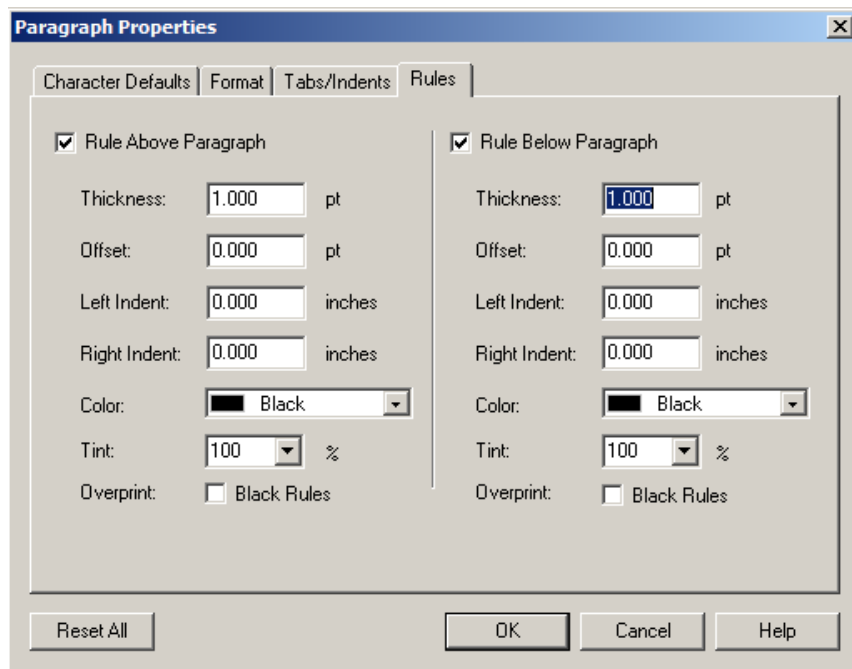


## Paragraph Rules

Paragraph rules are lines above or below a paragraph. Unlike lines drawn with the Line tool, paragraph rules move with the text of the paragraph. If a text container flexes its size for variable content, the paragraph rule can flex with the width of the container.

### ► To create paragraph rules

- 1 Using the Text tool , click anywhere within a paragraph. To format more than one paragraph at a time, drag the text tool across several paragraphs.
- 2 Choose **Text** ⇨ **Rules**. Studio displays the **Paragraph Properties** dialog box.





- 3 Select the **Rule Above Paragraph** box, the **Rule Below Paragraph** box, or both.
- 4 Below the check boxes, you can set up the specifications for the rules.

Box Name	Description
<b>Thickness</b>	The thickness of the rule. Thickness is always measured in points.
<b>Offset</b>	For <b>Rule Above a Paragraph</b> , the <b>Offset</b> is the distance from the bottom of the rule to the top of the text. For <b>Rule Below a Paragraph</b> , the <b>Offset</b> is the distance from the top of the rule to the bottom of the text.
<b>Left Indent</b>	The distance from the left edge of the text container to the left edge of the rule.
<b>Right Indent</b>	The distance from the right edge of the text container to the right edge of the rule.
<b>Color</b>	Select a color for the rule. Choose a color from the list, or click <b>New</b> to create a new color.
<b>Tint</b>	Choose or type a percentage between 0% and 100% to create a tint of the selected color.
<b>Overprint</b>	Select the check box to apply overprinting for black paragraph rules.



- 5 Click **OK** to close the dialog box.

## Paragraph Styles

Paragraph styles allow you to format sections of text quickly and consistently. Editing a paragraph style automatically updates every paragraph that uses that style to match the new formatting characteristics.

Styles, like elements in a template, can have parent-child relationships. You can base a new style on an existing style to create this relationship. The style on which you base the new style becomes the parent, and the new style becomes the child. Any characteristics you change in the parent style affect the child style as long as the child does not specifically override the change.

For example, the parent style uses a font size of 14 points, and the child style also uses 14 points. When you change the parent style to 18 points, the child style also changes to 18 points.

However, if the parent style uses a font size of 14 points, and the child style uses 10 points, then changing the parent style to 18 points does not change the child style.

Applying character and paragraph properties through the **Character** and **Paragraph** menu options or the Properties panel overrides the style information. Studio indicates when a style has overrides by displaying a plus sign (+) next to the Style property in the Properties panel.

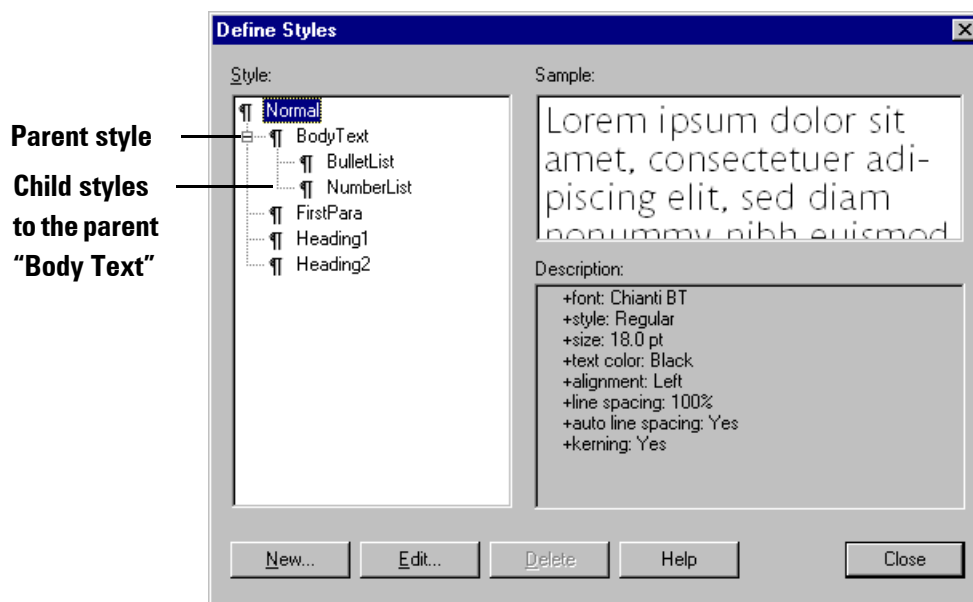
**Plus sign (+) indicates  
the style has overrides**

Form Flex	
Paragraph	
Style+	BodyText
Alignment	Left
Language	English

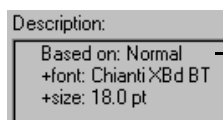
Changing a style definition or changing to a different style does not affect the overrides. For example, a paragraph has the style **BodyText** applied to it. If you apply bold to a specific word in the paragraph, the paragraph now contains a style override. If you change the definition of **BodyText**, the bold override remains.

► **To view the template style sheet**

Choose **Text** ➡ **Define Styles**. Pageflex Studio displays the **Define Styles** dialog box.



- The **Style** box displays the names and relationships of all desired styles. All styles are children of the Normal style, the default style. You can edit the Normal style, but you can never delete it.
- Under **Sample**, a block of sample text appears using the style information.
- Under **Description**, the list of style properties appears. If a style is based on another style, the **Description** lists the base style followed by the attributes that are different from the base.

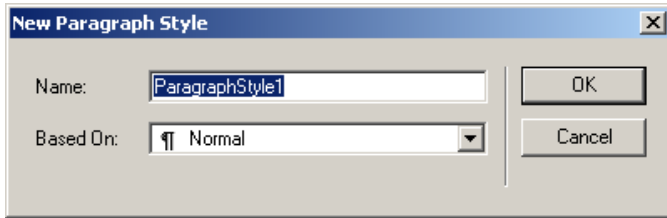


**Parent style name  
and unique attributes**

## ► To create a new style

- 1 On the **Define Styles** dialog box, click **New**  
-OR-

Choose **Text** ➡ **Paragraph Style** ➡ **New**. Studio displays the **New Paragraph Style** dialog box.



**2** Enter the following information:

- **Name.** Type a name for the new style. You cannot use spaces in style names. Names cannot begin with numbers or punctuation, including the underscore character ( \_ ).
- **Based On.** If you want the style definition to be based on an existing style, select the loose style in the list. The style you select becomes the parent style, and the new style is the child style to that parent.  
Select **Normal** if the style is not based on another style you have defined.

**3** Click **OK**. Studio displays the **Paragraph Style Properties** dialog box. The options in the dialog box are identical to the options in the **Paragraph Properties** dialog box. For information about Paragraph Properties, see “Paragraph Format Properties” on page 135.

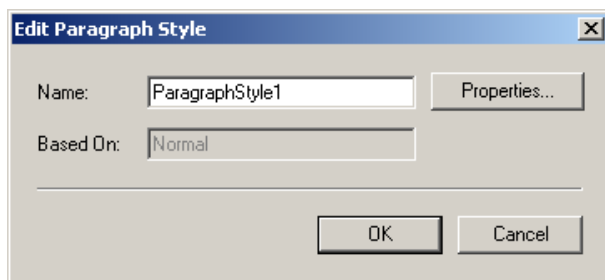
**4** Set the **Character Defaults**, **Formats**, **Indents/Tabs**, and **Rules** for the new style.

**5** Click **OK** to save the new style.

## ► To edit an existing style

**1** Choose **Text** ➡ **Define Styles** to display the **Define Styles** dialog box.

- 2 In the **Define Styles** dialog box, select a style in the list, and then click **Edit**. Studio displays the **Edit Paragraph Style** dialog box.

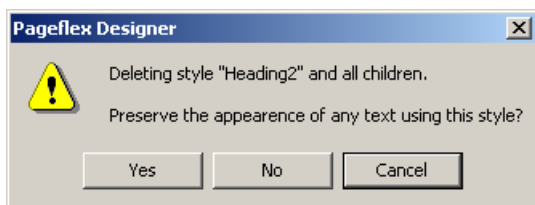


- 3 You can edit the style name in the **Name** box, but you cannot change the name of the parent style in the **Based On** box. If you change the style name, Studio updates the style name for any paragraphs you have already tagged with the old style name.
- 4 Click **Properties** to edit the Character and Paragraph properties for the style. For information on these properties, see “Paragraph Format Properties” on page 135.
  - Click **Reset All** to undo any changes you have made since you opened the dialog box. Studio reverts all properties back to their original state before you began editing them.
  - Click **OK** to accept the changes and close the dialog box.

### ► To delete a style

On the **Define Styles** dialog box, click the style name, and then click **Delete**.


**Note:** Deleting a parent style deletes all child styles. If you attempt to delete a parent style, Studio displays the following warning message:



You have the option to delete the style names and still preserve the styled appearance of the text.

- Click **Yes** to delete the style names, but leave the text formatted according to the style properties.
- Click **No** to delete the style names. The Paragraph properties revert to the properties for the next parent style in the list of styles. The Normal style is always the ultimate parent style.
- Click **Cancel** to cancel the action.


### ► To apply a style

- 1 Using the Text tool , select a paragraph in a Text container.
  - 2 On the **Text** ⇨ **Paragraph Style** menu, choose a style name from the list.
- or-
- On the Properties panel, under **Style**, choose a style name from the list.

### Removing All Style Properties

Character and paragraph properties are overrides to the underlying paragraph style information. Changing the style definition has no effect on any character or paragraph overrides you have added. Removing the formatting from a section of text removes all character, paragraph, and style information and returns the selection to the Normal style.

### ► To remove all formatting information

- 1 Using the Text tool , select the paragraph.
- 2 Choose **Text** ⇨ **Paragraph Style** ⇨ **No Style**.

Studio reapplies the Normal style to the selection and removes any additional formatting instructions.

# Asian Character Settings

## Using Chinese Character Settings

If you specify Chinese, either Simplified or Traditional, as the language for a paragraph, you can set the additional formatting options unique to this choice.

### ► To set Chinese character settings

- 1 Open the **Character Properties** dialog box

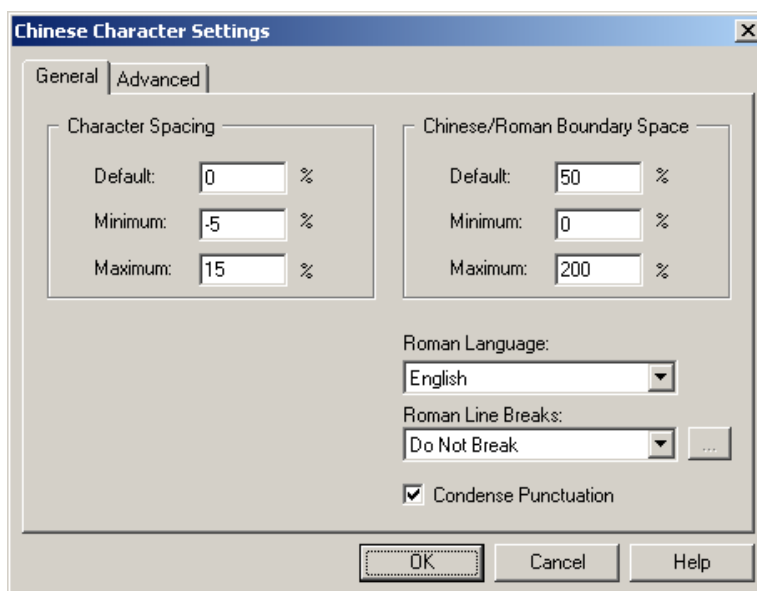
-or-

Open the **Character Defaults** tab on the **Paragraph Properties** dialog box.

- 2 Select **Chinese - Simplified** or **Chinese - Traditional** in the **Language** box. Studio displays the **Chinese Character Settings** button.



- 3 Click **Chinese Character Settings**. Studio displays the **Chinese Character Settings** dialog box.



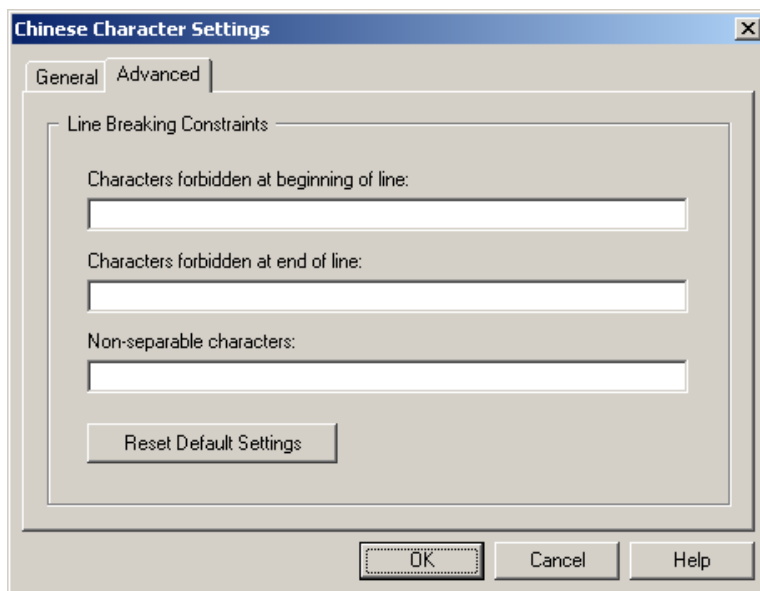
- 4 On the **General** tab, you can enter the following information.
  - **Character Spacing.** In the three boxes, enter the range of spacing to use between characters.
  - **Chinese/Roman Boundary Space.** Enter the desired range of space for Studio to use when using Roman characters mixed with the Chinese characters. Roman characters are the characters used by Latin-based languages such as English.

The values for **Default**, **Minimum**, and **Maximum** create a range of spacing used to justify the characters on a line. The values are expressed as percentages of the normal spacing for the font and font size selected.

- **Default.** The Default value is the desired amount of space. This is the amount of space Studio first tries to use.
  - **Minimum.** This is the smallest amount of space Studio can add between two characters to fit the text on a line.
  - **Maximum.** This is the largest amount of space Studio can add.
- 5 In the **Roman Language** box, select the language to use when mixing Roman characters or words in the Chinese text. This setting provides the spelling and hyphenation dictionaries for the Roman words.
  - 6 In the **Roman Line Breaks** box, choose how to break roman words across lines of text. Choose one of the following:
    - **Hyphenate.** Studio uses the hyphenation dictionary for the language specified in the **Roman Language** box to hyphenate words as needed. To set the Hyphenation options, click the button beside the box. For information on hyphenation, see “Hyphenation” on page 127.
    - **Do Not Hyphenate.** Studio does not hyphenate any Roman words.
    - **Break Anywhere.** Studio adds line breaks between words as needed to justify the text in the paragraph.
    - **Do Not Break.** Studio does not allow line breaks between the Roman words in a paragraph.
  - 7 Click the **Condense Punctuation** check box to reduce the spacing around Chinese punctuation.



- 8 Click the **Advanced** tab to set the Line Breaking Constraints. These settings control which characters can begin and end lines of text and which characters must always appear together.



Click **Reset Default Settings** at any time to restore the default characters.

- 9 When you are finished, click **OK** to close the **Chinese Character Settings** dialog box.

## Using Japanese Character Settings

If you specify Japanese as the language for a paragraph, you can set the additional formatting options unique to the Japanese language choice.

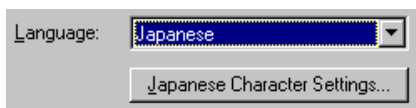
### ► To set Japanese character settings

- 1 Open the **Character Properties** dialog box

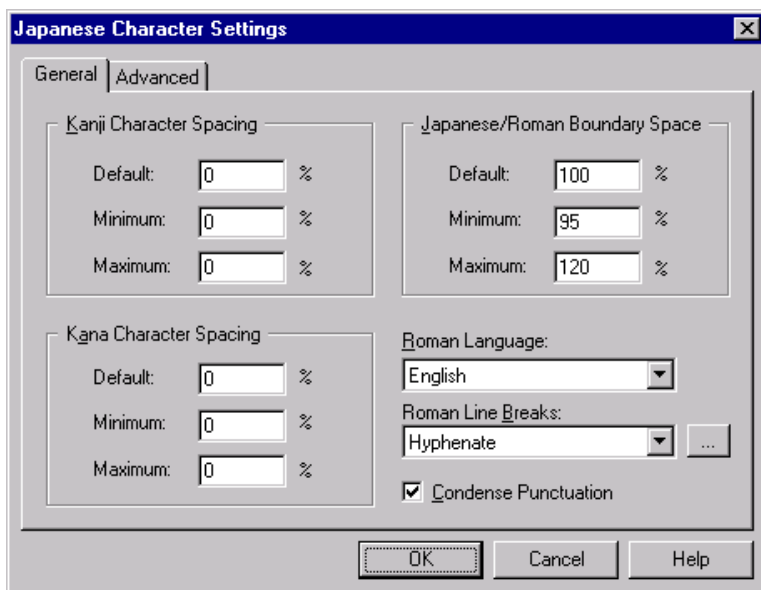
-or-

Open the **Character Defaults** tab on the **Paragraph Properties** dialog box.

- 2 Select **Japanese** in the **Language** box. Studio displays the **Japanese Character Settings** button.



- 3 Click **Japanese Character Settings**. Studio displays the **Japanese Character Settings** dialog box.



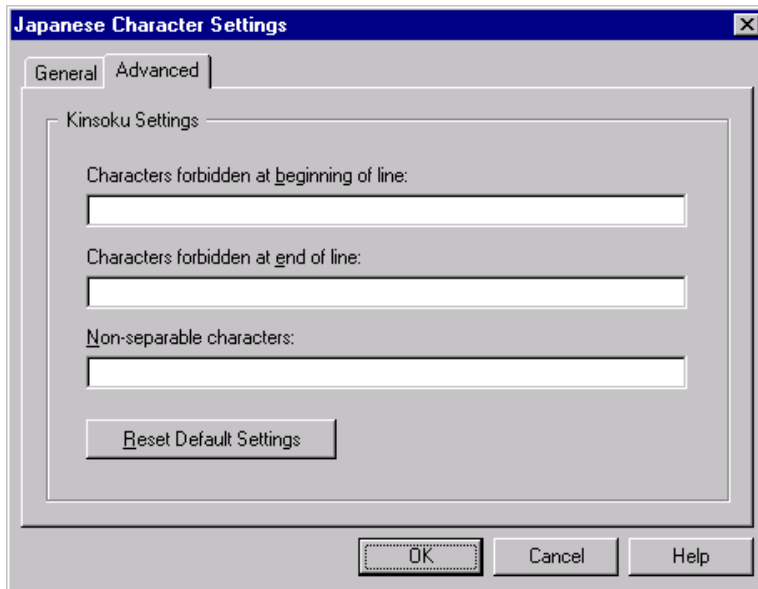
- 4 On the **General** tab, you can enter the following information.
  - **Kanji Character Spacing.** Enter the desired spacing for Kanji characters.
  - **Kana Character Spacing.** Enter the desired spacing for Kana characters.
  - **Roman/Japanese Boundary Space.** Enter the desired amount of space for Studio to use when using Roman characters mixed with the Japanese characters. Roman characters are the characters used by Latin-based languages such as English.

The values for **Default**, **Minimum**, and **Maximum** create a range of spacing used to justify the characters on a line. The values are expressed as percentages of the normal spacing for the font and font size selected.

- **Default.** The Default value is the desired amount of space. This is the amount of space Studio first tries to use.

- **Minimum.** This is the smallest amount of space Studio can add between two characters to fit the text on a line.
  - **Maximum.** This is the largest amount of space Studio can add.
- 5 In the **Roman Language** box, select the language to use when mixing Roman characters or words in the Japanese text. This setting provides the spelling and hyphenation dictionaries for the Roman words.
- 6 In the **Roman Line Breaks** box, choose how to break roman words across lines of text. Choose one of the following.
- **Hyphenate.** Studio uses the hyphenation dictionary for the language specified in the **Roman Language** box to hyphenate words as needed. To set the Hyphenation options, click the button beside the box. For information on hyphenation, see “Hyphenation” on page 127.
  - **Do Not Hyphenate.** Studio does not hyphenate any Roman words.
  - **Break Anywhere.** Studio adds line breaks between words as needed to justify the text in the paragraph.
  - **Do Not Break.** Studio does not allow line breaks between the Roman words in a paragraph.
- 7 Click the **Condense Japanese Punctuation** check box to reduce the spacing around Japanese punctuation.

- 8 Click the **Advanced** tab to set the Kinsoku settings. The Kinsoku settings control which characters can begin and end lines of text and which characters must always appear together.



- 9 When you are finished, click **OK** to close the **Japanese Character Settings** dialog box.

---

# Formatted Content

Besides using Pageflex Studio to create templates, you can also use it to create formatted content to reuse in multiple templates, or to use as the contents of a variable element.

Formatted content is a powerful feature for variable publishing. Formatted content greatly increases the amount of variability you can add to your projects. Formatted content can be as simple as adding names using a particular font, or as complex as adding entire sections of content.

Besides creating templates, Pageflex Studio lets you create formatted content to use with your projects. You can create the following formatted content files:

- **Formatted Text.** A section of text that belongs within a paragraph but does not form a paragraph by itself. Formatted text contains character formatting information. It can be a single character or many sentences, and may contain nested elements, such as images or area templates.
- **Formatted Paragraphs.** A section of text that contains at least one whole paragraph. Formatted text contains paragraph formatting information, and may also contain additional character formatting, as well as nested elements, such as images or area templates.
- **Area Templates.** A section of a template that can contain any number of elements including text boxes, images, shapes, or even other area templates. Area Templates are always created within an Area Template box container.

The exported file contains the elements you exported along with any formatting tags for those elements. For formatted text, the exported file includes the specific character formatting applied to the text, for example, font name and style.

For formatted paragraphs and area templates, the exported files contain paragraph and character formatting, but not paragraph style sheet information. For example, if you create a formatted paragraph file, and the paragraphs use a style called **BodyText**, the exported file contains the style name, but none of the properties of that style, such as the fonts you used, the point size, or any other formatting information.

When you use formatted paragraphs and area templates, you must make sure any paragraph styles defined in the formatted content files are also defined in the template you are using. Studio formats the formatted content based on the style sheet of the template in which you are reusing the content.


**Note:** Formatted content can contain variables. There is no limit in the level of nesting.

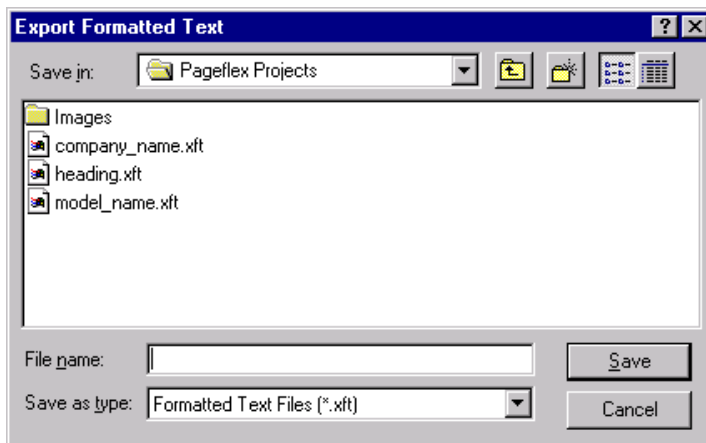
## Formatted Text

Using formatted text allows you to save pieces of text with character formatting attributes applied. When you insert the formatted text into another paragraph in the same template or a different one, the formatted text maintains the character attributes you have applied.

You can insert formatted text into a template as static content, or you can use it as a variable.

### ► To create formatted text


- 1 Using the Text tool , select the text you have formatted. **Do not include the paragraph symbol in your selection.** To see the paragraph symbol, choose **View** ⇨ **Hidden Characters**.
- 2 Choose **File** ⇨ **Export** ⇨ **Selection**. Pageflex Studio displays the **Export Formatted Text** dialog box.

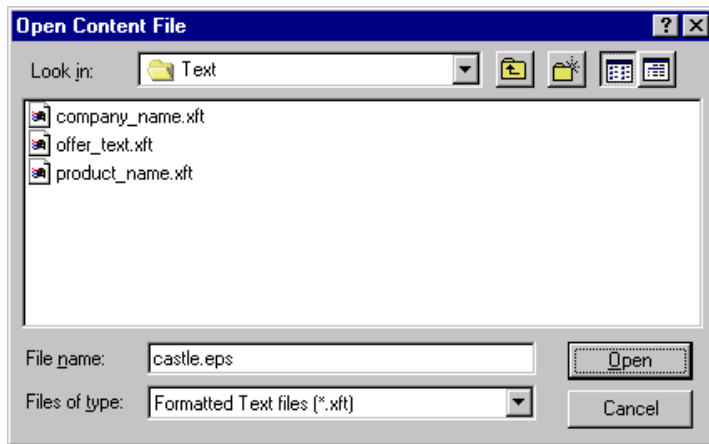


- 3 Select options for saving the file.
  - Locate a folder for saving the new file.
  - In the **Save as type** box, be sure the Formatted Text Files (.xft) option is selected.
  - Under **File name**, type a file name.

- 4 Click **Save**. Studio saves the formatted text with the extension **.xft**.


► **To insert formatted text into a text container**

- 1 Using the Text tool , click inside a text container.
- 2 Choose **File** ➤ **Insert Content**. Studio displays the **Open Content File** dialog box.



- 3 In the **Files of type** box, select **Formatted Text files (.xft)**.
- 4 Locate the formatted text file, and click **Open**. Studio inserts the text at the text insertion point.

► **To insert formatted text into a new text box**

- 1 Click the Selection tool , and then choose **File** ➤ **Insert Content**. Studio displays the **Open Content File** dialog box.
- 2 In the **Files of type** box, select **Formatted Text Files (.xft)**.
- 3 Locate the formatted text file, and click **Open**.

The Selection tool cursor changes to a text placement icon. 


- 4 In the Document window, click to place a new text box containing the formatted text. The formatted text is contained in a paragraph that uses the Normal style.

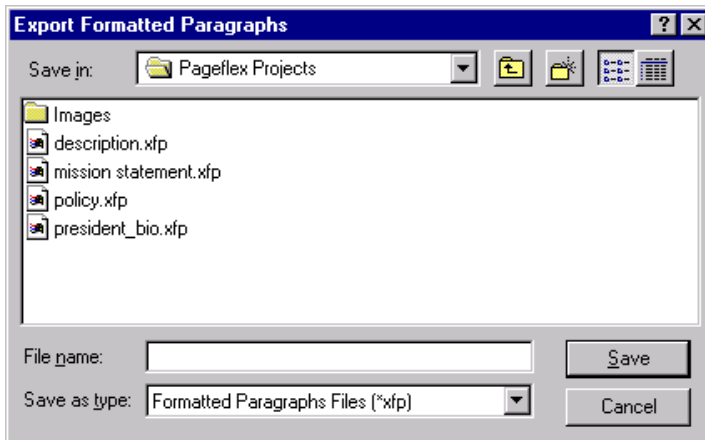
## Formatted Paragraphs

Using formatted paragraphs allows you to add multiple styled paragraphs to your template either as static content or as a variable. Formatted paragraphs retain the paragraph styles you defined for them, as well as any character attributes you applied. However, the paragraph styles identified in the formatted paragraphs must exist in any template you import them into.

Using Pageflex Studio, you can create formatted text paragraphs to use as variables for your project. See “Formatted Paragraph Variables” on page 257.

### ► To create formatted paragraphs

- 1 Using the Text tool , select the paragraphs you have formatted. **You must select at least one paragraph symbol.** To see the paragraph symbol, choose **View ⇨ Hidden Characters**.
- 2 Choose **File ⇨ Export ⇨ Selection**. Pageflex Studio displays the **Export Formatted Paragraphs** dialog box.




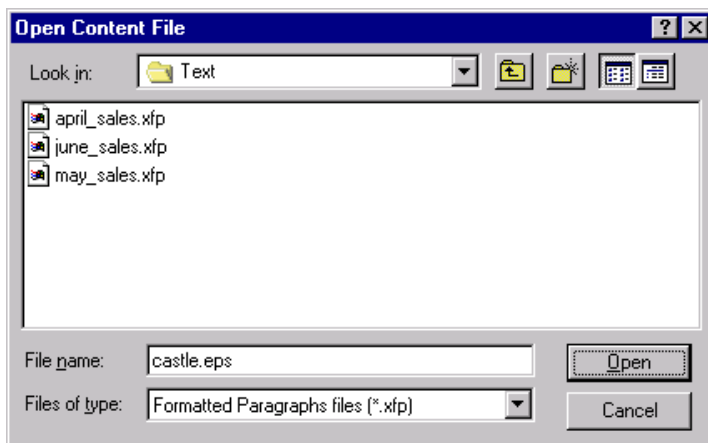
- 3 Select options for saving the file.
  - Locate a folder for saving the formatted paragraphs.
  - In the **File name** box, type the file name.
  - Under **Save as type**, select the Formatted Paragraph Files (.xfp) option.
- 4 Click **Save** to save the formatted paragraph file with the extension **.xfp**.



### ► To insert formatted paragraphs into a text container


**Note:** The paragraph style names in the formatted text must exist in the template before you insert the file. Studio offers the option to convert any missing styles to the Normal style in the destination document.


- 1 Using the Text tool , click inside a text container.
- 2 Choose **File** ➤ **Insert Content**. Pageflex Studio displays the **Insert Text File** dialog box.



- 3 In the **Files of type** box, select **Formatted Paragraph files (.xfp)**.
- 4 Locate the formatted paragraph file, and click **Open**.  
Studio inserts the text at the text insertion point.

### ► To insert formatted paragraphs into a new text box

- 1 Click the Selection tool , and then choose **File** ➤ **Insert Content**. Studio displays the **Open Content File** dialog box.
- 2 In the **Files of type** box, select the formatted paragraphs option.
- 3 Locate the formatted paragraph file, and click **Open**.

The Selection tool changes to a text placement icon. 

- 4 In the Document window, click to place a new text box with the formatted paragraphs.

## Area Templates

With area templates, you can save sections of your template to reuse in other templates or to use as variables. Area templates are defined by the boundaries of an area template container. They can contain any combination of elements including text boxes, images, shapes, and groups.

You can create area templates to use as variable elements. Each variable area template can also contain other variable elements such as formatted text and formatted paragraphs. See “Area Template Variables” on page 257 for information about using area templates as variables.

### ► To create an area template

- 1 Using one of the Area Template tools, draw an area template container.

If you draw the area template container on top of other elements, Pageflex Studio selects the other elements and asks if you want to include them inside the area template. Click **Yes** to have Studio add the elements under the area template element in the Layout tab.


- 2 Using the other drawing tools, you can add more elements to the area template by drawing them inside the boundaries of the area template container.

In the Layout tab, Pageflex Studio shows the new elements within the area template.

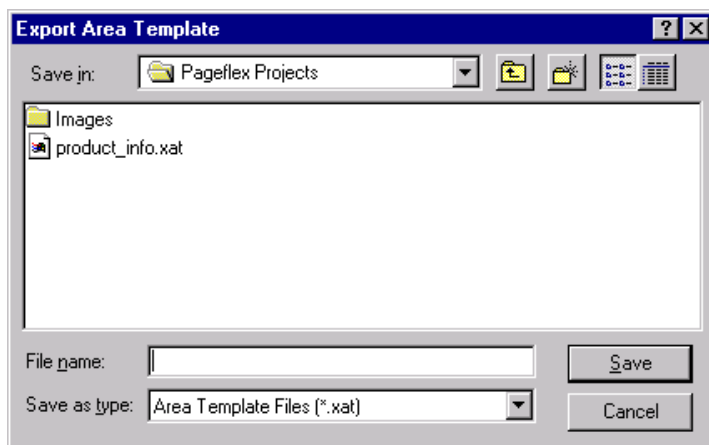
- 3 Apply any necessary attributes to the elements.

- Use the Properties panel to change any of the element containers.
- For text, apply paragraph styles and character attributes.
- Apply any variables.

**Note:** Studio does not save the properties of an area template on export. Studio only exports the contents of an area template. For example, the fill color, border properties, and rotation of an area template are some examples of the container properties that will be lost on export.

- 4 Using the Selection tool , select the area template container.

- 5 Choose **File** ➔ **Export** ➔ **Selection**. Studio displays the **Export Area Template** dialog box.

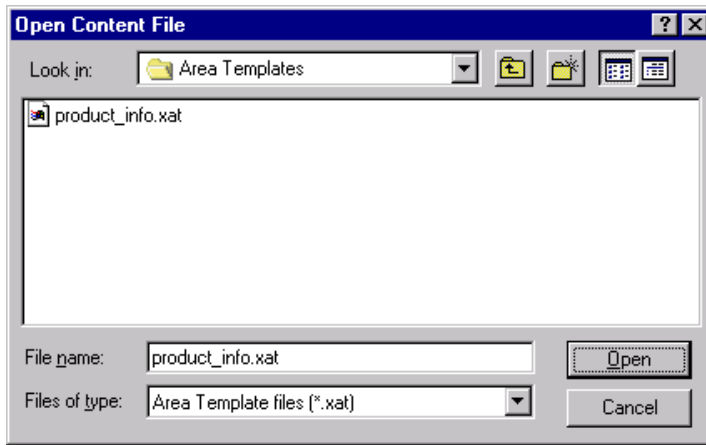


- 6 Select options for saving the file.
- Locate a folder for saving the area template.
  - In the **File name** box, type the file name.
  - Under **Save as type**, the only option is to save as an Area Template File (.xat).
- 7 Click **Save** to save the file with the extension **.xat**.


► **To insert an area template**

If the area template contains any text with paragraph style names, the style names must exist in the template before you insert the file. Pageflex Studio offers the option to convert any missing styles to the Normal style in the destination document.

- 1 Choose **File** ➔ **Insert Content**. Studio displays the **Open Content File** dialog box.



- 2 In the **Files of Type** box, select **Area Template files (\*.xat)**. Studio displays only area template files in the list.
- 3 Locate the area template, and then click **Open**.

The cursor changes to an area template placement icon. 

- 4 In the Document window, click to place the area template.  
You can edit the elements in the area template if necessary.

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# Using Copy Fit Rules

Pageflex Studio lets you define Copy Fit rules for fitting text into a text container. A Copy Fit rule is a set of instructions that defines which attributes Studio should reduce and in what order Studio should apply them. A Copy Fit rule applies to a container, which means it applies to all the text inside the container. The text container can be any shape. You can choose to have containers with the same copy fit rule applied independently or synchronously so typographic integrity is preserved between two containers.

**Note:** Copy Fit rules can apply to any text container in a chain, however, Studio ignores Copy Fit rules in autochain containers.

The goal of a Copy Fit rule is to reduce certain text attributes until the text just fits into the text container, avoiding a text overflow. The values you specify for each attribute in a Copy Fit rule provide a lower limit to the amount of reduction Studio can make. You can control the text attributes you want Studio to adjust to make the fit.

There are two kinds of Copy Fit rules:

- **Simple Rules.** Studio adjusts all the text attributes in the rule simultaneously until the text fits into its container.
- **Advanced Rules.** Studio adjusts text attributes one at a time in the order they are listed in the rule. The Copy Fit process stops as soon as the text fits into its container.

## Understanding Copy Fit Attributes and Units

Copy Fit rules change the appearance of the text based on the attributes you have already applied through paragraph styles, paragraph properties, or character properties. You can use the following attributes in a Copy Fit rule.

### Font Size

Use either points (pt.) or a percentage (%) of the original font size. The original font size is always specified in points.

If you specify a font size in the Copy Fit rule, Studio reduces the point size of all the text in the container until it reaches the value. Text that began as different font sizes may end up at the same size as a result of the Copy Fit rule. If the original text is smaller than the value in the Copy Fit rule, there is no change.

If you specify a percent in the Copy Fit rule, Studio reduces the point size of all the text in the container by the same percentage until the text fits or until it reaches the limit you set.

You can control font size through a simple or advanced Copy Fit rule. You can enter font sizes values from 0.1 point to 720 points or relative values from 0% to 100% of the font size.

## Leading

Use either points (pt.) or a percentage (%) of the original font size. When you specify leading for a paragraph (in the paragraph properties or the paragraph style definition), you can specify it either as a fixed size or as a minimum size. In addition, you can specify the leading in points or as a percentage of the font size.

The leading attribute of a Copy Fit rule can also be defined as either a fixed size (pt.) or a percentage of the font size (%) to achieve different Copy Fit results.

You can control leading along with font size and paragraph spacing in a simple Copy Fit rule. You can control it separately through an advanced Copy Fit rule. You can enter a fixed size from 0.1 points to 1080 points or a percentage from 50% to 200%.

## Horizontal Scale

Specify this attribute as a percentage of the original horizontal scale. In a Copy Fit rule, Studio applies horizontal scaling on top of any existing horizontal scaling attributes. For example, if the original character attribute (before applying the Copy Fit rule) has horizontal spacing at 100%, and the Copy Fit rule specifies 90%, then the horizontal scale can be reduced to 90% of 100%, which is 90%.

However, if the character attribute is 90%, and the Copy Fit rule is 90%, then the Copy Fit rule means the horizontal scale can reduce to 90% of 90%, which is 81% in total.

You can control horizontal scale through a simple or advanced Copy Fit rule. Enter a value from 0 to 100%.

## Space Before

Use either points (pt.) or a percentage (%) of the original space before attribute. Studio reduces the amount of space before each paragraph until it reaches the measurement you specify. If the original value is less than the value you use in the Copy Fit rule, there is no change to the text.

You can control this attribute along with leading and the space after attribute as part of a simple Copy Fit rule. You can control this attribute separately through an advanced Copy Fit rule. Enter values from 0 to 1080 points or relative values from 0% to 100%.

### **Space After**

Use either points (pt.) or a percentage (%) of the original space after attribute. Studio reduces the amount of space after each paragraph until it reaches the measurement you specify. If the original value is less than the value you use in the Copy Fit rule, there is no change to the text.

You can control this attribute along with leading and the space before attribute as part of a simple Copy Fit rule. You can control this attribute separately through an advanced Copy Fit rule. Enter values from 0 to 1080 points or relative values from 0 to 100%.

### **Tracking**

Tracking is always measured in thousandths of an em. Negative numbers decrease the amount of space after a character and positive numbers increase it.

In a Copy Fit rule, Studio applies this attribute to reduce the amount of the original tracking value that you specified in the character, paragraph, or paragraph style properties. If the original tracking value is lower than the tracking value in the Copy Fit rule, the text does not change.

You can control tracking through a simple or advanced Copy Fit rule. You can enter values from -0.25 em to 10 em.

## Viewing Copy Fit Rules

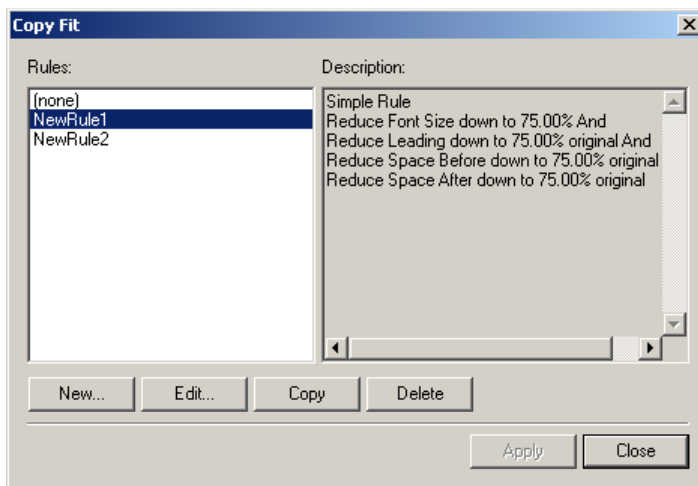
You can add, edit, delete, and apply the Copy Fit rules for a template from the **Copy Fit** dialog box.

### ► To view Copy Fit rules

#### 1 Choose Element ⇌ Copy Fit

-or-

With a text container selected, click the **Flex** tab on the Properties panel. Under **Copy Fit**, click the button in the **Rule** attribute.



#### 2 Select a rule from the **Rules** list to view its description.

#### 3 You can do any of the following:

- Click **New** to define a new Copy Fit rule.
- Click **Edit** to edit the selected Copy Fit rule. You can change any part of the definition.
- Click **Copy** to duplicate the selected Copy Fit rule.
- Click **Delete** to delete the rule. Studio also removes the Copy Fit rule from any containers in the template that use it.

#### 4 Click the **Apply** button to apply the rule to the currently selected text container. This button is unavailable if you have not selected a text container.

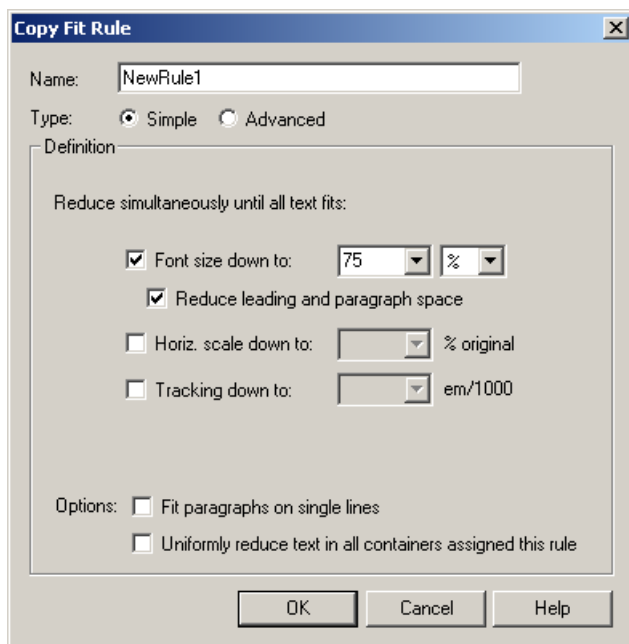
#### 5 Click **Close** when you are finished viewing Copy Fit rules.



## Defining a Copy Fit Rule

### ► To define a Copy Fit rule

- 1 Click **New** on the **Copy Fit** dialog box.



- 2 In the **Name** box, type a name for the rule. Names must begin with a letter, and they cannot contain spaces.
- 3 Next to **Type**, choose **Simple** or **Advanced**. The options in **Definition** section change based on your selection.

### Simple Copy Fit Rule

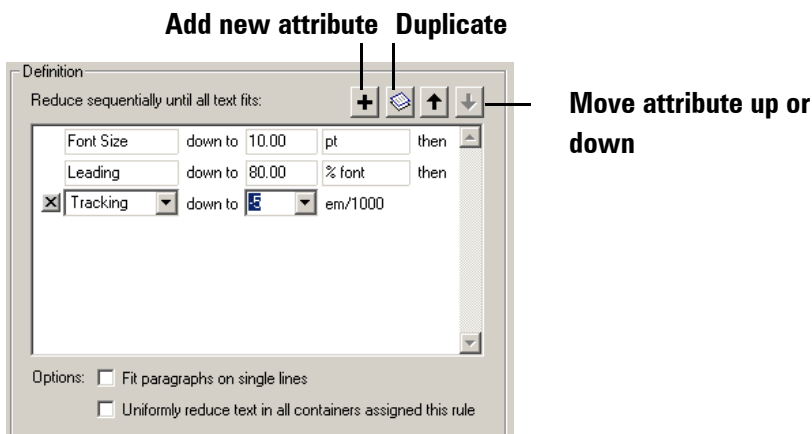
For a simple rule, select **Definition** and choose options for the rule. Studio applies the options simultaneously until the text fits into the container.

- **Font size down to.** This option reduces the font size down to a percentage of the original font size or down to a specific font size. If you specify an exact point size in this box, text that is already smaller the specified amount is unaffected by the Copy Fit rule.

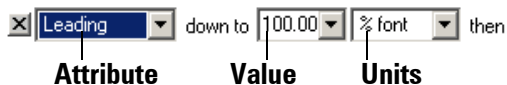
- **Reduce leading and paragraph space.** If you click the option to reduce the font size, you can also select this option to reduce leading and paragraph spacing in the same proportion as the font size.
- **Horizontal scale down to.** This option uses horizontal scaling to reduce the overall size of the text.
- **Tracking down to.** This option changes the amount of tracking applied to the text. It reduces the width of the text by reducing the amount of space after each character.

### Advanced Copy Fit Rule

For an advanced Copy Fit rule, Studio applies each attribute in the order you list them until the text fits into the container. Starting with the first attribute, Studio reduces the value of this attribute until the text fits into the container or until it reaches the value you set. If the text still does not fit, Studio applies the same procedure to the next attribute in the list.



- For each line of the definition, choose an attribute, a value, and a unit (pts. or %). Tracking is always expressed in ems.



- Continue to build the definition using the button at the top of the Definition section to add, duplicate, or move each attribute.
- To delete an attribute, click the delete button ☒ at the beginning of the line.

- Click the **Fit paragraphs on single lines** check box. Studio attempts to fit the text into the text container and also to fit each paragraph onto a single line. For example, if you need each line of an address to fit on a single line, this option prevents Studio from adding unwanted line breaks.
- 4 Click **OK** to define the Copy Fit rule.
  - 5 In the **Copy Fit** dialog box, click **Apply** if you want to apply the new rule to the currently-selected text container.

## Options

Choose from the following options for simple or advanced copy fit rules.

- **Fit paragraphs on single lines.** Select this check box and Studio not only attempts to fit the text into the text container, but also attempts to fit each paragraph onto a single line. For example, if you need each line of an address to fit on a single line, this option prevents Studio from adding unwanted line breaks.
- **Uniformly reduce text in all containers assigned this rule.** Select this check box to copy fit all containers with this rule applied. For example, if you apply this copy fit rule to several containers and check this box, and only one container needs to apply the rule to fit text, the other containers will also apply it, even if text is not overflowing within them. This is useful if you want to maintain typographic consistency within your template.

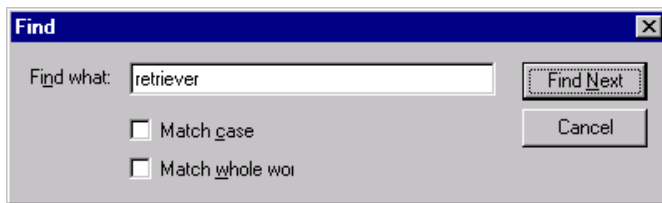
## Finding and Replacing Text

Using **Find** and **Replace** commands, you can quickly locate and change text in any text container in the template.

**Note:** The Find and Replace commands can only find text that is part of the template. They do not find text that is part of the variable contents, even while previewing records.

### ► To find specific text

- 1 Choose **Edit** ➔ **Find** or press **CTRL + F**. Pageflex Studio displays the **Find** dialog box. The dialog box remains open until you click **Cancel**.

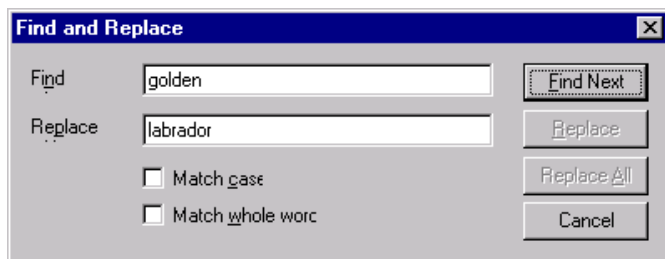


- 2 In the **Find What** box, type the text you want to find. Select one of the two additional search options to refine the search.
  - Click **Match Case** to find text that matches not only the characters, but also the case of the characters (uppercase or lowercase).
  - Click **Match Whole Word** to find the text as a separate word, not part of another word. For example, if you type the word “page” and check this box, Studio finds only the word “page,” not “pageflex.”
- 3 Click **Find Next**. Studio finds the next occurrence of the text you specified. To find the next occurrence, click **Find Next** again.

Continue clicking **Find Next** until Studio displays the message that there are no more occurrences of the search text.

## ► To replace text

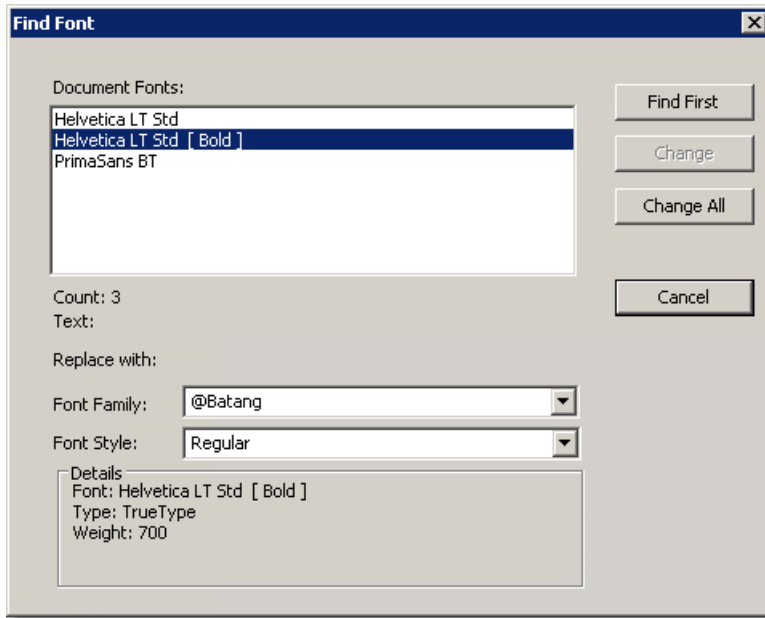
- 1 Choose **Edit** ➔ **Replace** or press **CTRL + H**. Pageflex Studio displays the **Replace** dialog box. The dialog box remains open until you close it or click **Cancel**.



- 2 In the **Find** box, type the text you want to replace. In the **Replace** box, type the text you want to replace it with.
- 3 Select one of the two additional search options to refine the search.
  - Click **Match Case** to find text that matches not only the characters, but also the case of the characters (uppercase and lowercase).
  - Click **Match Whole Word** to find the text as a separate word, not part of another word.
- 4 Click **Find Next** to find the first occurrence of the search text.
- 5 Choose one of the following options:
  - Click **Find Next** to leave the found text unchanged and continue searching.
  - Click **Replace** to replace the found text with the text you specified in the **Replace** box.
  - Click **Replace All** to replace all occurrences of the found text with the replacement text throughout the entire template.

# Finding and Replacing Fonts

Using **Find Font**, you can find all the text that uses a particular font and replace it. Choose **Text** ➔ **Find Font** to display the **Find Font** dialog.



The **Document Fonts** window displays the fonts in the document. The **Count** displays the number of instances of the font in the document. Below the count is a snippet of the selected text that has the font applied to it.

## ► To Find a Font

- 1 Choose a font and click **Find First**. If the first instance of the font exists, it is highlighted in the document pane.
- 2 You can switch to the document pane to edit or change this font as needed, then switch back to the **Find Font** dialog and click **Find Next** to continue finding font instances. As each instance is found, the dialog updates the **Text** field to reflect the discovered string. The **Details** window is updated to reflect the characteristics of the font selected in the **Document Fonts** pane.
- 3 If you want to replace the font, choose a **Font Family** and **Font Style** from the drop-down list boxes and click **Change**. Click **Change All** to change all occurrences of the font.

**Note:** This does not change the font for the **Paragraph** or **Character** style, just the font of the selected text.

To undo any changes, click **Cancel** and then **Edit** and **Undo**.

When the **Find Font** feature runs out of instances of the font, the button changes back to **Find First**.

Sometimes **Find Font** results in a blank character or no characters found (the orphan case). In these cases, you might want to remove that text altogether. Studio may have left a trace of a font around that represents only white space.

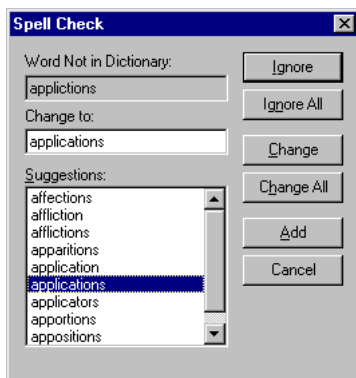
The **Find Font** feature is helpful when you want to identify where specific fonts are used in your document. Ideally, you should not use **Find Font** to change font styles on a regular basis. A best practice is to use paragraph styles to set font attributes.

# Checking Spelling

Pageflex Studio has the ability to check the spelling in your template.

## ► To check spelling

- 1 Choose **Edit** ➔ **Spelling**.
- 2 If your document uses any words not already in Studio's dictionary, Studio displays the **Spell Check** dialog box. Under **Word Not in Dictionary**, it displays the first possibly misspelled word.



- 3 If the word is misspelled, fix it with either of the following options:
  - In the **Change To** box, type the correction. Click **Change** to change only this misspelling or **Change All** to change all occurrences in the template.
  - Under **Suggestions**, select the correct spelling, and then click **Change** or **Change All**.
- 4 If the word is spelled correctly, select one of the following options:
  - To add the word to the dictionary, click **Add**.
  - To leave this occurrence of the word unchanged and continue the spell check, click **Ignore**.
  - To leave all occurrences of the word unchanged, click **Ignore All**.
- 5 Studio then moves to the next possibly misspelled word. Repeat steps 3 and 4 as often as necessary.
- 6 When there are no more possible misspellings, Studio closes the dialog box.



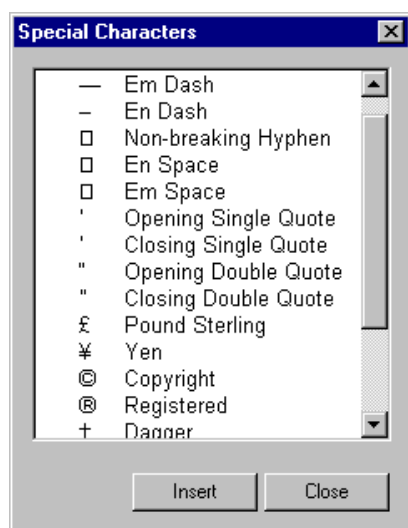
# Inserting Special Characters

You can insert text symbols into your text using the Special Characters window. Special characters include many common symbols for typesetting, such as open quotations (“) and closed quotations (”). They also include two characters to help with formatting:

- **Non-breaking space.** Use this character to keep two words from breaking at the end of a line.
- **Non-breaking hyphen.** Use this character to keep intentionally hyphenated words from breaking at the end of a line.

## ► To use special characters

- 1 Using the Text tool, click to place the cursor where you want to insert the special character.
- 2 Choose **Text ⇨ Special Characters**. Pageflex Studio displays the **Special Characters** window.



- 3 Select a character in the list, and then click **Insert**. Studio inserts the character into the paragraph. The window remains open for adding additional characters. Click **Close** to close the window.

## Available Special Characters

You can also click **Text** ➡ **Insert** and choose an item to insert, such as a Line Break (**SHIFT ENTER**), Column Break (**CTRL SHIFT ENTER**), Page Break (**CTRL ALT SHIFT ENTER**), Page Number (**CTRL SHIFT N**), Last Page Number, or any of the special characters in the special characters window.

The following special characters are available for insert from the **Special Characters** menu or the **Text** ➡ **Insert** menu option.

Name	Character
Bullet	•
Closing Double Quote	”
Closing Single Quote	’
Copyright	©
Dagger	†
Degree	°
Double Dagger	‡
Double Quote	“
Ellipsis	...
Em Dash	—
En Dash	–
En Space	
Euro	€
Horizontal Fill	
Indent Here	
Leader Fill	
Left Guillemet	«
Non-breaking Hyphen	-
Non-breaking space	
Opening Double Quote	“
Opening Single Quote	‘
Pound Sterling	£
Registered	®
Right Guillemet	»
Single Quote	’
Soft Hyphen	-
Tab	
Trademark	™
Yen	¥

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# Adding Flex

## 7

Flex is the ability of elements in a template to expand, contract, and move as needed to fit the dimensions of the project's variable contents. Flex is one of the unique features of variable publishing with Pageflex Studio. Using flex changes a static design into a sophisticated variable one. This chapter assumes you have a working knowledge of the various elements and properties in a Pageflex Studio template.

# Understanding Flex Behavior

Studio containers and shapes can use flex behavior. Flex behavior allows a container to expand, contract, and reposition itself and adjacent containers to accommodate the variable contents of each document in a project. Pageflex Studio adds flex with three properties.

- **Flex Height** — how the height expands and contracts
- **Flex Width** — how the width expands and contracts
- **Anchor Flex** — which direction the element expands and contracts

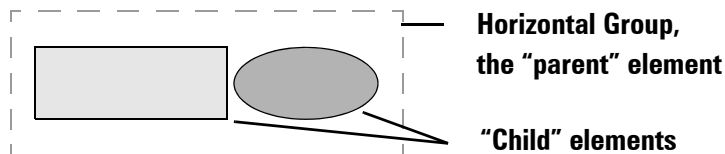
**Flex Height** and **Flex Width** determine the flexible behavior of an element. You can maximize or minimize each behavior to control how the element expands and contracts its dimensions. The **Anchor Flex** property sets the anchor point, a fixed point around which the element can flex. No matter how much the element expands or contracts, the **Anchor Point** remains fixed.

**Note:** Image containers do not use flex behavior to change size. Use scaling to change the size of the containers. See “Scaling Images” on page 65.

## Parent-Child Relationships for Elements

To understand how flex behavior works, it is important to understand how elements are nested inside each other. Every element in a Pageflex Studio template can be a parent or a child to another element. Parent elements contain child elements.

If you create a horizontal group with a rectangle and an oval inside it, the rectangle and oval are child elements in relation to the parent horizontal group.

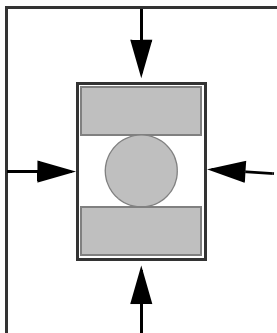


**Note:** Flex behavior does not apply to image containers. Images change size in variable documents based on the **Image Scaling** property. See “Scaling Images” on page 65 for more information.

Also note, the Anchor Point property is not available for any element inside a horizontal or vertical group, or any element pasted inline into a text paragraph. The elements inside these groups are “floating,” meaning they do not have fixed locations on the page.

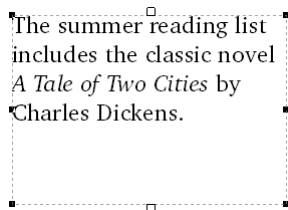
## Minimizing Height or Width

When you set **Flex Width** or **Flex Height** to **Minimize**, the element size shrinks (or grows) to fit whatever it contains. Use **Minimize** to control the flex behavior for a parent element so that the parent element contracts to fit the elements contained within it.

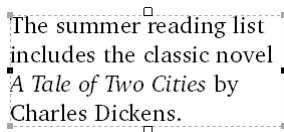


**The container element  
shrinks to fit its contents**

For example, a text box is a parent element to the text it contains. Setting **Flex Height** to **Minimize** makes the text box contract to fit the text inside it.



**Text box with  
no flex behavior**

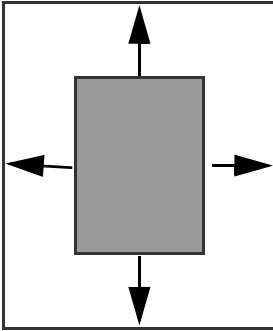


**Text box with  
Flex Height = Minimize**

Minimize does not always make the container smaller in final documents. In some cases, the container may have to become larger to accommodate the variable elements inside it.

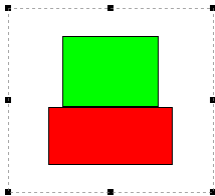
## Maximizing Height or Width

When you set **Flex Width** or **Flex Height** to **Maximize**, the element size expands to fill the container that holds it. In general, use Maximize on a child element to make it expand to fit its parent container element.

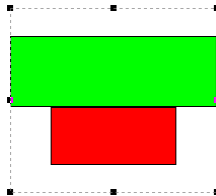


**The element expands  
to fill its container**

For example, a rectangle inside a vertical group has **Flex Width** set to **Maximize**.



**Top rectangle has  
no flex behavior**



**Top rectangle with  
Flex Width = Maximize**

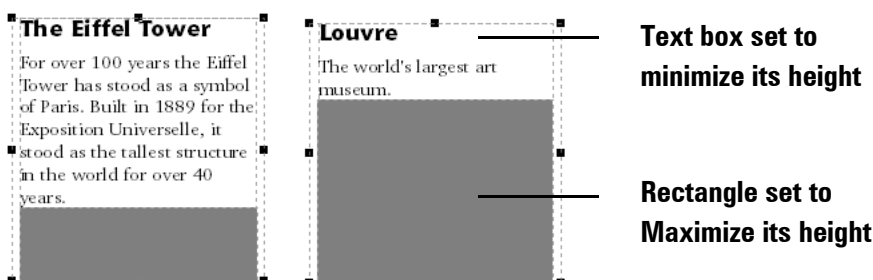
Because Maximize behavior depends upon the size of the bounding element, it works best when combined with other flex behaviors.

## Combining Flex Behaviors

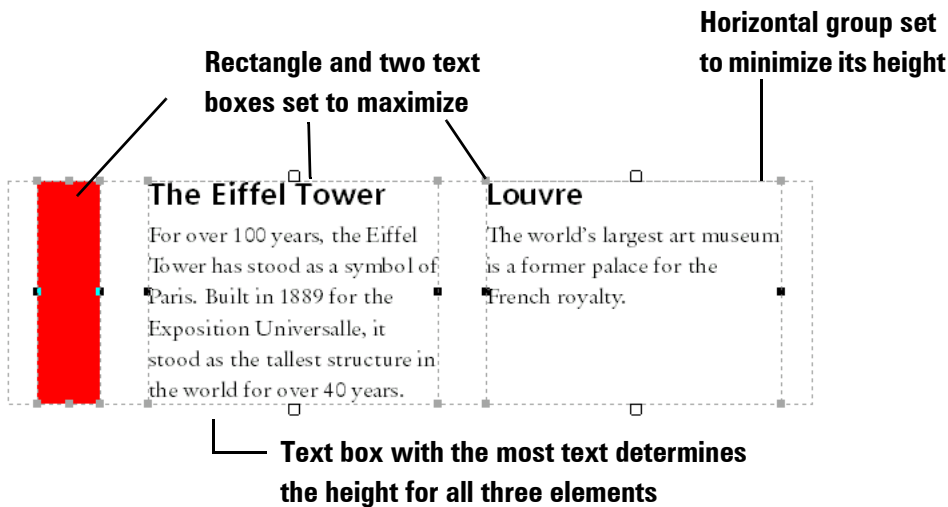
Much of the power of flex comes from combining the flex behaviors with horizontal and vertical groups. Minimize and maximize work together by offsetting each other. As Maximize expands a container, Minimize contracts around it.

In the next example, the vertical group contains a rectangle and a text box set to maximize and minimize their heights, respectively. The vertical group has no flex behavior.

**As the text box minimizes, the rectangle fills the space**



In another example, you can use flex behavior to be sure that three adjacent elements all have the same height. The horizontal group here contains two text boxes and a rectangle. The horizontal group has **Flex Height** set to **Minimize**, which means the group container is contracting as much as possible to fit the elements inside it. At the same time, the elements inside the group have **Flex Height** set to **Maximize**.

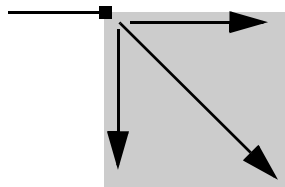


The middle text box is the one with the most text, and it becomes the element that determines the size for all three elements in the group. The middle text box expands just enough to fit the text it contains because the Minimize property of the group is forcing each element in the group to become as small as possible. Once the horizontal group container contracts as much as it can, the other text box and the rectangle expand to match the height of the group container. The text container does not contract enough to cause the text to overflow.

## Setting Anchor Points

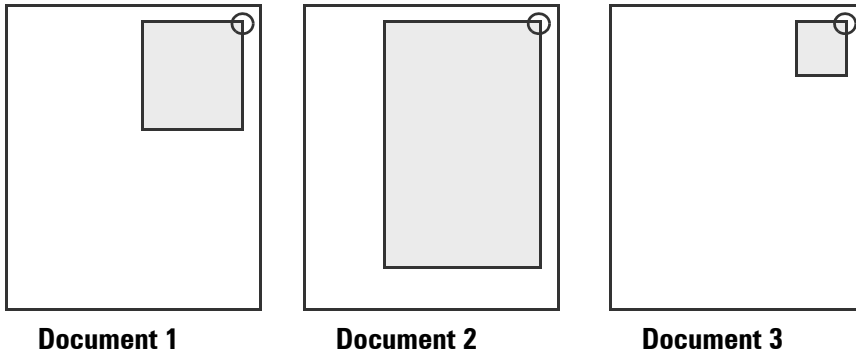
The Anchor Point provides a fixed point around which an element can flex.

**Left/Top anchor point remains fixed as height and width adjust for new contents**



As Studio ingests the variable contents for each document, the Anchor Point for a flexible container remains constant no matter how much the container expands or contracts.



**Anchor Point set to Right/Top**

**Note:** The Anchor Point property does not apply to elements inside a horizontal or vertical group, or to an element pasted inline into a block of text.

## Setting Boundaries for Flex

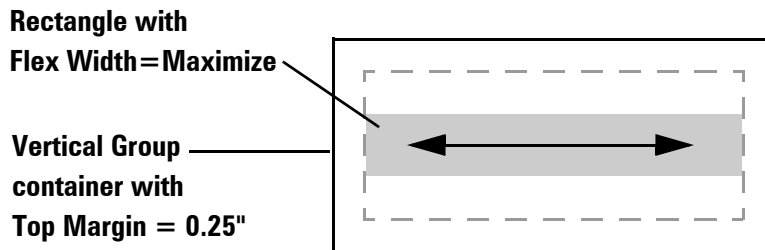
While adding flex helps you create complex variable documents, you may need to set some limits on how much the elements in your document can flex. There are several properties you can use to control the boundaries for flexible behavior.

- Margins
- Bumpers
- Flex Minimum
- Flex Maximum

### Using Element Margins and Bumpers

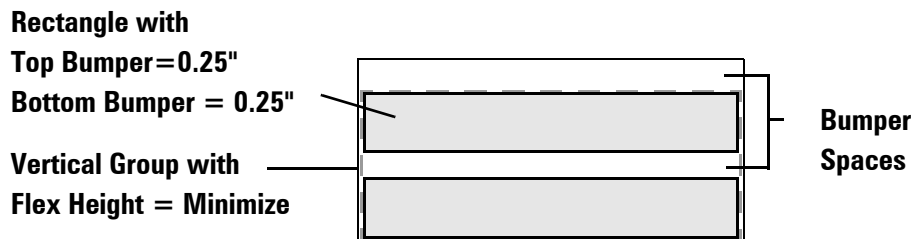
The spaces created by **Margins** and **Bumpers** are preserved when you apply flex behavior to any element. **Margins** control how close the contents of an element can approach the edges of a container. **Bumpers** control how close elements can be next to each other. For information on Margins and Bumpers, see “Understanding Element Properties” on page 90.

In the following example, a vertical group contains a rectangle. The vertical group has all **Margins** set to 0.25 inches, and the rectangle has **Flex Width** set to **Maximize**.



The rectangle's width expands to the left and right margins.

In the following example, a vertical group contains two rectangles. The vertical group has **Flex Height** set to **Minimize**, and the top rectangle has **Top** and **Bottom Bumpers** set to 0.25 inches.

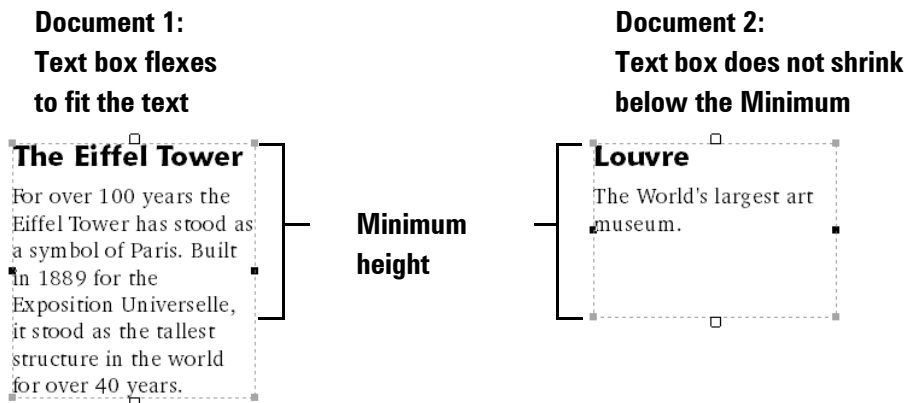


The Bumper space between the top of the rectangle and the vertical group container is preserved when the container contracts.

## Setting Minimum and Maximum

The **Minimum** and **Maximum** for **Flex Height** and **Flex Width** set the range for how much the element can change size. The **Minimum** sets the smallest size, and the **Maximum** sets the largest size. The **Minimum** must be smaller than the **Maximum**.

For example, a text box has **Flex Height** set to **Minimize**, and a **Minimum Height** set to 1 inch. For each variable document, the text box minimizes to fit the variable text. No matter how small the amount of text, the height does not shrink below 1 inch.

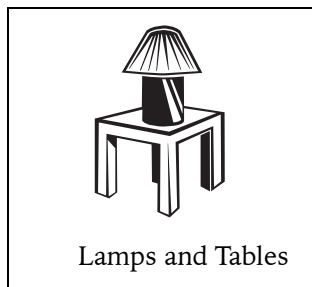


If you change the **Minimum Height** to zero, Studio shrinks the height to zero if the variable content is empty. The text box appears to disappear, but it is not deleted from the template.

In the following example, a text box contains a variable to indicate whether an item pictured is on sale. The text box has **Flex Height** set to **Minimize**, and a **Minimum Height** set to zero.



**Document 1**  
**Item is on sale. Variable**  
**contents are displayed.**



**Document 2**  
**Item is not on sale.**  
**Text box disappears and**  
**next item in catalog**  
**appears instead.**

---

## Setting Auto-Hide Conditions

You can set conditions on elements or paragraphs so that if a variable has no value, Studio hides the element or paragraph during output. Studio does not examine the type of variable, but only determines if the variable has a value. If the variable contains any value, auto-hide will fail and the element or paragraph will be displayed.

### ► To Auto-Hide an Element or Paragraph

- 1 Choose an element or paragraph.
- 2 Select the **Flex** tab in the Properties panel.
- 3 Type the name of a variable in the **Auto-Hide Condition** field. The variable must exist in your project.



---

# Working with Master Pages

## 8

Master Pages provide the standard layout information for document templates, including guides, margins, and page borders and recurring logo images or text. They also provide the models for pages created in variable-length documents. A document may use a series of master pages. Master page management helps you set up automatic page and section numbering, add headers and footers that are automatically repeated on every new page, and apply a consistent template style to imported PDFs.

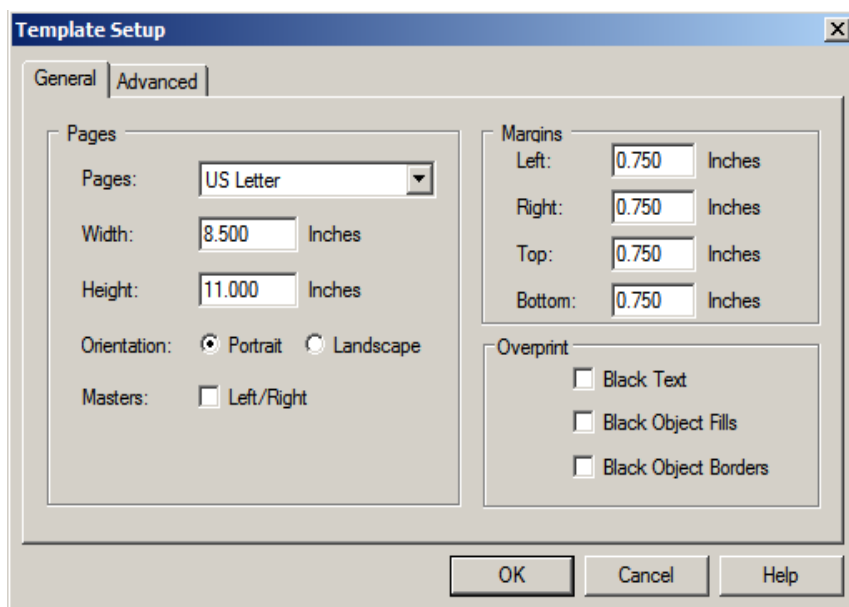
## Using Master Pages for Page Layout

Master pages are background layers shown with each document page. They can have no elements, or elements that will appear on each document page associated with the master, such as page numbers, guides, headers, and footers. There are two types of master pages that you can choose from.

- Using **Left/Right Masters** specifies a master page for left-hand pages, and a different master page for right-hand pages. This feature allows you to specify margins for book binding, for example.
- Using **Single Page Masters** specifies a single master for all pages.

When you first create a new template, you must choose whether you want to use Left/Right Masters or Single Page Masters in the **Template Setup** dialog box.

**Note:** You cannot change the master page format you have chosen once you have created your template.





► **To choose Left/Right Masters**

- Check the **Masters Left/Right** box in the **Pages** section of the **General** tab of the **Template Setup** dialog box.

► **To choose Single Page Masters**

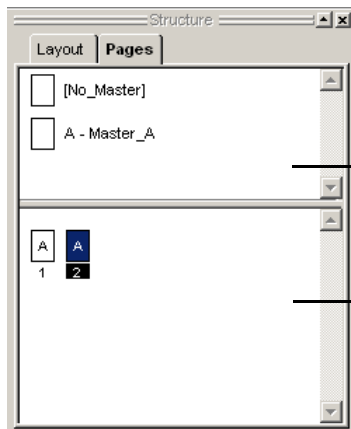
- Leave the **Masters Left/Right** box unchecked in the **Pages** section of the **General** tab of the **Template Setup** dialog box.

**Note:** Studio uses single-page masters by default.

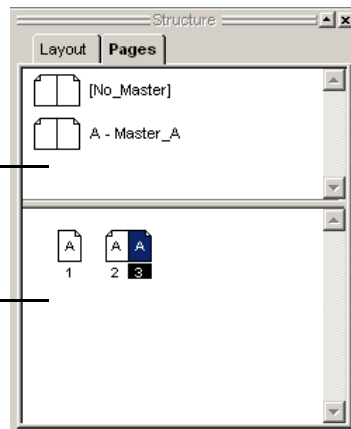
# Pages Tab

After the document is created, master pages and document pages are displayed in the **Pages** tab in the **Structure** panel. This gives an overview of all pages in the template, including master pages.

**Pages tab with Single Page Masters**



**Pages tab with Left/Right Masters**



You can manipulate the page representations in the **Pages** tab to change the real document pages by doing the following:

- Double-click a page to view or edit the selected page in the document area.
- Drag and drop a page or pages to re-order the document.
- Drag and drop a master page into the document page list to create new document pages associated with that master.
- Drag and drop a master page onto a document page to apply the master to that page.
- Single-click a page to select it as the potential target of an editing action.
- Press **CTRL** click and **SHIFT** click to extend page selection to multiple pages.
- Right-click on a page to choose an option from a context menu.
- Move the mouse over a document page to view a tool tip that displays more information about the document page.
  - For static document pages, the tool tip provides the full page number, including prefix.
  - For variable pages, the tool tip provides the associated variable name. See “Creating Variable-Length Documents” on page 203 for details.
  - For filler pages, the tool tip provides information on how the filler page will affect handedness and page count.

# Managing Master Pages

Studio assigns master pages a prefix character, such as A, B, or C, which is displayed on document pages to indicate which master is assigned. Pages using the “No\_Master” master page have no prefix.

The **No\_Master** master cannot be edited or deleted. It is there to provide the option to assign a blank page master to a document page. When legacy documents are opened, they appear with single page masters with “No Master” assigned. “A-Master A” is assigned by default to the first and all new document pages.

## Creating Master Pages

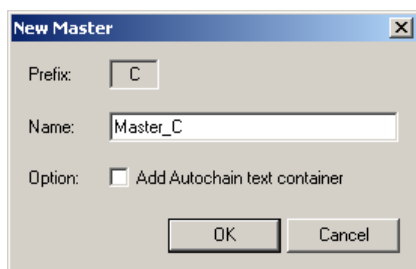
### ► To create a new Master page

- 1 Choose Page ⇨ New Master...

-or-

Right-click in the **Master Page list** on the Pages tab and choose **New Master...**

This displays the **New Master** dialog box.



- 2 Studio automatically assigns the prefix character, which is the next available letter in the alphabet. It cannot be edited. Type a **Name** for the master page in the text box, or make no change to use the default name.
- 3 Check the **Add Autochain text container** if you want to create a text container that will automatically autochain to another page if there are text overflows. See “Automatic Pages” on page 204 for more information.
- 4 Click **OK** to create the master page.

## Editing Master Pages

You can edit master pages like you edit document pages, except the elements that you add become master items for each document page associated with that master. To edit a master page, double-click on its page representation in the Master Page List on the Pages tab.

### ► To change the name of a Master page

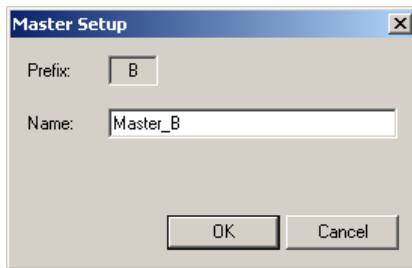
Use the **Master Setup** dialog box to change the name of a master page. It is the same as the New Master dialog box, except that the autochain option is no longer available. Once a master has been created, use the **Element ⇌ Autochain** menu command to set a selected text container to autochain on text overflow. See “Automatic Pages” on page 204 for details.

#### 1 Choose Page ⇌ Edit Master

-or-

**Right-click** in the **Master Page list** and choose **Master Setup**

This displays the **Master Setup** dialog box.



- 2 The prefix character cannot be edited. Type a new **Name** for the master page.
- 3 Click **OK** to change the name for the Master Page. The name is changed for all document pages that reference this master page.

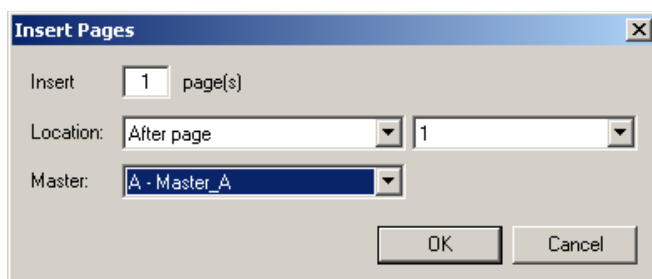
## Inserting Pages Based on a Master Page

### ► To insert pages

- 1 Drag and drop a master page into the document page list to create new document pages associated with that master.

-or-

Choose **Page** ➞ **Insert Pages** or **right-click** in the **Document Page** list and choose **Insert Pages**. This displays the **Insert Pages** dialog box.



- 2 Enter the number of pages to insert in the **Insert** text box.
- 3 Choose the **Location** to insert pages, in the beginning of the document, at the end of the document, or before or after a specific page.
- 4 If you have chosen to insert pages before or after a specific page, choose that page in the drop-down list.
- 5 Choose the **Master** page to use for the pages to be inserted.
- 6 Click **OK** to insert pages.

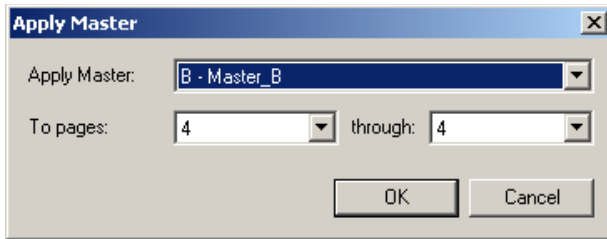
## Applying a Master Page to Document Pages

### ► To apply a Master page to Document pages

- 1 Drag and drop a master page onto a document page to apply the master to that page.

-or-

Choose **Page** ⇨ **Apply Master** or **right-click** on the selected master page representation, and choose **Apply Master**. This displays the **Apply Master** dialog box.

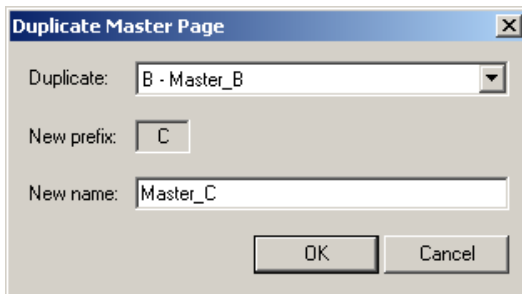


- 2 Select the master page to apply in the **Apply Master** drop-down list.
- 3 Choose the document page range to apply this master page to.
- 4 Click **OK** to apply the master page to this document range.

## Duplicating Master Pages

### ► To duplicate a Master page

- 1 Choose **Page** ⇨ **Duplicate Master** or **right-click** on the selected master page representation and choose **Duplicate Master**. This displays the **Duplicate Master** dialog box.

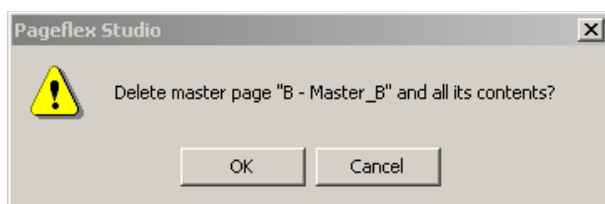


- 2 Select the master page to be duplicated.
- 3 The prefix character cannot be edited. Enter a new name for the duplicate master page.
- 4 Click **OK** to create a duplicate of the selected master page.

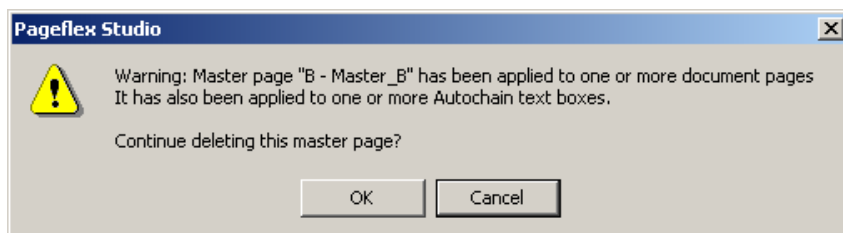
## Deleting Master Pages

### ► To delete Master pages

- 1 Choose **Page** ⇨ **Delete Master** or **right-click** on the selected master page representation and choose **Delete Master**. This displays a confirmation dialog box.



- 2 Confirm that the master page listed is the one that you would like to delete, and click **OK** to delete this page. Studio displays a warning if any document pages use the master.



- 3 Click **OK** to delete the master. The document pages that use the deleted master are converted to pages using No\_Master. Studio deletes master items from document pages if they haven't been modified on the document page.

# Automatic Page Numbering

Studio provides the ability to set up automatic page numbering fields on master pages, as well as the ability to create sections with different number formats, for example for a forward or introduction. These capabilities are discussed in this section.

## Setting up Automatic Page Numbering

### ► To set up automatic page numbering

- 1 Select the master page on which to set up automatic page numbering. You can either choose a master page from the page selection toolbar or double-click on a master page in the Pages tab.
- 2 Create a text frame on the Master page.
- 3 Place the cursor in the text frame and select **Text ⇨ Insert ⇨ Page Number**. The page number is represented by the variable <P#> on the master page.

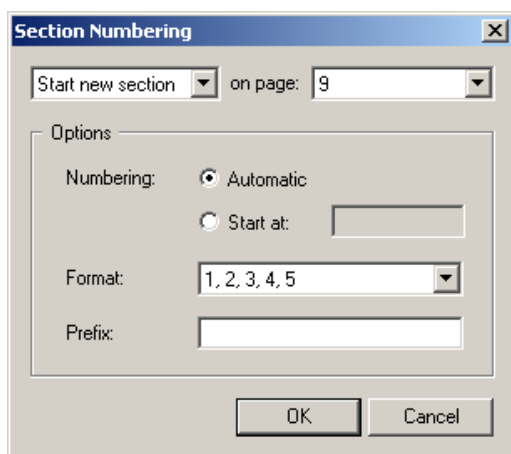
If **View ⇨ Variable Highlights** is selected, the page number variable is highlighted in gray on the Master page. On document pages, the page number is resolved and presented as the appropriate page.



## Setting Up Section Numbering

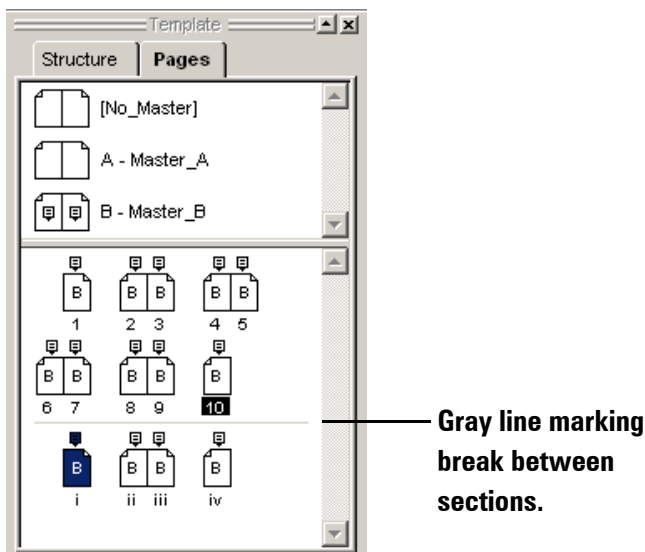
### ► To Set Up Section Numbering

- 1 Single-click a page in the document page list in the Pages tab to select it.
- 2 Choose **Page ⇨ Section Numbering** or **right-click** on a selected document page representation and choose **Section Numbering**. This displays the **Section Numbering** dialog box.



- 3 Choose the page on which to start a new section.
- 4 Choose a **Numbering** option:
  - Choose **Automatic** to automatically continue the numbering sequentially from the previous section
  - Choose **Start at** to enter a specific value with which to start numbering.
- 5 Under **Format**, choose a numbering style from the drop-down list.
- 6 Under **Prefix**, choose a text string to incorporate into the page number, for example “4-1,” “4-2,” and so on.
- 7 Click **OK** to create the new section.

In the **Pages** tab, new sections cause a line break. A gray line, extending to the margins of the document pages area, is inserted to mark the break between sections.



Pages in the **Pages** tab show the page numbers in the numbering format that was chosen for the section in which they are located. They do not show page prefixes. For example, you would add a section if you want to list an index with roman numerals after pages with numeric numerals, as shown in the image to the right.

## Elements on Master Pages

A document page displays the elements placed on the master page it is based on. You can in effect add headers and footers to all document pages by adding text boxes at the top and bottom of your master page. Elements placed on master pages are called **master items**.

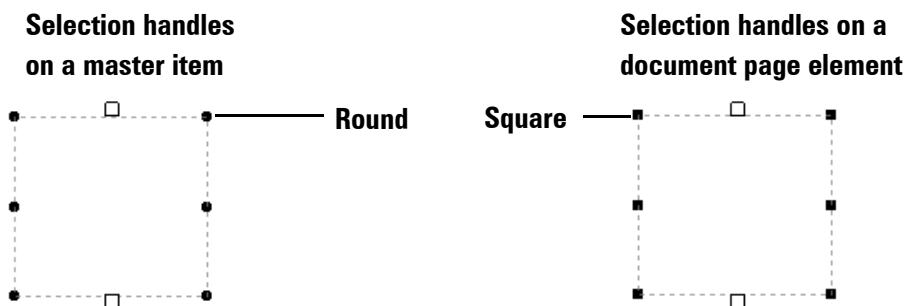
You can select and edit any master item on a document page. Once you edit a master item on a document page, edits made to the same property of the same item on the master page will no longer affect the item on the document page.

For example, create a text box on a master page and then edit the size of the text box on a document page that uses that master. Now the text box will no longer change size in the document if you change its size in the associated master.

However, if you now change the fill color of the text box in the associated master, the fill color will change in the document page.

### Selecting Master Items

Studio displays round selection handles when you select master items. When you edit a master page, all selected master items have round handles. On a document page, document page elements have square selection handles.



The Info Tab provides a read only “Master Element” property that indicates whether a selection is a master item or not. If the selected element is a master item, the Master Element property value is “Yes.” If the selected element is not a master item, the Master Element property value is “No.”

## Revert to Master

When you edit a property of a master item on a document page, the master item no longer inherits changes made to that property that are made on the master page. However, changes to other properties *are* inherited. In this way, edits to master element instances are similar to the way paragraph styles can be modified by paragraph and character properties. If you want to remove any changes you have made to a master item on your document page, Studio lets you revert a modified master item to its original state.

### ► To revert a modified Master Item to its original state

- 1 Select the modified master item on the document page.
- 2 Choose **Element ⇨ Revert to Master**

The selected element reverts back to the state it was in when first inherited from the master.

## Changing Master Items to Document Elements

Studio offers the ability to completely detach a master item on a document page from the master using the **Edit ⇨ Cut** and **Edit ⇨ Paste in Place** menu commands.

The element is copied exactly in the position it was copied from and behaves as a normal element selection. It is fully detached from the master, which means that any changes made to that element in the master will not affect the detached master item. It now functions as a regular document element.

### ► To detach a Master Item from the Master page

- 1 Choose the master item on the document page.
- 2 Choose **Edit ⇨ Cut**
- 3 Choose **Edit ⇨ Paste in Place**

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# Creating Variable-Length Documents

## 9

With Pageflex variable-length document features, you can design document templates that use automatic, variable, and filler pages to add or remove pages based on the amount of text that needs to be presented in a specific document. Automatic pages are created by text overflow, variable pages by the application of document variables, and filler pages by rules that govern handedness or page count.

# Automatic Pages

Automatic page insertion occurs when text overflows in selected text containers in Studio.

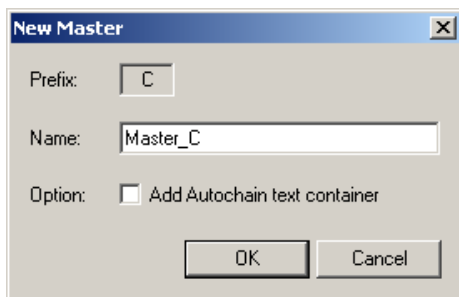
You must specify that text overflowing from a text container on a particular page should be automatically chained, or “autochained,” to text containers on pages created and inserted into the document automatically until all text has flowed. These containers are known as **autochain text containers**.

You can add an autochain text container on a document page or a master page, or convert an ordinary text container into an autochained text container in either place. New pages generated by autochain text containers are based on **autochain masters**, master pages with an autochain text container on at least one of their pages. You can create as many autochain masters as you want, but only one autochain text container can appear on each page.

In order to set up an autochained text container, first create an autochain master, and then set a text container on a document page to autochain on overflow.

## ► To create a new master with an autochain text container

- 1 Choose **Page ⇨ New Master** or **right-click** in the **Master Page list** and choose **New Master**. This displays the **New Master** dialog box.



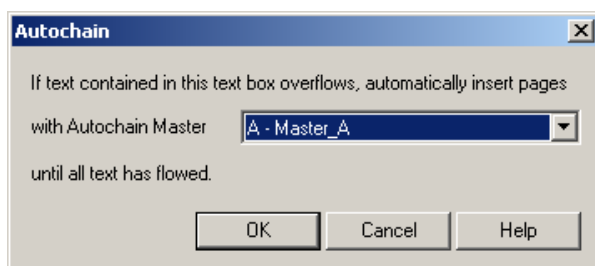
- 2 The prefix character cannot be edited. Type a **Name** for the master page in the text container or do nothing to use the default name.
- 3 Check the **Add Autochain text container** if you want to create a text container that will automatically autochain to another page of the same master type if there are text overflows.

- 4 Click **OK** to create the master page. This causes rectangular autochain text containers, sized to the page margins, to be inserted on the master. If left/right masters are in use, Studio creates autochain containers on both left and right sides.

► **To create an autochain text container on an existing master**

You can add a new text container to create an autochain text container, or modify an existing text container to include autochain text properties.

- 1 Select a master page on which to add an autochain text container.
- 2 Single-click a text container to select it.
- 3 Choose **Element** ⇨ **Autochain**. This displays the **Autochain** dialog box.



- 4 From the drop-down list box, choose the master page that you want new document pages to use when text overflows in the autochain text container.

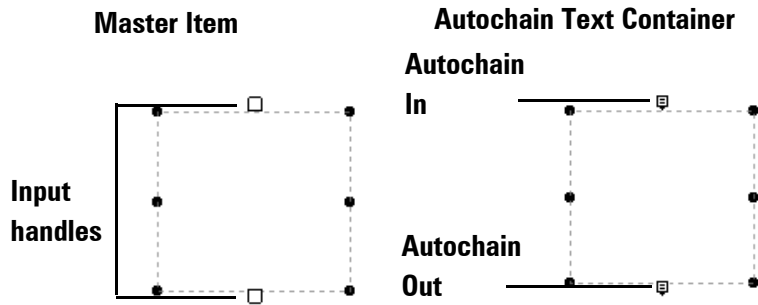
**Note:** Only autochain masters are offered as options.

- 5 Click **OK** to create the autochain text container.

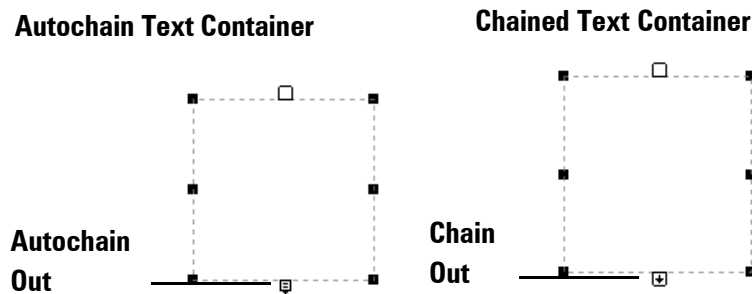
**Note:** If you are using left/right masters you should create a autochain text container on both left- and right-hand pages.

## Identifying Autochain Text Containers

The input and output selection handles at the top and bottom of a text container on a master page change when a text container becomes an autochain text container. When an autochain text container is created on a master page, the input handles change to an autochain in point and an autochain out point.



The output selection handles on autochain text containers on document pages are different from the output selection handles on chained text containers, as shown below. Additionally, if the autochain text container was created on a master page, its selection handles are round.



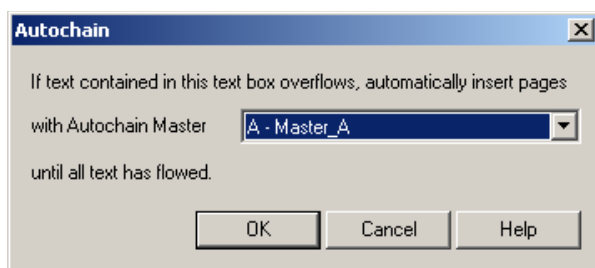
### ► To set a document page text container to autochain on overflow

You can set a text container on a document page to autochain text overflows to pages specified on an autochain master.

- 1 Select a text container by single-clicking on the text container.
- 2 Choose Element ➞ Autochain



This displays the **Autochain** dialog box.



**3** Select an autochain master to be used for any pages automatically inserted if the text container overflows.

**4** Click **OK** to create the autochain text container.

► **To unchain an autochain text container**

**1** Select an autochain text container by single-clicking on the text container.

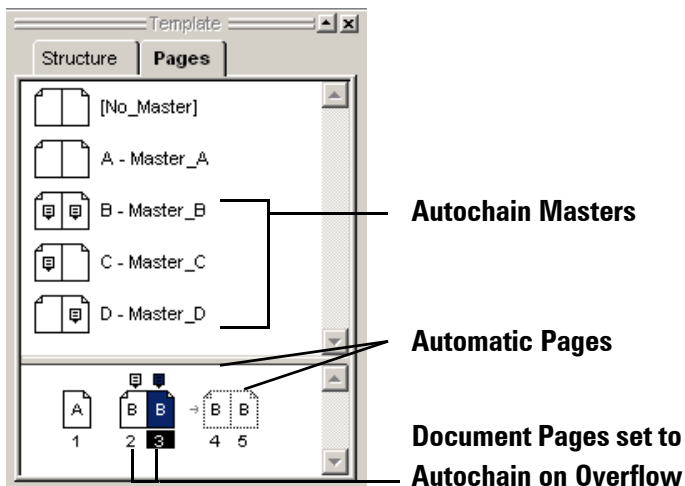
**2** Choose **Element** ⇨ **Unchain**

Studio unchains the autochain text container.

## Autochain Text Containers in the Pages View

When an autochain text container is added to a master page, its icon in the Master Page list shows a graphic to indicate that it can be used for automatically inserted pages.

In the image below, Master A is not an autochain master. Master B, Master C, and Master D are autochain masters. Overflow text creates new pages on both left and right pages when Master B is used. However, overflow text creates new pages only on the left page when Master C is used, and only on the right page when Master D is used.



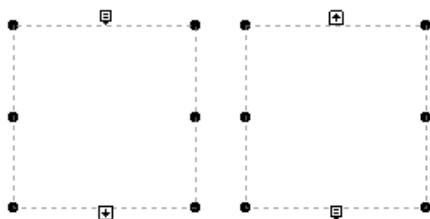
When you set a text container on a document page to autochain on overflow, the icon representing that document page is updated to indicate that the page contains an autochain link, as shown above.

If the text container set to autochain does overflow, the pages required to present all text are automatically inserted. These **automatic pages** can disappear if text is removed and are represented by pages with dotted outlines. Arrows appear between the gaps in the sequence of automatic pages to show that they are grouped or connected to the initial static page.

In the screenshot above, text inserted on page 3 created two automatic pages, 4 and 5. If text is inserted on page 2, automatic pages are created between pages 2 and 3.

## Chaining Autochain Text Containers

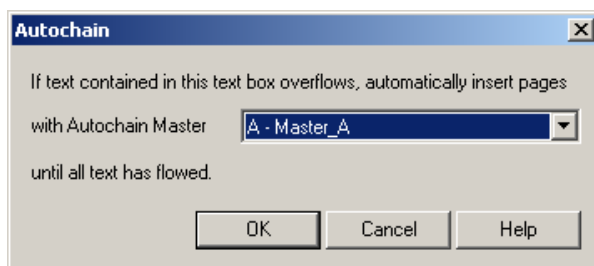
It is possible to set up a sequence of chained text containers to act as a single autochain container. An example showing two chained text containers on a master page is displayed below.



If text overflows from the last container, Studio generates automatic pages.

### ► To autochain a chain of text containers

- 1 Click the **Chain** tool in the Toolbox.
- 2 Drag the mouse in the document area to create and size the first text container in the chain.
- 3 Drag the mouse in the document area to create and size the second text container in the chain.
- 4 Select the last text container in the chain.
- 5 Choose **Element** ➡ **Autochain**. This brings up the Autochain dialog box.



- 6 Choose the autochain master you would like to use when text overflows in these text containers from the drop-down list.

- 7 Click **OK** to add the autochain in and out links to the chaunted text containers, thus forming a chain of containers that acts as one autochain text container on the master.

## Unchaining Autochain Text Containers

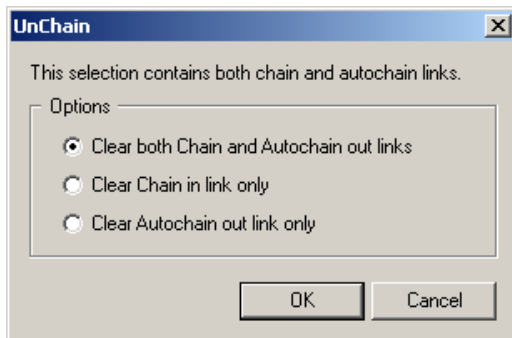
You can unchain autochain text containers or chained autochain text containers. Once you do so, the containers become ordinary text containers and no longer support the generation of automatic pages.

### ► To unchain autochain text containers

- 1 Select the autochain text container you would like to unchain.
- 2 Choose **Element** ⇨ **Unchain**.

### ► To unchain a chain of autochain text containers

- 1 Select the text container you would like to unchain.
- 2 Choose **Element** ⇨ **Unchain**. Studio displays the **Unchain** dialog box when you unchain a chained text container set to autochain. This dialog gives you the option of unchaining both chain and autochain links.



- 3 Choose whether you want to clear both chain and autochain links, chain links only, or autochain links only
  - **Clear both Chain and Autochain out links** clears any chain links in or out of the text container as well as any autochain links out.
  - **Clear Chain in link only** clears any chain links in or out of the text container.

- **Clear Autochain out link only** changes a chained autochain text container to chained text containers when it is applied to the last container in a set of autochain text containers.

**Note:** **Clear Autochain out link only** works only on the last container in a set of autochain text containers.

## Reordering and Removing Pages With Autochain

This section describes what happens when pages with Autochain links are inserted, moved, or deleted.

- Only static pages can be moved or deleted.
- Automatic pages move as a group.

Automatic pages stay with the page that contains the their “parent” autochain link. For example, if page one of a set of automatic pages were dragged to a new location, page one plus the entire set of automatic pages associated with it would also be relocated.

- If the page with the autochain link is removed, the Autochain link is removed along with the page.

## Inserting Page Breaks

The Text menu has an option to insert a page break in text. This is useful if you need to force text to break in a certain place in your text flow, so that the automatic page insertion set up for the parent text container can insert a new page.

### ► To insert a page break

- 1 Place the cursor at the beginning of the text where you would like the break to occur.
- 2 Choose **Text** ⇨ **Insert** ⇨ **Page Break**.

## Converting Dynamic Pages to Static Pages

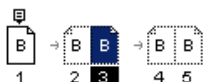
Automatic pages may not always remain visible in a document. If enough text is removed from the flow of text that causes the insertion to happen, the last page in an automatically inserted chain of pages, for example, can be removed.

The only content on a dynamic page that can be edited is the stream of autochained text. Because the page can disappear when content shrinks, you can make no other edits. If you want to make any other edits to the page or add images, for example, you must convert the automatic page to a static page.

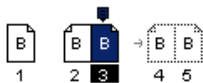
### ► To convert dynamic pages to static pages

- 1 Select the last page in the sequence of pages that you would like to convert to static.
- 2 Choose **Page** ➡ **Convert to Static Page**.
- 3 Click **OK** to convert the selected dynamic page and all prior dynamic pages associated with the selected page to static pages.

For example, you have inserted a block of text which creates four automatic pages, as shown below by the dotted lines.



If you choose the third dynamic page in the Document Page list in the Pages tab and convert it to a static page, it converts itself and the prior two dynamic pages associated with it to static pages, as shown below.



The last two automatic pages remain dynamic.

---

# Variable Pages

You can use variable pages to design templates that include different pages based on variable values. For example, you can create a custom product brochure personalized to show just those items a particular user is interested in, typically by having the user select the items from a list on a website.

Studio uses the “**Document**” variable type to set up variable pages. Document variables are created using the same variable setup as for creating text, image, and area template variable types. See “Understanding Variable Types” on page 256 for more information on these variable types. The value of a document variable resolves to either a Pageflex document template (.xdt) file or an Adobe Acrobat portable document format (.pdf) file.

You can insert document variables between pages in a document template to splice in pages based on the value of the document variable. As with other variables, Studio resolves document variable values during variable data ingestion at preview or submission time.

You must follow the steps below to create a template that incorporates variable page capabilities:

- Create the .xdt files or PDF documents to be imported
- Create document variables in the main template, each specifying which .xdt file or PDF to import
- Create and place variable-page placeholders based on the document variables

These steps are described in the sections below.

## Creating Document Templates

You can create both the main template and a template to be imported into it with the template creation tools in Pageflex Studio. You can also insert externally produced PDFs or generate PDFs from Studio output and insert them as variable pages.

If you create .xdt files for insertion, keep the page size, master page type, and page orientation the same as those in the main template. Since PDFs are imported as images, their document size can be anything the main template can accommodate.

## Creating Document Variables

Create document variables using the variable setup dialog used for creating other variable types such as text, image, and area template variable types. See “Adding or Editing Variables” on page 261 for instructions.

Definition				
+				
✖ If	<childage>	Is	1	
	Result Is OneYearOld.xdt			
Else If	<childage>	Is	2	
	Result Is TwoYearOld.xdt			
Else If	<childage>	Is	3	
	Result Is ThreeYearOld.xdt			
Otherwise Result Is GenericOlderChildPage.pdf				

If you specify an .xdt file as a document variable value, be sure to choose files in which the page size and master page format are compatible with the parent document it is ingested into.

PDF page images are positioned in the center of the pages of the parent document.

## Inserting Variable Pages

You can insert variable pages within document templates using menus or directly through the Pages tab.

**Note:** You must have created a document variable in a project and have that project open in order to create a variable page.



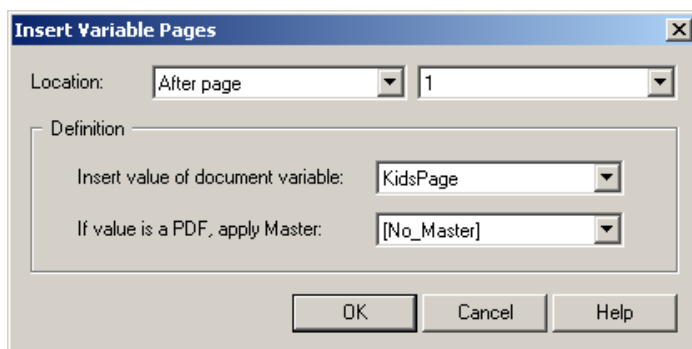
## ► To insert variable pages using menu choices

- 1 Choose **Page** ⇨ **Insert Variable Pages**

-or-

Right-click in the document pages list and choose **Insert Variable Pages**

This displays the **Insert Variable Pages** dialog box.



- 2 Choose the location within the pages of the template to insert the variable pages. Insert the variable pages before or after a specified page, or at the beginning or end of the document.
- 3 Choose the document variable from a list of all those available for the currently open project to determine which document to insert.
- 4 Choose which master page to apply to any PDF insertions. “[No\_Master]” is the default.

**Note:** This feature offers you the chance to set up page numbering for inserted PDF pages since the master you choose can have page number variables. The master items will always be layered on top of PDF page images.

- 5 Click **OK** to insert the variable pages.

## ► To insert variable pages using drag-and-drop

- 1 Select a document variable from the variable list of an open project.
- 2 Drag the document variable to the area in the Document Page list on the Pages tab where you would like to insert the variable pages.
- 3 Drop the document variable into the Document Page list on the Pages tab. This displays the **Insert Variable Pages** dialog box. Follow steps 2-5 in the previous procedure to choose your options and insert variable pages.

## Style name conflicts

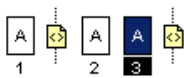
Style names may differ between the inserted document and the main document. “Style” refers to paragraph style, color, copyfitting rule, and master page definitions in document template TSL style files. Name conflicts can occur in any of these definitions. An example of a paragraph style name conflict is a main document that has a “body” paragraph style and an inserted document that also has a “body” paragraph style definition.

The style name conflicts on master pages occur in the user assigned names for the master pages rather than the prefix names. For the master page named “A-BackgroundMaster,” “A” is the automatically assigned prefix and “BackgroundMaster” is the name assigned by the user.

Inserted documents adopt the style definitions of the parent document directly in case of conflict. Other styles that exist in the inserted document, but not in the main document are added to the paragraph style, color, copyfitting rule, and master page definitions of the parent document temporarily during ingest. These added definitions are visible to you during preview.

## Viewing and editing variable pages

Variable pages appear as place holders within the Document Page list in the Pages tab, highlighted with the variable highlight color, as shown below. They can be selected, deleted, repositioned, and included in a page numbering section like any document page.



If you select a variable page, it is displayed in the document area in the variable highlight color, with a label in the center that says it is a variable page, to signify that one or more variable pages may be inserted based on the document variable value listed. It then lists the document variable value. You can click the link in the document area to edit the variable page setup.

### ► To edit variable pages

- 1 Double-click a variable page in the Document Page list on the Pages tab and click the link “Click to edit.”

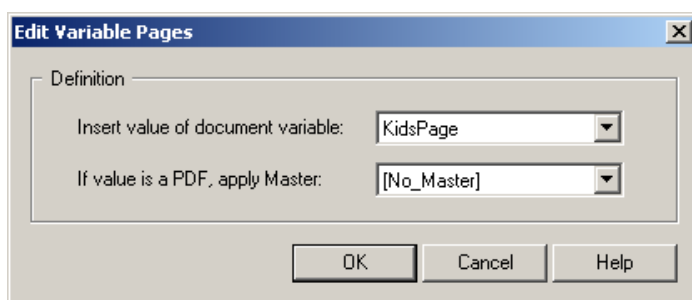
-or-

Select a variable page in the Document Page list on the Pages tab and choose **Page ⇨ Edit Variable Pages**.

-or-

Right-click on a variable page insertion point in the Document Page list on the Pages tab and choose **Edit Variable Pages**.

This displays the **Edit Variable Pages** dialog box.

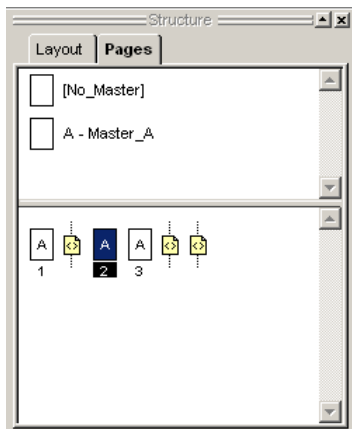


- 2 Choose the document variable from a list of those available for the currently open project to determine which document to insert.
- 3 Choose which master page to apply to any PDF insertions. “[No\_Master]” is the default.
- 4 Click **OK** to make the edits.

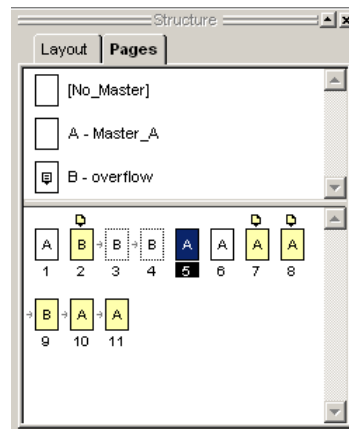
## Previewing Variable Pages

You can use the Preview command to cause variable data to be ingested live. The page representations in the Pages tab change to show the results of Document variable ingestion. If the value of a Document variable resolves to a document file name, then the representation changes to show the single or multiple pages of that document that are inserted. Inserted pages are colored with the variable highlight color. A graphic appears on top of the first page in the insertion sequence. Arrows appear between the gaps in a sequence of multiple pages to show that they are grouped or connected together. If the value of a document variable resolves to no value, then no place holders are shown.

**Pages tab  
Pre-ingest**



**Pages tab  
Post ingest**



The example above shows what the page representations with multiple Variable pages looks like before and after variable data ingestion. The post ingest example shows that a three-page document with autochain text containers was inserted at the first insertion point, a one-page document at the second, and a four-page document at the third.

Variable pages can consist of a document which itself contains automatic pages, variable pages, and filler pages. However, at the main document level, inserted documents show only the actual document pages resulting from all sub-insertions.

It is possible for a document template to be completely comprised of variable pages. No static pages need exist. This is useful if you want to construct documents out of pre-created single or multiple page document components. It is also useful to “stitch” PDF documents created with other authoring tools into single files can be output through a Studio job.

# Filler Pages

Publishers frequently need to enforce usage conventions for left- and right-hand pages, specifying for example that chapters begin on a right-hand page. Some binding methods also require that the total number of pages in a publication be even. Other binding methods require that pages fit a set number of pages. Designers and print production experts working with static page layout can insert or remove pages manually to meet these conventions. But when you work with variable-length document features, you can not, since your documents can change in length dynamically. You must make such requirements explicit in template designs. Pageflex Studio provides the ability to create filler pages to address this need.

## Inserting Filler Pages

Studio lets you manage the number of filler pages you want to insert through an option on the Page menu. The selections are the same for left/right and single-page masters.

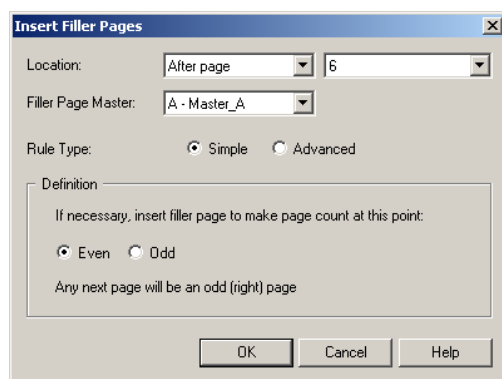
### ► To create a simple filler page rule

#### 1 Choose Page ⇨ Insert Filler Pages

-or-

Right-click in the Document Page list on the Pages tab and choose **Insert Filler Pages**.

You see this dialog box:



- 2 Under **Insertion Point Location**, select **After Page** or **Before Page** in the first drop-down list, and then select the number of the page the new page will follow or precede. Or select **Beginning of Document** or **End of Document** to place the filler pages at the beginning or end of the document.
- 3 Under **Filler Page Master**, select a master page for the new page to use.
- 4 Under **Rule Type**, choose **Simple** to specify whether the new page should be an odd or even page. Choose **Advanced** to specify a multiple of filler pages. See below for advanced instructions.
- 5 Under **Definition**, specify whether the new page should be an odd-numbered page and force the next page to be a right-hand page if you are using left/right masters, or an even-numbered page and force the next page to be a left-hand page with left/right masters.
- 6 Click **OK** to insert the filler page. In the Document Page List on the Pages tab, you will see a filler page placeholder. You can reposition this placeholder to change the location of your filler page.

Inserting filler pages does not guarantee the automatic insertion of a dynamic page. Studio evaluates your definition at production time and inserts a page only if necessary to satisfy the conditions in your definition.

For example, if you specify inserting an even page to force the following page to be an odd page, Studio will not insert a page if the next page is already an odd page.

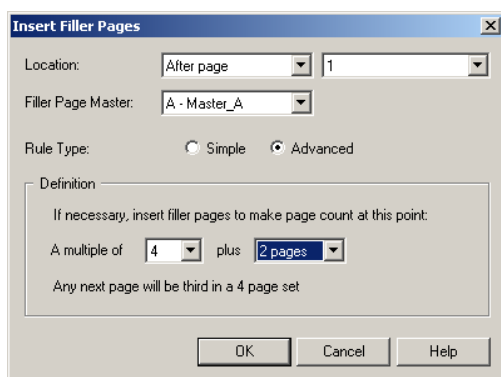
### ► **To create an advanced filler page rule**

- 1 Choose **Page** ⇌ **Insert Filler Pages**

-or-

Right-click in the Document Page list on the Pages tab and choose **Insert Filler Pages**.

This displays the **Insert Filler Pages** dialog box.



- 2** Under **Insertion Point Location**, select **After Page** or **Before Page** in the first drop-down list, and then select the number of the page the new page will follow or precede to specify the location. Or select **Beginning of Document** or **End of Document** to place the filler pages at the beginning or end of the document.
- 3** Under **Page Master**, select a master page for the new page to use.
- 4** Under **Rule Type**, choose **Advanced** to specify a multiple of filler pages.
- 5** Under **Definition**, choose a number the page count will be a multiple of, plus a specific number of pages, to choose where in the set your next page will fall.

For example, if you choose to insert 4 filler pages plus 2 Pages, your next page will be the third in a four-page set. See the examples below.

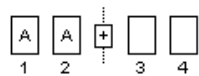
- 6** Click **OK** to insert the filler pages. In the Document Page List on the Pages tab, you will see a filler page placeholder. You can reposition this placeholder to change the location, and amount of your filler pages.

## Advanced Filler Page Example

Assume you want two pages to appear at the end of the document and you need to keep the total page count to a multiple of four. You need to insert filler pages to ensure that your final static page completes a four-page set, so you use a rule with “A multiple of 4 plus 2 pages.” The illustrations below show what you see in the Document Page list of the Pages tab in several different examples.

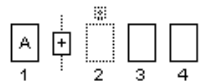
### Case 1: No Filler Pages Inserted

No filler pages are inserted because the page count before the pages to be inserted is either two or already a multiple of four + two.



### Case 2: One Filler Page Inserted

One filler page is inserted because the page count before the pages to be inserted is either one, or a multiple of four plus one.



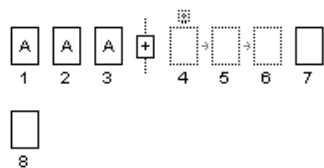
### Case 3: Two Filler Pages Inserted

Two filler pages are inserted because the page count before the pages to be inserted is either zero, or an even multiple of four.



### Case 4: Three Filler Pages Inserted

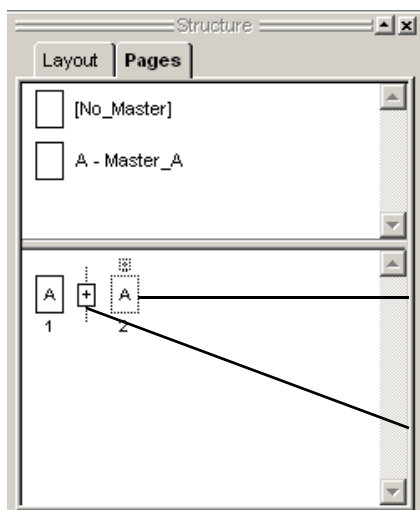
Three filler pages are inserted because the page count before the pages to be inserted either three or a multiple of four plus three.





## Viewing Filler Pages

Studio displays filler page placeholders in the Document Pages list in the Pages tab. The symbol is a small page with a plus sign to indicate that a page might be added. If a page is added based on the filler page definition, double-click it in the Document Page list to display it in the Document window. The document page has a dotted outline to indicate that it is a dynamic page, as it may or may not be added, depending on the variable values when you run the job.



**Dynamic page**

**Filler Page**

**Note:** You will not see filler page placeholders in the document area during preview. The Document window always shows you exactly what will print when you output the document with the specified profile values. So, either you will see a filler page if it is necessary, or no page where the filler page placeholder was in the template.

## Editing Filler Pages

You can make changes to filler pages at any time by editing them.

### ► To edit filler pages

- 1 Double-click the filler page placeholder in the Document Page list on the Pages tab and click the link “Click to edit”

-or-

Select a filler page insertion point in the Document Page list on the Pages tab and choose

**Page ⇨ Edit Filler Pages**

-or-

Right-click on a filler page insertion point in the Document Page list on the Pages tab and choose **Edit Filler Pages**.

This displays the **Edit Filler Pages** dialog box.

- 2 Make any changes necessary and click **OK** to apply your changes.

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# Adding a Table of Contents

## 10

This chapter explains how to use Studio features for creating, editing, and updating a table of contents. The table of contents prints a list of text you have marked with selected styles. As you bring variable data into a Studio template to create a suite of related documents, Studio dynamically updates the table of contents to reflect changing content and page numbers.

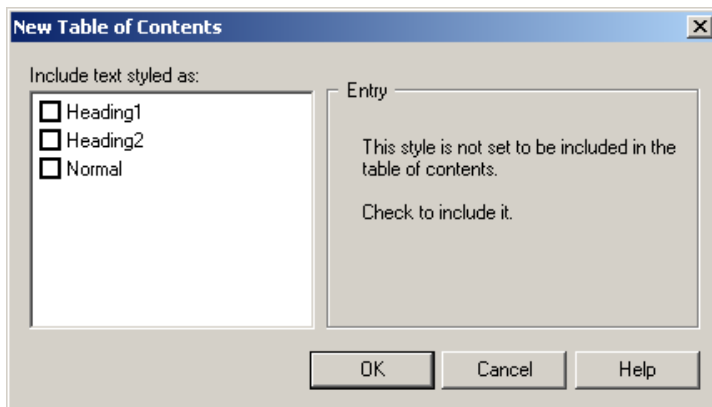
## Creating A Table of Contents

You can create a table of contents (TOC) based on the text styles in a document. For example, all text styled with “Title” could be collected for the TOC. Studio automatically collects multiple TOC items and updates text and page numbers in the document as content and flow change. You can also specify styles for TOC entries themselves and assign simple plain-text alternate TOC entries. You may have more than one TOC in your document.

### ► To create a new Table of Contents

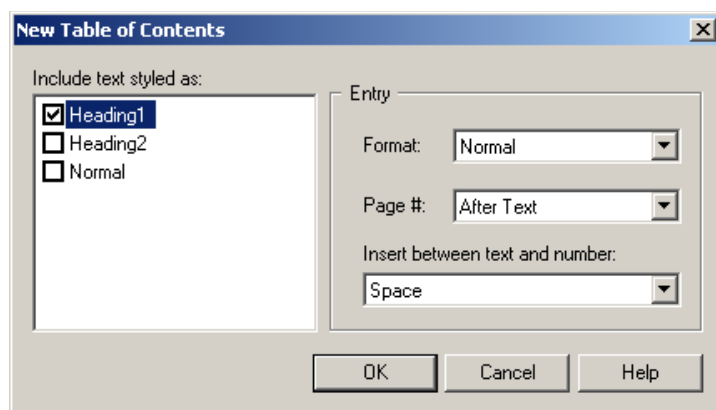
- 1 Create a text container for the table of contents. See “Text Containers” on page 54.
- 2 Insert the text cursor in the container and choose **Text ⇨ New Table of Contents**.

This displays the **New Table of Contents** dialog box.



- 3 On the left is a list of the paragraph styles used in the template. Put a checkmark beside the styles which you want to include in the TOC.

- 4 Highlight a checked paragraph style to change its Entry options.



- 5 Under **Format**, select a paragraph style to use to display the table of contents entry and associated page number. The paragraph styles are defined in the template. The default is **Normal**.
- 6 Under **Page #**, select a position in which to place page numbers relative to the corresponding text. You can put numbers **After Text** or **Before Text**, or you can select **None** to suppress page numbers from the TOC. The default is **After Text**.
- 7 Under **Insert between text and number**, choose the leader to use between the text and the page number. Choose either an **Em Dash**, **Em Space**, **En Space**, **Horizontal Fill**, **Leader Fill**, **Space**, or **Tab**. The default is a **space**.
- 8 Click **OK** to create and view the table of contents.

**Note:** The TOC is highlighted in grey. You can turn this off by unchecking Variable Highlights in the View menu.

## Updating and Editing a Table of Contents

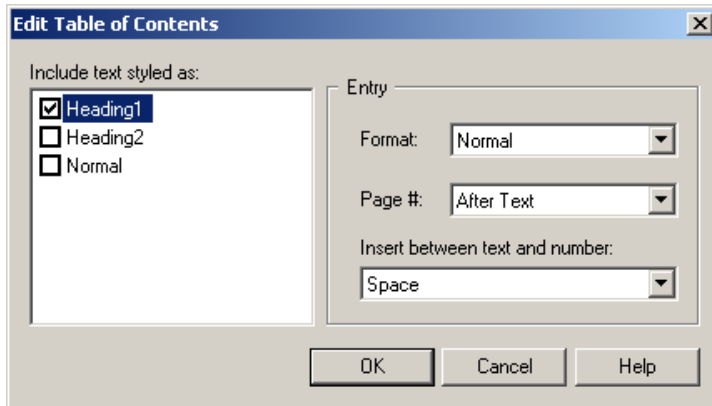
Once you have created a TOC, you can edit it using a dialog box, or you can choose a menu option to request an update of all TOCs. While editing a document, all TOCs are updated to show the most current view of entries in a doc. Studio automatically updates all TOCs during preview and job submission.

If you make format changes to text styled with TOC styles, those changes show up in the TOC entry as well.

### ► To edit a local Table of Contents

- 1 Position the cursor within the TOC you want to edit.
- 2 Choose **Text** ➡ **Edit Table of Contents**.

This displays the **Edit Table of Contents** dialog box.



- 3 Make any changes you want to the entries or text styles.
- 4 Click **OK** to update page numbers and add any new appropriately styled entries.

### ► To update all Tables of Contents

- Choose **Text** ➡ **Update All Tables of Contents**.

## Viewing TOCs in the Document Area

Studio highlights table of content entries and page numbers in light gray. You can turn this highlighting on or off using the **Variable Highlights** option on the **View** menu.

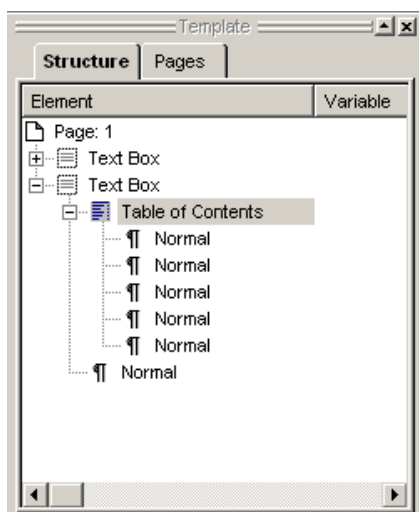
### ► To toggle highlighting Tables of Contents in the Document window

- Choose **View** ➡ **Variable Highlights**

Studio highlights your TOC entries and page numbers in light gray.

## Viewing TOCs in the Layout Tab

Studio labels the table of contents with an icon in the Layout tab.



## Overriding the Text Content of a TOC Entry

By default, the text of a table of contents entry will be the exact text to which the associated style applies. You cannot edit the text directly in the TOC. If you want to edit the text in the TOC, you can use the Info tab in the Property panel to supply alternate text to be used instead of the styled text in the TOC.

### ► To supply alternate text for a TOC entry

- 1 Highlight the original text for the TOC Entry.
- 2 From the **Properties** panel, choose the **Info** tab.
- 3 Enter your preferred text in the box to the right of the **TOC Override Text**.

**Note:** You have access to this option whether or not the style of your text selection is included in a TOC definition in your document. Studio will use the new text you supply if the style is included, and ignore the text if not. If you leave the Text Range field blank, the styled text remains in the document in your TOC.





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# Creating Projects

# 11

This chapter describes how to create, open, and save projects in Pageflex Studio. Projects tie together all the components of variable-data publishing.

This outlines the format of project files and explains how to add data sources and map variables. It also discusses the difference between database jobs that use content data sources and Web-based transactional jobs that use Web forms as a profile data source.

# Understanding Projects

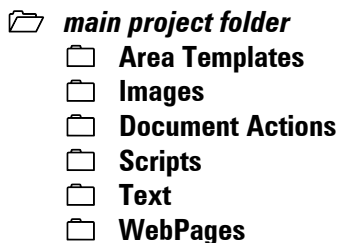
A Pageflex project is a set of variable data and job definitions stored within a project file (with a file extension of “.pf”). Studio places project files in project folders, which contain document template files (with file extensions of “.xdt” and “.tsl”) and subfolders for other resources needed by a project such as text, images, scripts, Web pages, and data base files. Use Pageflex projects to produce documents driven by input data and submitted to a driver to generate output.

The contents of project folders vary based on the design of the document to be produced, as well as how the data for document production is collected. Data for Web-to-print jobs can be entered by a user typing into Web page forms, while other jobs can be driven directly from database records. In addition, content used to populate a variable document can be stored directly in the project folder, or elsewhere in a asset management database.

## Project Folders

Project folders provide the “input,” the information that goes into each document in a job. Studio creates these project folders when you create a new project. You work with these folders while using Pageflex Studio to create the final job.

Every project has a main project folder with five or more folders inside it. The folders inside the main project folder are named for the type of content files they contain. Do not change the names of these folders.



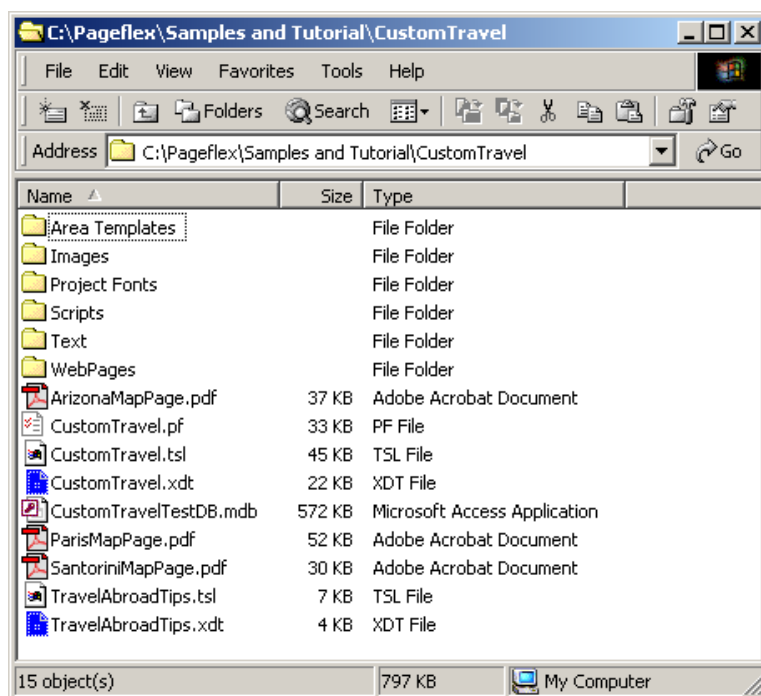
If the project was unpacked by Pageflex Packager, there may be a **Project Fonts** folder in the main project folder. The machine generating the output must have these fonts installed in order to properly output the job.

**Note:** If your projects share the same content, you can use the same folder for both projects.

When you create a new project, Studio creates an associated project folder in the file system, with subdirectories for other project contents, as shown in the list below. These subfolders provide a structure for users to add templates and other project content as they work to build a working variable data production.

- **Area Templates.** You should store any area templates you create for variable productions in this folder.
- **Images.** Any images that you use in your project should be stored in this folder.
- **Document Actions.** Store scripts that will be used for document actions here.
- **Project Fonts.** Fonts are stored in this folder when you use Pageflex Packager to consolidate projects.
- **Scripts.** Store any Visual Basic or JavaScript scripts in this folder.
- **Text.** Store formatted character and paragraph files in this folder, for use with variables.
- **WebPages.** Store Web pages in this folder.

The screenshot below displays the contents of a typical project folder.



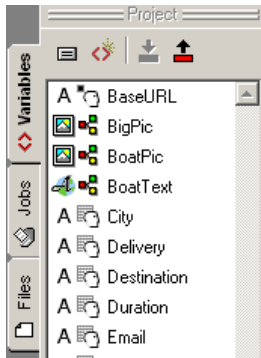
When you open a project in Studio, the Project panel displays its job and variable definitions as well as the supporting project folder template and content files in three tabbed views:

- Variables Tab
- Jobs Tab
- Files Tab

These tabs are described below.

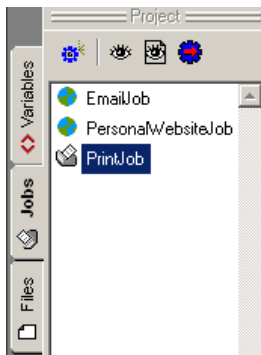
## Variables Tab

The Variables tab contains a list of the variables in your project, and a toolbar with buttons to add a data source, add variables, apply variables, and remove variables.



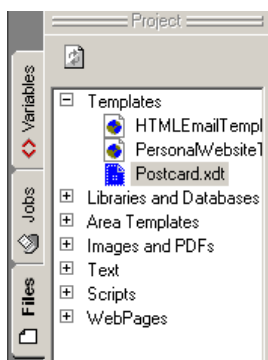
## Jobs Tab

The Jobs tab contains a list of the jobs in your project, and a toolbar with buttons to add a job, preview a job, preview a job with the current template, and submit a job.



## Files Tab

To help you access and edit files, the Files tab offers a filtered view of project folder contents.



A Pageflex project file is identified with the extension .pf. When you create a project, you identify the data source for your templates and variables.

A **profile data source**, typically a database, houses the records that build a suite of variables for use in Pageflex documents. Each record in the profile data source creates one final document.

A profile data source can be external to Pageflex. You can submit **transactional jobs** from a Web browser or another application, for example. In this case, the profile data source is the information submitted from the other application.

A **content data source** is the directory to use to generate content variables. Content variables are created programmatically by rules, Library queries, scripts, or Plug-ins. You can use profile variables to create content variables. Profile variables are required for all projects while content variables are optional. To manage a content data source, you can use one of the options below or a combination of them. Profile variables get their values from the profile data source, or from a constant value you specify.

- **Your file system.** Pageflex has a default hierarchy of folders for storing content data source files. Pageflex Studio creates these folders when it creates the project.
- **Pageflex Librarian.** You can catalog content source files using categories for the purpose of retrieving these files for your Pageflex project. With Pageflex Studio, you can create queries to the contents stored in Librarian.
- **An asset management database.** Through an optional content source plug-in, you can create queries to contents stored in an asset management database application.

## Storing Content in the File System

Using the file system as a content data source involves setting up folders to store static and variable contents. Pageflex projects have a default hierarchy of folders that Studio creates for every project, and it always searches the default folders first for contents.

Pageflex Studio automatically creates the default folders when you create a new project and displays the following views within the Files tab:

- **Templates**, for displaying template files (.xdt/.tsl)
- **Library**, for displaying file collections made with Pageflex Librarian (.pfl)
- **Area Templates**, for displaying and storing area template files (.xat)
- **Images**, for displaying and storing image files (.tif, .eps, .jpg, .pdf, and .gif)
- **Project Fonts**, for displaying and storing fonts if folders have been packaged and unpackaged using Pageflex Packager (.ttf, .pfm, .pfb, and .otf)
- **Scripts**, for displaying and storing scripts (.vbs and .js)
- **Text**, for displaying and storing plain text, formatted text, and formatted paragraph files (.txt, .xft, and .xft)
- **WebPages**, for displaying and storing Web interface pages (.htm, .html, .xml, .asp, and others)

As you gather the content for your project, store it in the appropriate folder to make it available to your Pageflex project.

## Working with Transactional Jobs

A transactional job is a job submitted from a Web page or another application. Typically, you set up a transactional job to create one record at a time. The person requesting the job through a Web page submits the variable information for the job. This information becomes the profile data source for the job.

A transactional job uses all the same project resources as a non-transactional one, with the one exception of the profile data source named in the project file. The information submitted with the job takes the place of the profile data source information.

You can preview a transactional job in Studio.

# Building New Projects

Follow the steps below to create a new project.

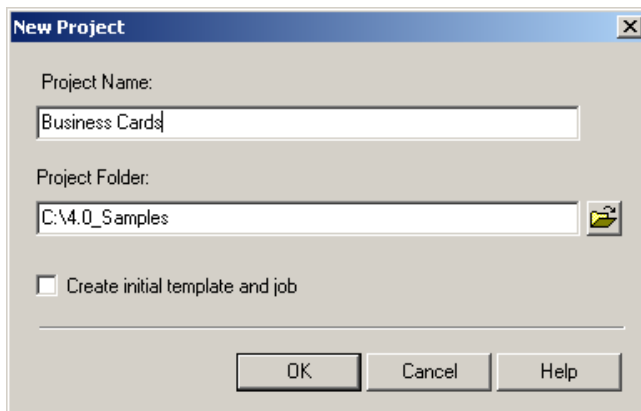
## ► To create a new project

- 1 Choose **File** ⇒ **New** ⇒ **Project**

-or-

Click the Project icon  in the toolbar.

This displays the **New Project** dialog box.




- 2 Under **Project Name**, enter the name of the project.
- 3 Under **Project Folder**, enter the location of the folder that you would like to use for project files, or use the folder icon to browse to a location.
- 4 Check the box to "Create initial template and job" if you want to automatically create a template and job associated with this project.
- 5 Click **OK** to create the project. If you have checked the box to create an initial template and job, you will see the Template Setup dialog. See "Building New Templates" on page 39 for instructions. The initial job will be associated with this template.

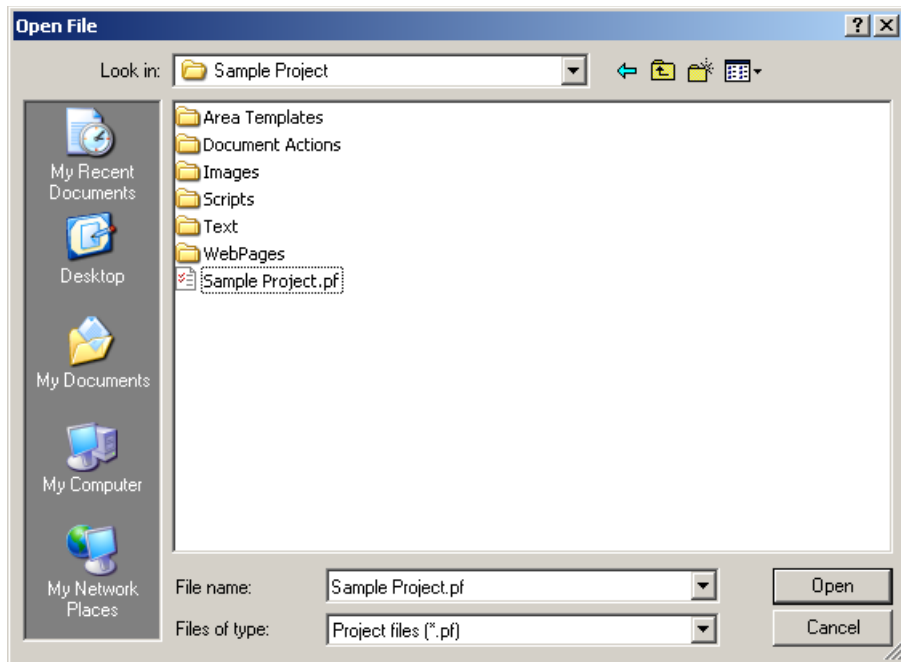


# Opening an Existing Project

Follow the steps below to open an existing project.

## ► To open an existing project

- 1 Choose **File** ➔ **Open** or click the open icon  in the toolbar. This displays the **Open File** dialog box.





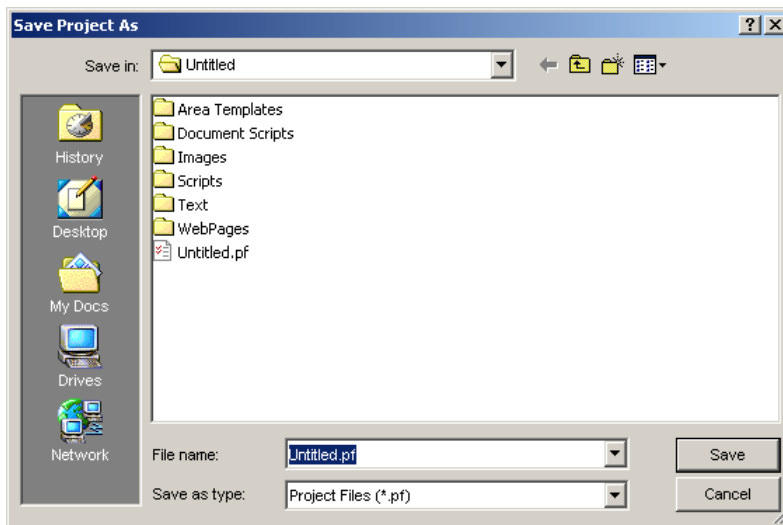
- 2 Locate the project and click **Open**. You can open only one project at a time. You cannot open a project if another user has it open.
- 3 Click **OK** to open the file in Studio

# Saving Projects

Follow the steps below to save a project.

## ► To save a project


- 1 Choose **File** ➡ **Save Project** or choose **File** ➡ **Save Project As** or choose **File** ➡ **Save All** or click the **Save Project**  icon in the toolbar or click the **Save All**  icon in the toolbar. This displays the **Save Project As** dialog box.



- 2 Enter a **File name** for the project.
- 3 Click **Save** to save the project.

## ► To save current project and all open templates

You can save the current project and all open templates with **Save All**.

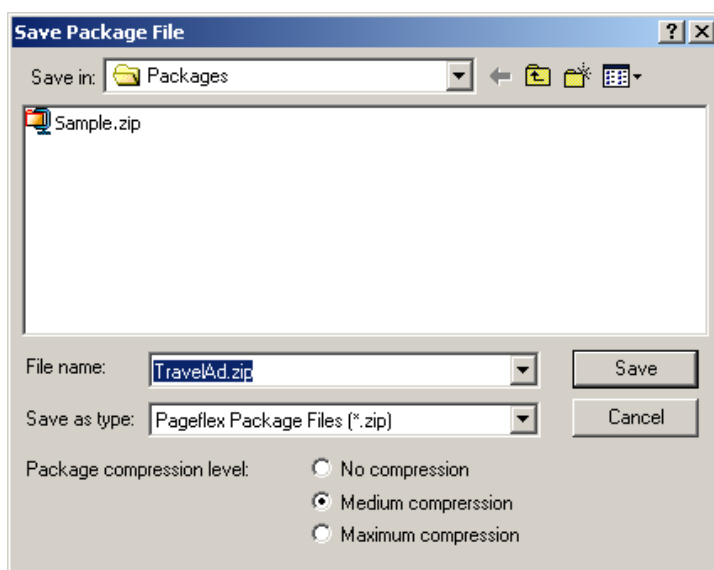
- 1 Choose **File** ➡ **Save All** or click the **Save All**  icon in the toolbar
- 2 Enter a **File name** and click **Save** for each new template. Your project and previously saved templates are saved with their current names.

# Packaging Projects

Since Pageflex projects contain images, fonts, and other elements that can exist in multiple locations on your network, you cannot copy or move projects using only the file system. Studio enables you to package projects for this purpose. Pageflex Packager consolidates project files into a package with .zip extension which it can then open on the target system. Create packages using the stand-alone Pageflex Packager application (see Chapter 17, “Packager,” on page 387 for details), or by following the steps below in Studio.

## ► To package a project

- 1 Choose **File** ➔ **Make Packager Zip**. This displays the **Save Package File** dialog box.



- 2 Enter a **File name** for the package.
- 3 Choose a compression level.
- 4 Click **Save** to save the package. Open the package by using the Pageflex Packager application, located in the Pageflex installation directory, and accessible from the Studio program menu from the Start menu.

## Connecting to a Profile Data Source

Studio connects to the profile data source using ODBC (Open Database Connectivity). You can use any ODBC-enabled database as a profile data source. You can connect to the profile data source in one of two ways:

- If you are using a Microsoft Access database (.mdb) or a comma-separated value (.csv) file, you can connect directly to the database file. Connecting directly saves you the trouble of setting up the data source through the ODBC Control Panel.
- If you are using an ODBC-enabled database, you must first set up a connection to it through the ODBC Control Panel. See “Setting up a Profile Data Source” on page 243.

**Note:** While you can use a Microsoft Excel (.xls) file, you should change the file to a Microsoft Access database file or export it as a CSV file and assign it to as the data source, as Microsoft Excel spreadsheets have a tendency to insert extra rows of blank records when used as data source files, which can produce erroneous output records.

## Working with Databases

Databases allow you to assign a data type for each field in the database. A data type identifies the kind of data the field contains and what operations you can perform on the data. For example, number fields can only contain numbers, and you can use them in numeric calculations. Text fields can contain almost any combination of letters, numbers, and symbols, but you cannot perform arithmetic calculations on them.

Database applications provide automatic formatting features to make the data appear a certain way. These automatic formatting features change only the appearance of the data, not the actual value of the data. For example, if your database has a field for storing a dollar amount for the cost of something, the data may appear as “\$1,200.00” in the database even though you typed “1200” to enter the data. The currency symbol and the comma are a part of data filter applied to the numeric data in the field to keep the data looking consistent.

When you work with a database in a project, make sure all the fields in the database use the **Text** data type, and that the data in each field appears exactly as you plan to use it in your project. Do not use any automatic formatting features of the database application because Studio cannot read such formatting. Your data appears in the Studio application without special formatting.

## Using a Microsoft Excel Spreadsheet as a Database

We do not recommend that you use Microsoft Excel as a data source, as Excel does not allow you to declare data types explicitly, which may cause corruption to your data. This is because spreadsheets support mixed data types in a column. For example, one cell can be text, another can be a date, another can be a number, and so on. Because of this, the ODBC driver makes a best guess at what the data in the column is, based on the format of all of the data in the column. Sometimes this guess can be incorrect, corrupting your data.

Databases avoid this problem by forcing you to declare your data type ahead of time. You can change all your cells to text in Excel to avoid this issue, but doing so only changes the new data, not any existing data in the cells. So unless you do this from the onset, in most cases you will have to retype any data that is already in the cells.

If you must use Excel, we recommend that you save your Excel file as a CSV and use the CSV as your data source.

## Using a Microsoft Access Database

To use a Microsoft Access database, follow these guidelines.

- Define all fields using the **Text** data type.
- If you import data from another application into a new table, you can choose the **Text** data type for each field during the import process.
- Do not use the **Input Mask** property or the **Format** property to format the appearance of data in a field.

## Setting up a Profile Data Source

If you are using an Access database, save the file in a location where Studio can work with it. The main project folder is a good location for this file.

If you are using an ODBC-enabled database, you must set up an ODBC connection to it. You can set up this connection at any time using the ODBC Control Panel.

**Note:** You must set up ODBC on each computer you use. If you set up your data sources for creating the project using Studio, you do not need to set them up again for if you are using the same computer. However, if you change computers, or if you transfer the project file to another computer, you must set up the identical ODBC connection for the new computer.

## ► To set up an ODBC data source with ODBC control panel

- 1 In Windows 2000, choose **Start** ➤ **Programs** ➤ **Control Panel** ➤ **Administrative Tools**
- 2 In the Administrative Tools window, double-click the **Data Sources (ODBC)** icon.
- 3 In the ODBC Data Source Administrator window, click the **System DSN** (Data Source Name) tab to display the current list of system DSNs.
- 4 Click **Add** to add a new DSN.
- 5 In the **Create New Data Source** dialog box, select the appropriate driver for the type of database you are using as a profile data source, and then click **Finish**.
- 6 Windows displays a window for setting up ODBC for the type of database you have selected.
  - Under **Data Source Name**, type the name for this data source. The Data Source Name must match the Data Source Name in the Studio project file.
  - Under **Description**, you can add a description of the data source to help you identify it. This information is optional.
  - The remaining options in this dialog box vary according to the driver you have selected. These options provide information for the ODBC driver to locate the database and read its contents.

Click **OK** twice to save the changes and close the dialog box and the ODBC Data Source Administrator.


## Adding a Data Source

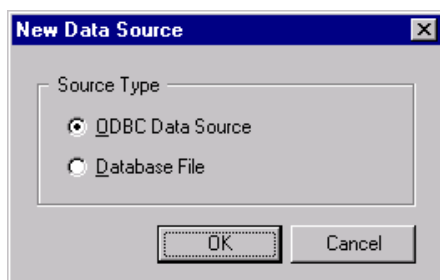
All projects require a data source. The data source provides the connection to the profile data source. A data source can be an ODBC-compliant database, Microsoft Access database file, Microsoft Excel workbook, or a CSV file. Additionally, you can create a transactional job that uses data from Web browser forms or other applications. However, in order to generate output for these jobs, you must use Pageflex Server or Pageflex Storefront.

**Note:** Although each project can have only one data source, you can use more than one table from the database.

Adding the data source also involves mapping the fields in the data source to become variables in the project. Studio can create variables automatically with the same names as the fields in the database, or you can manually create each variable with a unique name.

### ► To add a data source

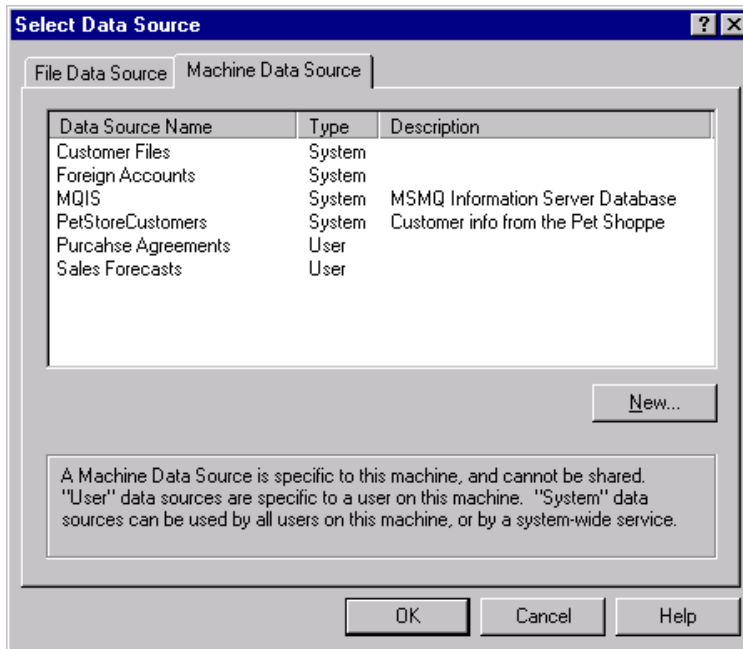
- 1 Choose **Variables** ➔ **Data Source** or click the **Add Data Source** icon  on the Variables tab of the Project panel.
- 2 Select the **Source Type**.



- **ODBC Data Source.** Choose this option if you are using an ODBC-compliant database.
- **Database File.** Choose this option if you are using a Microsoft Access or Excel, or CSV database file.

## Using an ODBC data source

- Select **ODBC Data Source**, and click **OK**. Studio displays the **Select Data Source** dialog box.



- Click the **Machine Data Source** tab to view the list of available data sources.
- Choose a data source in the list, and click **OK**.

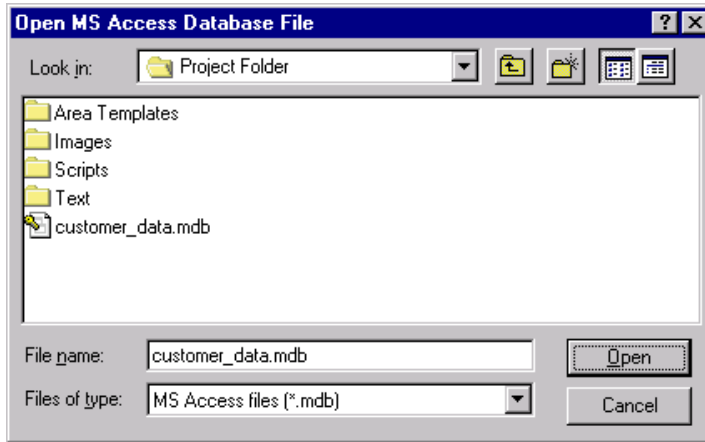
To create a new machine data source, click **New**. Studio launches the Data Source Wizard to help you set up a new ODCB connection. See “Using the Data Source Wizard” on page 252 for more information.



## Using a database file

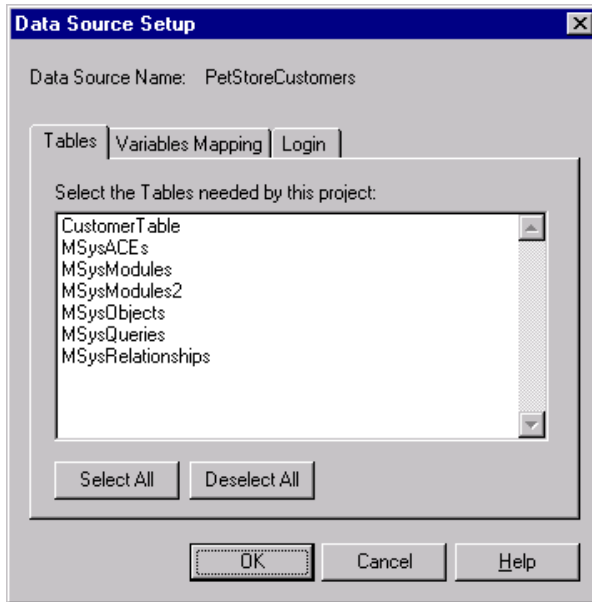
You can use Microsoft Access (.mdb), Microsoft Excel (.xls), or comma-separated text (CSV) files as data sources. Follow the steps below to open a database file.

- Select **Database File**, and click **OK**. Studio displays the **Open MS Access Database File** dialog box.



- Choose the file type from the file type list below the file name. Locate and select the database file, and click **Open**.

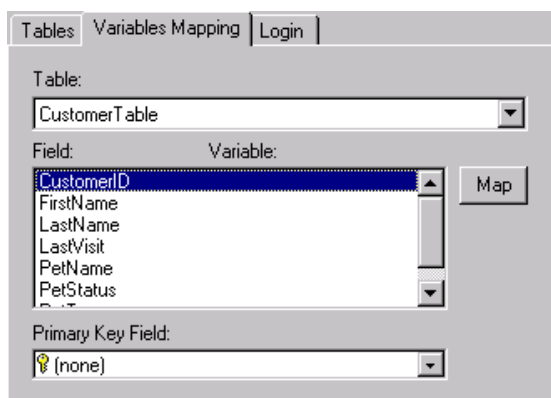
- 3 Studio adds the data source name to the Project panel and displays the **Data Source Setup** dialog box.



- 4 On the **Tables** tab, select at least one table to use.
  - Hold down the **CTRL** key to select more than one table, or hold down the **SHIFT** key to select consecutive tables.
  - Click **Select All** to select all the tables in the list.
  - Click **Deselect All** to select none of the tables.

**Note:** The list may include some tables created by the database application for its own purposes.

- 5 Click the **Variables Mapping** tab.



In the **Table** list, select a table. The list includes all the tables you selected on the **Tables** tab.

- 6 The **Field** list shows the available fields for the selected table. Select all the fields or only the fields you want to use. Hold down the **CTRL** key to select more than one field.

**Note:** You do not need to select all the fields at this time. You can define profile variables manually at any time.

- 7 Click **Map**. The new variable name appears next to the field name in the list. Studio creates a new plain text variable for each selected field using the same name as the field. You can use the Variables tab on the Project panel to change to any other kind of variable later.
- 8 *Optional:* In the **Primary Key** list, you can select a field to be the primary key. A primary key identifies a field in a database where each value is unique. Studio uses the primary key field to identify each record in a job. Having a primary key helps identify problem records when you produce the final job.
- 9 To add variables from more than one table, select the next table in the list and repeat the mapping procedure.
- 10 *Optional:* If the database you are using as a data source requires a login name, click the **Login** tab.

- 11** Type the **Login** and the **Password** in the boxes.

- 12** Click **OK** when you are finished mapping. Studio adds the new profile variables to the Project panel.

► **To edit the data source**

- 1** On the Project panel, click **Add Data Source** . Studio displays the Modify Data Source dialog box.

- 2** Choose to **Edit the current data source** to make changes to the current data source.

- On the **Tables** tab, you can add more tables.
- On the **Variables** tab, you can map additional variables.
- On the **Login** tab, you can type the **Login** and **Password**.


**3** Click **OK** when you are finished.

### ► **To change the data source**


Each project can have only one data source. Use caution when changing the data source for an established project. Variables that you have defined change to a data source of **None**. Studio does not delete the variables. It only removes their data source. Any jobs you have created no longer have a data source selected.

Mapping the variables in the new data source creates additional variables. If you want to use the existing variables, you can also edit their definitions to use fields in the new data source.

**Note:** Changing the **Source Type** between **ODBC Data Source** and **Database File** creates copies of the existing variables with “\_2” added to the name. The original variable is changed to a data source of **None**. You can edit the original variables if necessary.

- 1** On the Project panel, click **Add Data Source** . Studio displays the Modify Data Source dialog box.
- 2** Choose to **Replace the current data source** and follow the instructions for adding a new data source if you want to replace the data source. See “Adding a Data Source” on page 245.
- 3** Click **OK** when you are finished.

### ► **To remove the data source**


- 1** On the Project panel, click **Add Data Source** . Studio displays the Modify Data Source dialog box.
- 2** Choose to **Remove the current data source** to remove the data source entirely.
- 3** Click **OK** to confirm that you want to remove the data source.

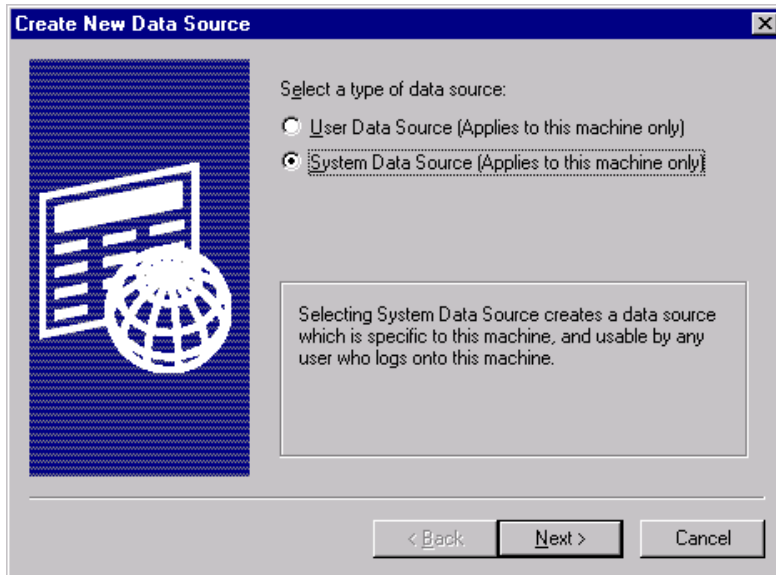
## Using the Data Source Wizard

If you need to create a new data source for your project, you can launch the Data Source Wizard while adding the data source. The Wizard provides step-by-step help with making the ODBC connection to the database you are using.

You can also set up this connection using the ODBC Data Sources control panel. The control panel allows you to add, remove, and reconfigure your ODBC data sources. See “Connecting to a Profile Data Source” on page 242 for more information.

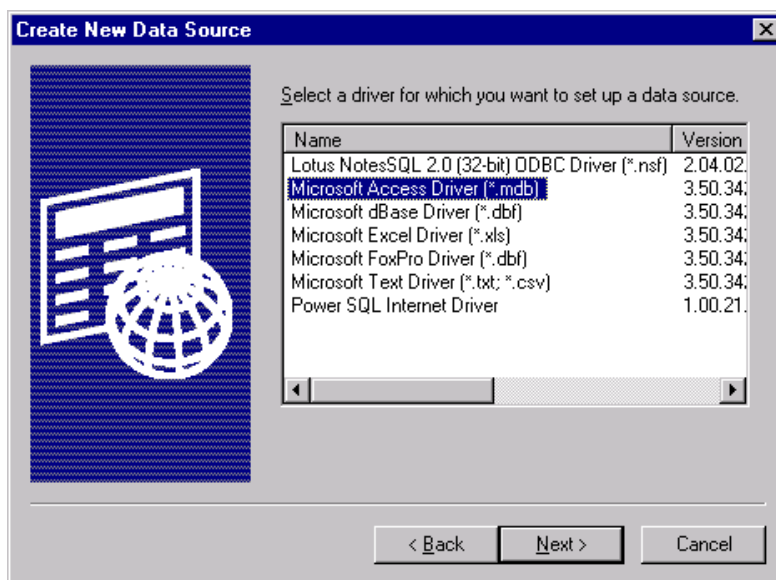
### ► To create a new data source with the Data Source Wizard

- 1 On the Project panel, click **Add Data Source** .
- 2 Under **Source Type**, choose **ODBC Data Source**.
- 3 On the **Select Data Source** dialog box, click the **Machine Data Source** tab.
- 4 Click **New**.
- 5 Studio launches the Data Source Wizard to assist you. The Wizard creates Machine Data Sources. Machine Data Sources are only available to the machine you are using, and they cannot be shared across a network.



Select the type of data source, and click **Next**.

- **User Data Source.** A User Data Source is available only to the user who was logged on when it was created.
  - **System Data Source.** System Data Sources are available to all users who log on to this machine.
- 6 Select the appropriate driver for the data source. For example, if you are using a Microsoft Access database, select **Microsoft Access Driver (.mdb)**.



Click **Next** to continue.

- 7 The Wizard displays the driver you selected. Click **Finish** to close the Wizard and open the driver setup dialog box for the driver you selected.
- 8 In the driver setup dialog box, enter the following information.
- Under **Data Source Name**, type the name for this data source. The Data Source Name must match the Data Source Name used to create the project with Pageflex Studio.
  - Under **Description**, you can add a description of the data source to help you identify it. This information is optional.
  - The remaining options in this dialog box vary according to the driver you have selected. These options provide information for the ODBC driver to locate the database and read its contents.

- 9 Click **OK** to close the driver setup dialog box and to return to the list of data sources.
- 10 Select the new data source in the list, and click **OK**.



---

# Variables

# 12

This chapter explains Studio variable types and sources. It also discusses how to apply content and profile data source variables to template elements. Topics include defining variables with rules, scripts, and library queries and using JScript or VBScript to combine variables or evaluate them mathematically.

# Understanding Variable Types

Pageflex Studio uses many different kinds of variables. Each variable holds a specific kind of variable content. When you create a template with Pageflex Studio, it is important to use the correct container type for each variable.

## Plain Text Variables

**Description:** Plain text is text without formatting attributes or additional tagging information. Plain text is also called *ASCII* or *Text Only*. Plain text cannot contain any references to variables or any special formatting characters.

**Template Container:** Plain text variables appear inside text containers. They inherit their formatting from the paragraph and character attributes that surround the variable.

For example, if you insert a plain text variable inside a paragraph with the style **Heading** applied to it, Studio formats the variable using the **Heading** style because the plain text variable has no formatting of its own.

## Formatted Text Variables

**Description:** Formatted text is a section of text that belongs within a paragraph but does not form a paragraph by itself. Formatted text contains character formatting attributes but does not contain any paragraph-level attributes. Formatted text can include other variables.

For example, the text may contain bolded words or italicized phrases. The text can be as short as a single character or as long as many sentences, provided it does not contain a paragraph break.

**Template Container:** If you use formatted text variables, you must place them inside text containers. They maintain the character-level formatting as specified when they were created. They inherit all other formatting attributes from the paragraph and character styles that surround them. For example, the formatted text variable inherits the leading and paragraph spacing attributes from the paragraph that contains it.

## Formatted Paragraph Variables

**Description:** Formatted paragraphs contain at least one whole paragraph. They contain paragraph-level formatting information, including paragraph styles and paragraph spacing. They might also contain additional character formatting. Formatted paragraphs can include other variables.

**Template Container:** Text containers hold formatted paragraphs. They maintain the character-level and paragraph-level formatting specified when they were created. If the paragraphs have paragraph styles applied, only the name of the paragraph style is exported, not the definition of the style. Paragraph style definitions are stored with the template file. In other words, a formatted paragraph maintains the name of a paragraph style used to create it, but not the style attributes. If the template does not define the paragraph style named in the formatted paragraph, the paragraph inherits the default “Normal” style.

## Image Variables

**Description:** Images are the pictures and graphics that enhance the template design. Pageflex Studio supports the following image formats: TIFF, EPS, JPEG, PDF, and GIF.

**Template Container:** If you use image variables, you must apply them to image containers.

## Area Template Variables

**Description:** An area template is a section of a template that can contain any number of elements. Using area templates as variables allows entire sections of your template to vary for each record.

**Template Container:** Area templates are always contained within an Area Template container. Area Template containers can be rectangles, ovals, or polygons.

## Document Variables

**Description:** Documents are Studio document template (.xdt) files or Adobe Acrobat (.pdf) files.

**Template Container:** Document variables are child documents that are inserted into the pages of a parent document template.

## Formatted HTML Variables

Use formatted HTML variables to tag HTML pages for HTML output. See “Creating Variables for HTML Elements” on page 354 for a description and details about this variable type.

## Formatted HTML Paragraph Variables

Use formatted HTML paragraph variables to tag HTML pages for HTML output. See “Creating Variables for HTML Elements” on page 354 for a description and details about this variable type.

## Campaign URL Variables

Use campaign URL variables to tag campaign-related output. See the *Pageflex Campaign Manager Guide* for a description and details about this variable type.

## Campaign HTML Form Variables

Use campaign HTML form variables to add automatically-generated form fields to your campaign-related output. See the *Pageflex Campaign Manager Guide* for a description and details about this variable type.

---

# Understanding Variable Sources

Variables are divided into two classes: **profile variables** and **content variables**. Profile variables get their values from the profile data source, or from a constant value you specify. Profile variables are required for all projects, while content variables are optional. You can use profile variables to create content variables. Content variables allow you to add more personalization to your documents. You cannot use a content variable to create or otherwise change a profile variable or any other variable.

You can also change the source or type of a variable as needed. For example, you can change a profile variable from using plain text to an image variable where the text is the name of an image file.

## Profile Variables

The first **profile variables** are created when you add the Data Source and map the fields in it to new project variables.

Profile variables have two sources:

- **Profile Data Source Table.** The tables you specify when you add the Data Source are the profile data source tables. The variable gets its value based on a field in the database table.
- **Constant.** A constant is a variable that does not change its value.

## Content Variables

You can create **content variables** to add other kinds of variables in addition to the variables from the profile data source. Content variables can be text, images, or formatted content you add to enhance the customization of your variable project. You use profile variables to define the content variables. You cannot use content variables to define other content variables.

For example, to add an image based on a profile variable, you can create a content variable that examines the values in a profile variable and selects the images to use. The content variable can calculate a result from a script, or it can use a rule to decide which image to use.

Content variables can have the following sources:




- **Rule.** A rule is a set of conditions and results.
- **Script.** Studio can evaluate both JScript and VBScript to define a variable.
- **Library Query.** If you use Pageflex Librarian to categorize the content data source files, you can write a library query to select the content files to use based on those categories.
- **Content Source Plug-Ins.** You may have additional content source plug-ins for Studio. Plug-ins allow you to connect to media asset management systems and other types of databases.

## Source Files for Content Variables

A content variable definition can be a rule, a script, a library query, or a content source plug-in. The source files must be stored in specific locations in order for Studio to use them. The location of the source files depends on the source type of the variable.

- If you define a variable with a rule, a script, or a library query, you must store the source files for the variable inside the matching folders within the main project folder. The Text folder contains plain text, formatted text, and formatted paragraphs together. The names of the other folders indicate the kind of content they store.

### **Main Project Folder**


-  **Area Templates**
-  **Document Actions**
-  **Images**
-  **Project Fonts**
-  **Scripts**
-  **Text**

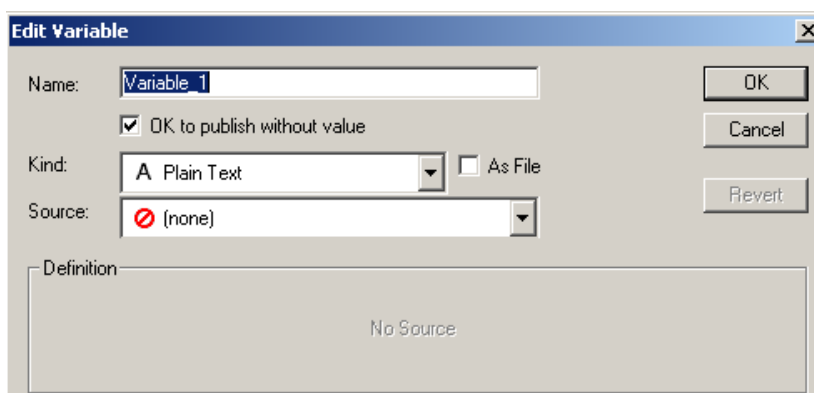
- If the variable definition relies on a content source plug-in, please consult the documentation for the plug-in for more information. A content source plug-in can have its own requirements for the source files.

# Adding or Editing Variables

You can add or edit a variable at any time. You can edit any of the information for a variable, including its name, kind, or even its source. For example, you can change the variable source from a rule to a script. You can even change a profile variable to a content variable. However, when you change the source of a variable, you must also change its definition.

## ► To add a variable

- 1 Choose **Variables** ➔ **Add Variable** or on the Variables toolbar, click the **Add Variable** icon . Studio displays the **Edit Variable** dialog box.



- 2 Enter the following information.

Box Name	Description
<b>Name</b>	Type a name for the variable. Names must begin with a letter. After the first letter, you can use letters, numbers, and the underscore character (_). Do not use spaces.
<b>OK to publish without value</b>	If you select this option, the driver generates output even if this variable is empty. If you clear the check box, and the variable is empty in a record in the job, the driver generates an error when you run or preview the job.

Box Name	Description
Kind	Choose the kind of variable. See “Understanding Variable Types” on page 256.
As File	Click the check box if the result of the script produces a file name for Studio to ingest. For image variables, this option is always selected. Clear the check box if the result is literal text you want to appear in the document.

- 3 In the **Source** box, choose a source for the variable. See “Understanding Variable Sources” on page 259 for more information, or the specific sections mentioned below.

- **Profile Data Source Table.** See “Defining Profile Data Source Variables” on page 266.
- **Constant.** See “Defining Constant Variables” on page 267.
- **Rule.** See “With a Rule” on page 268.
- **Script.** See “With a Script” on page 271.
- **Library Query.** See “Using a Library Query” on page 275.
- **Content Source Plug-in.** See “With a Content Source Plug-In” on page 276.

- 4 Based on the Source you selected, enter the definition of the variable under **Definition**.

## ► To duplicate a variable

- 1 In the **Project** panel, click the **Variables** tab. Studio displays a list of the variables in the project.
- 2 Click a variable to select it and choose **Variables** ⇌ **Duplicate Project Variable**.
- 3 Edit the information for the variable.

**Note:** If you change the **Source**, you must also change the definition of the variable.

- 4 Click **OK** to duplicate the variable.




### ► To edit a variable

- 1 In the **Project panel**, click the **Variables** tab. Studio displays a list of the variables in the project.
- 2 Double-click a variable to open the **Edit Variable** dialog box or click a variable to select it and choose **Variables ⇌ Variable Setup**.
- 3 Edit the information for the variable.  
**Note:** If you change the **Source**, you must also change the variable's definition.
- 4 Click **Apply** to save your changes.

## Adding a Variable to a Template

Once you open a project, you can add the variables from the project to the template. As you add each variable, Pageflex Studio updates the Layout tab to show the variable name in the Variable column.

You can add variables from the Variables list by:




- Dragging and dropping variables onto elements
- By using the **Apply Variable**  icon on the variables tool bar.

To delete a variable, right-click on the variable in the variables list and choose **Delete Project Variable**.

### ► To add a variable using drag and drop



- 1 Choose **View ⇌ Project ⇌ Variables**. Studio displays the list of variables for the open project.
- 2 Drag a variable from the list. As you drag the variable, the cursor changes to a plus sign (+) whenever you are over an acceptable location to add the variable.
  - To add a variable to an existing container, drag the variable into the container.
  - To add a variable into a new container, drag the variable to an empty area on a page. Studio adds the appropriate container for the variable type.



## ► To apply variables using the Variables list

- 1 Select a location for the variable.
  - To apply text variables, use the Text tool . Click inside a text box or text oval to position the text cursor.
  - To apply image or area template variables, use the Selection tool . Click an image container or an area template box.
- 2 Click a variable in the variables list
- 3 Click the **Apply Variable** icon on the variables tool bar  or choose **Variables** ➡ **Apply Variable**.

**Note:** If the **Apply** button is unavailable, the type of variable you are trying to apply is incompatible with the selected container element. For example, you cannot apply a text variable to an image container.

## ► To remove a single or multiple selected variables

- 1 In the container, select the variable or variables you want to remove.
  - For text variables, use the Text tool .
  - For image and area template variables, use the Selection tool .

You cannot combine the two types of variables in one selection.
- 2 In the Variables list, click the **Remove Variable** icon . Studio removes the selected variable or variables. For text variables, Studio leaves the text for the variable names as plain text inside text containers that used to contain variables. Use the Text tool  to delete the text.

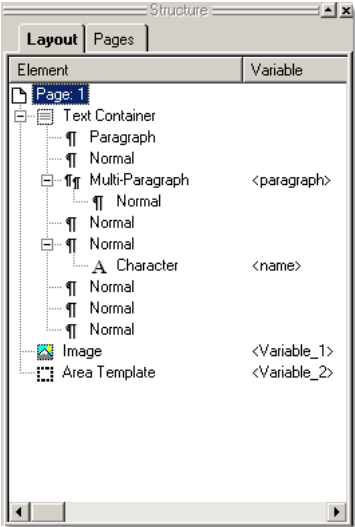
## ► To remove all variables

- 1 Choose **Variables** ➡ **Remove All Variables**.
- 2 This action is irreversible. You see a dialog box asking you to confirm that you want to remove all variables from the template.
- 3 Click OK to have Studio remove all text, image, and area template variables from the template.

The names for text variables remain as editable text in this case as well.


# Variables displayed on Layout tab

When you apply a variable to the template, the variable is displayed on the Layout tab next to the element.



As shown above, when a formatted paragraph variable is applied to a paragraph, the paragraph displays as a **Multi-Paragraph** element in the **Element** column on the **Layout** tab, with the name of the variable in the **Variable** column. When a plain text or formatted text variable is applied to text, it displays as a **Character** element. **Image** and **Area Template** variables are displayed in the Element column with the names of any applied variables in the **Variable** column.

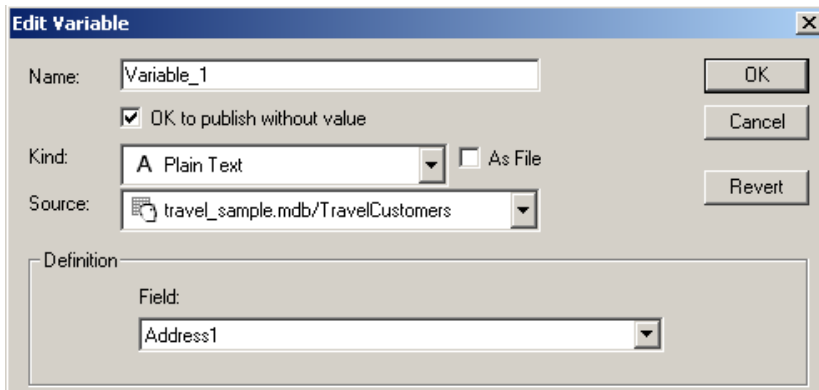
## Defining Profile Data Source Variables

 A profile data source variable is a variable that gets its value from a field in the profile data source. You can create a profile variable manually if you do not want to create it when you add the data source. You can also do this if you change the data source and need to re-map existing variables to the new data source.

### ► To add a profile data source variable manually

- 1 Add a new variable, or open an existing one to edit its definition. See “Adding or Editing Variables” on page 261.

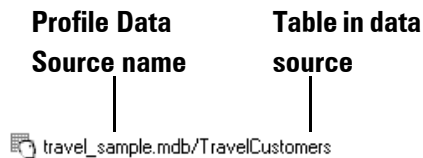
Studio displays the **Edit Variable** dialog box.



The **Edit Variable** dialog box is shown. It has the following fields and controls:

- Name:** Variable\_1
- Kind:** A Plain Text (dropdown menu)
- Source:** travel\_sample.mdb/TravelCustomers (dropdown menu)
- Definition:** Field: Address1 (dropdown menu)
- Buttons:** OK, Cancel, Revert
- Checkboxes:** ☒ OK to publish without value, ☐ As File

- 2 In the **Source** box, choose the table in the profile data source that you want to use. The table name follows the data source name.



- 3 Under **Definition**, select the field in the data source to use as a source for the variable. The list shows all available fields in the table you selected in the **Source** box.
- 4 Click **OK** to save the variable.

## Defining Constant Variables

■ A constant variable is a profile variable with a constant value. It does not change from record to record. Although the name sounds like an impossible contradiction, constant variables have many uses. For example:

- You can define a constant variable for a term or name that may change while you are developing the project. For example, you may be using a prototype name for your product while the final name is being determined. If you use a constant variable for the name, when you change the value of the variable, the name changes automatically throughout the project.
- If you are submitting transactional jobs from a Web browser or another application, you can use constant variables as place holders for pieces of information that the other application submits.

Since a constant variable is a type of profile variable, you can use it to define content variables.

### ► To create a constant variable

- 1 Add a new variable, or open an existing one to edit its definition. See “Adding or Editing Variables” on page 261.

Studio displays the **Edit Variable** dialog box.


The screenshot shows the 'Edit Variable' dialog box. The 'Name' field contains 'NewProductName'. The 'Kind' dropdown is set to 'A Plain Text', and the 'As File' checkbox is unchecked. The 'Source' dropdown is set to 'Constant'. The 'Definition' section has a 'Value' field containing 'Super-Whiz-o-Matic'. The 'OK to publish without value' checkbox is checked. The 'OK', 'Cancel', and 'Revert' buttons are on the right side of the dialog.

- 2 In the **Source** box, choose **Constant**.
- 3 Under **Definition**, type the constant in the **Value** box.
- 4 Click **OK** to save the variable.

# Defining Content Variables

A content variable definition can be a rule, a script, a library query, or a content source plug-in.

## With a Rule

 A rule defines the conditions Pageflex Studio uses to select each instance of a content variable. A rule is made up of **conditions** and **results**, also called “if... then” statements. **If** a condition is true, **then** Studio uses the matching result. The condition (the “if” part) checks if a value in a profile variable is related to the value of another profile variable or to a value you specify. The result (the “then” part) provides the value of the variable for Studio to use if the condition is true.

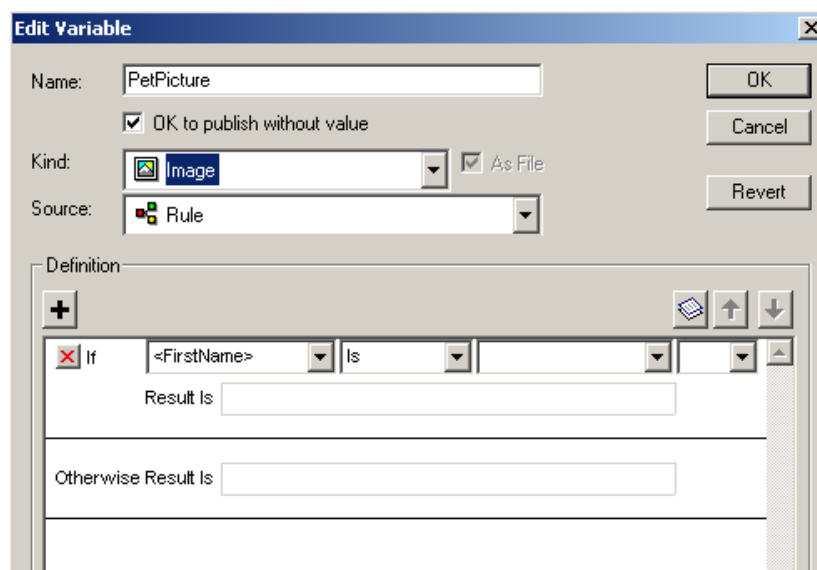
A rule can have one condition and one result, or it can have several conditions and several results. A condition can have multiple lines linked together with “and” or “or.” The rule ends with a default result, the result to use if none of the conditions are true.

When you define a rule, you need to consider the complete range of conditions that are possible, and then provide a result for each condition. For example, if you are building a rule around a particular field in a database, then you need to consider all the possible values for that field. You should always provide a final result to use if none of the conditions are true, even if the final result is empty.

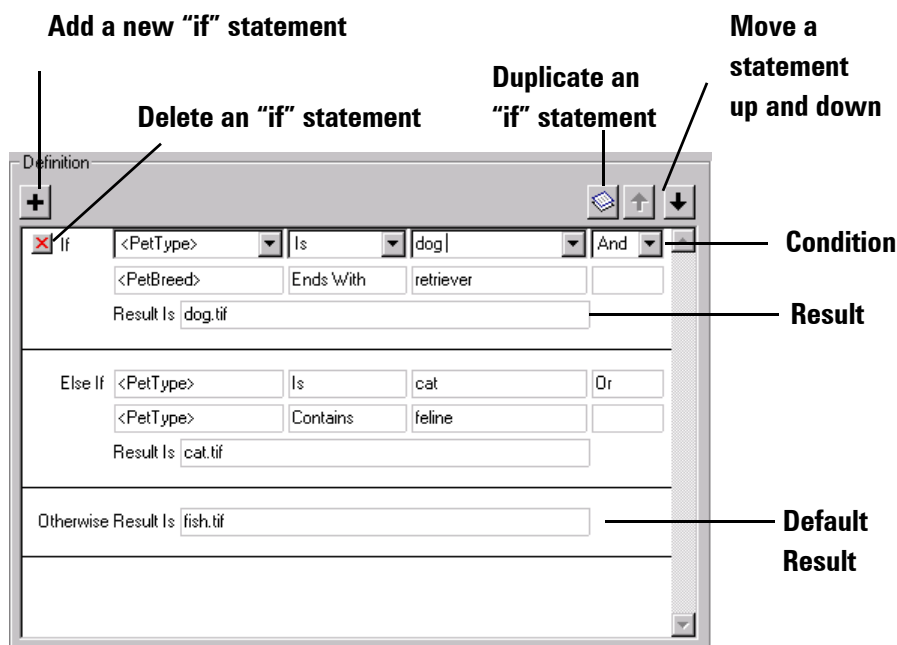
### ► To define a content variable with a rule

- 1 Add a new variable, or open an existing one to edit its definition. See “Adding or Editing Variables” on page 261.

Studio displays the **Edit Variable** dialog box.



- 2 In the **Source** box, choose **Rule**.
- 3 Under **Definition**, build the conditions and results statements that make up the rule.



**Note:** The buttons to delete, duplicate, and move the “if” statements are active only if you select the first line of the condition.

To create the condition, choose or enter values in the four boxes as shown below:

☐ If
 <PetType>
Is
dog

**Profile variable**
**Qualifier**
**Another profile variable or literal text**
**And/Or link**

- Choose a profile variable.
  - Choose a *qualifier*: **Is**, **Is Not**, **Contains**, **Starts With**, or **Ends With**.
  - Choose another profile variable, or type a value in the box. This box can be blank for an empty value.
  - To add another line to the condition, choose **And** or **Or**.
- 4** In the **Result Is** box, choose a result from the list, or type a value for the result.
- If you selected the **As File** check box, the box displays the variable source files available for the variable **Kind** you selected. These content files are stored in the Text, Images, or Area Templates folders for the project.
  - If you did not select the **As File** check box, type the result as text.

For example, if you have the following rule definition:




☐ If
 <pettype>
Is
dog

Result Is

If the **As File** check box is selected, Studio inserts the contents of the text file `dog_text_file.txt` into the text container.


If the check box is not selected, Studio inserts the literal text “`dog_text_file.txt`” instead.



- 5 Continue to build the variables definition.
  - To add more “If” statements, click the **Add a New “If” Statement** button .
  - To duplicate a statement, click the duplicate button .
  - To delete a statement, click the red delete button  next to the word “If” or “Else If.”
  - To delete a line in the condition, click the black delete button for that line.
- 6 Finish the rule by choosing or typing a default result in the **Otherwise Result Is** box. This is the result if none of the conditions are true. You can leave this blank, but remember that if none of the conditions are true, the result is empty.
 

**Note:** The driver displays an error when you run the job unless you also select the **OK to publish without value** check box.
- 7 Click **OK** to save the variable.

## With a Script

 Scripts extend the range of possibilities for content variables. With scripts, you can perform operations and calculations on the profile variables to create new content variables. Scripts also let you mathematically evaluate profile variables, something you cannot do using rules. For example, you can define a variable based on whether the value of a profile variable is “greater than” or “less than” another value.

Scripts can refer only to profile variables, not other content variables. You cannot use a script to change the value of another variable. The result of a script affects only the variable it is defined for.

Studio supports two scripting languages:

- JScript®— an object-oriented scripting language developed by Microsoft, mostly compatible with JavaScript and EcmaScript.
- VBScript®— a subset of the Microsoft® Visual Basic® programming language

You can decide which language you want to use. This guide provides a brief explanation of some basic scripts. It does not explore the full range of capabilities for using scripts. For a complete explanation of both JScript and VBScript, visit the Microsoft Web site at: <http://msdn.microsoft.com/scripting/>

## Using Scripts with Pageflex Studio

Pageflex Studio has three requirements for all scripts.

- You can use only one function per variable.
- You can use Profile variables by reading their values through a special function created for this purpose. To use a profile variable called `profile_variable`, for example, use the following syntax:

```
PFGetValue("profile_variable")
```

The function `PFGetValue` is a global function name accessible to scripts executed by Pageflex applications.

- The final returned value from a script must be a text string. If your script returns a number, make sure it converts the number to a string for Studio.

### ► To define a variable with a script

- 1 Add a new variable, or open an existing one to edit its definition.

Studio displays the **Edit Variable** dialog box.

**Edit Variable**

Name:

☒ OK to publish without value

Kind:  ☐ As File

Source:

OK Cancel Revert

**Definition**

Script Language:

Script File:

Function Name:

Parameters List
1. AskingPrice


Remove ↑ ↓

Variable:

Literal:

- 2** In the **Source** box, choose **Script**.
- 3** In the **Definition** section, choose a script language in the **Script Language** box. Choose either JScript or VBScript, to match the script language you are using.
- 4** In the **Script File** list, select a script file from the list of files saved in the Scripts folder. You can use the Script editor to create a new script or to edit the current one.

To use the Script editor:

- Select **New**, or click the button beside the **Script File** box .
- Write a script in the text area.  
For help writing JScript, see “Using JScript” on page 279. For help writing VBScript, see “Using VBScript” on page 281.
- Use spaces to indent lines of code.
- Click **Save** to save the script. If you did not name the script file already, Studio prompts you to enter a file name. Use the extension `.js` for JScript, and `.vbs` for VBScript.  
Studio saves all scripts in the Scripts folder inside the main project folder.

- 5 Type the name you gave the function in the **Function Name** box.
- 6 Under **Parameters List**, add the parameters for this function. Studio passes these parameters on to the function. For example, `Price(AskingPrice,10000)` in the example above.

Add fields from your data source by choosing them in the **Variables** field and clicking **Add Variable**, or add a literal value by entering it into the **Literal** field and clicking **Add Literal**. Use the up and down arrows to resort the parameters list. Or click to highlight a parameter in the list and click **Remove** to remove it from the list.

- 7 Click **OK** to save the variable.

## System Variables


Two system variables are available to scripts executed from Studio.

- `_sys_ProjectPathName`  
Reports the project's file full path, such as “C:\Pageflex\Projects\Flyer.pf”
- `_sys_JobName`  
Reports the name of the job, such as “PostScript Job 1”

## Sample VBScript:

```
Function MyProjectPathName()  
    MyProjectPathName = PFGetValue("_sys_ProjectPathName")  
End Function
```

## Using a Library Query

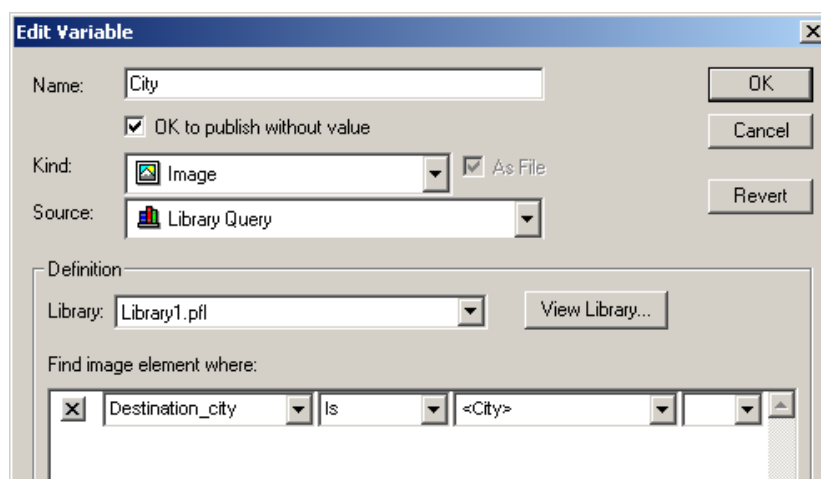
 If you have created a library using Pageflex Librarian, you can define a content variable using a library query. A library query finds content files based on the associated categories. You create categories and assign values to each category for content files when you create the library.

**Note:** Before you can create a library query, you must create a library inside the project folder and define its categories with Pageflex Librarian.

### ► To define a variable using a library query

- 1 Add a new variable, or open an existing one to edit its definition.

Studio displays the **Edit Variable** dialog box.

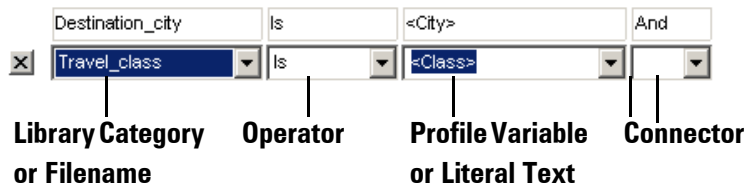


- 2 In the **Source** box, choose **Library Query**.
- 3 In the **Library** box, choose the library to use. You can click **View Library** to start Pageflex Librarian and view the library contents.

**Note:** If you have not created a library, the **Library** box is unavailable. You must create the library inside the main project folder with Pageflex Librarian before you can create a library query.

- 4 In the large box below the **Library** box, begin building the query.

A library query can have one or more statements joined together with “And” or “Or.” Each statement has four parts, as shown below:



- **Library Category.** Library categories contain the words used to classify each library item. You can also use the filename of the content file.
- **Operator.** The operator is the “verb” for the statement. It defines the relationship between the library category and the profile variable or literal text that follows.
- **Profile Variable or Literal Text.** In this box, you can select a profile variable to use, or you can type literal text to use to create a relationship to the library category.
- **Connector.** You can connect multiple statements using the expressions “And” or “Or.”

5 When you are finished building the query, click **OK** to save it.

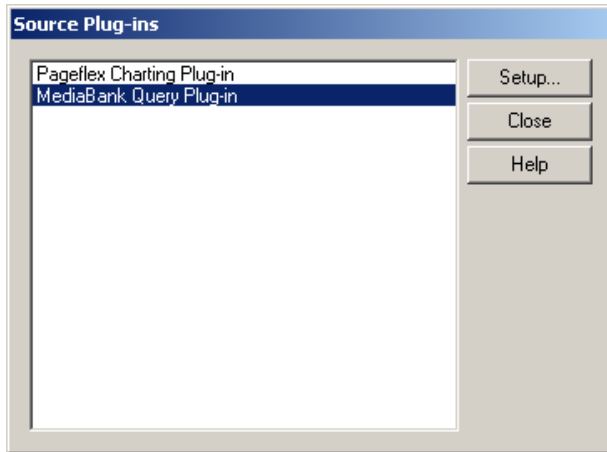
**Note:** See Chapter 16, “Librarian,” on page 375 for details about using Librarian.

## With a Content Source Plug-In

With Pageflex Studio you can create additional content variables through content source plug-ins. Each plug-in is designed for a specific purpose such as connecting to a type of database or performing a calculation. Some plug-ins require you to set them up before you can use them to deliver variable content.

► **To set up a content source plug-in**

- 1 Choose **Variables** ⇨ **Content Source Plugins**. This displays the Source Plug-ins dialog box:



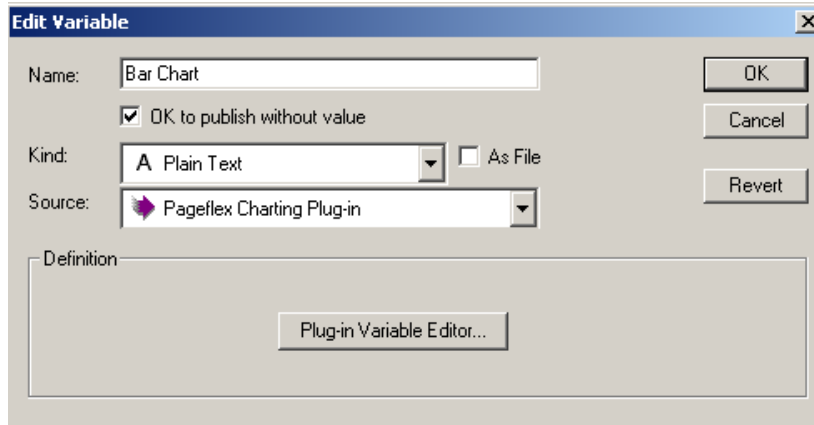
- 2 The dialog box lists all the available plug-ins that have been installed. Choose a plug-in from the list, and click **Setup**.
- 3 If the plug-in requires setting up, Studio displays a setup box. Follow the manufacturer's instructions for setting up the plug-in.

Consult the documentation supplied with the plug-in for more specific information about plug-in features.

► **To define a variable using a content source plug-in**

- 1 Add a new variable, or open an existing one to edit its definition.

Studio displays the **Edit Variable** dialog box.



- 2 In the **Source** box, choose the content source plug-in.
- 3 Under **Definition**, click the name of the Plug-In Variable editor to open the Content Source Plug-In editor.
- 4 Enter the required information for the plug-in.
- 5 Click **OK** to save the variable.



# Using JScript

Use the Script editor in Pageflex Studio or another text editor to write a script. JScript uses the following basic conventions.

- Each line begins a new statement. Extra blank lines and spaces are ignored, so feel free to use them to make your code more readable.
- End each statement with a semi-colon (;).
- All names are case sensitive. A variable called `FirstName` is not the same as a variable called `firstName`.
- Use two forward slashes (//) for single line comments.
- Save the file with the extension `.js`. Save all scripts in the Scripts folder inside the main project folder. If you use the Script editor, Studio saves the script to the Scripts folder for you.

## ► To combine two variables using JScript

The following example script shows how a script can combine two profile variables into a single variable. This is also called “concatenating.”

The example uses the following variable names. For your script, substitute the variable names that match the variables in your project.

- **Profile Variables:** `first_name` and `last_name`
- **Content Variable Name:** `full_name`

In the Studio Script editor window, write a script using this script as a guide.

```
function full_name() // combine the first and last names
{
    var result = PFGetValue("first_name") + " " +
        PFGetValue("last_name");
    return result;
}
```

For example, if the first name is “John” and the last name is “Smith”, the script returns the value “John Smith”.

## ► To mathematically evaluate variables using JScript

In this example, the script evaluates a numerical field from the profile data source to determine which text string to return. It uses an “if-then-else” statement to determine which string to return based on how large the customer’s total purchases were.

The example uses the following variable names. For your script, substitute variable names that match the variables in your project.

- **Profile Variable:** total\_purchases
- **Content Variable Name:** qualification

In the Script editor window, write a script using the following text as a guide.

```
function qualification () //evaluates how much customer spends
{
    if (PFGetValue("total_purchases") >= 2000)
        result = "Dear Platinum customer.";
    else if (PFGetValue("total_purchases") >= 1000)
        result = "Dear Golden customer.";
    else
        result = "Dear valued customer.";
    return result;
}
```

For example, if the customer spends \$2,200, the script returns the text, “Dear Platinum customer.”

# Using VBScript

You can use the Script editor window in Studio or Microsoft Visual Basic® to write a script in VBScript. VBScript uses the following basic conventions.

- Separate lines using the Return key. VBScript ignores extra lines and spaces, so feel free to use them to make your code more readable.
- Always use a Function instead of a Sub since only a Function can return a value.
- Use the single apostrophe ( ' ) to mark comments.
- Save the file with the extension .vbs. Save all scripts in the Scripts folder inside the main project folder. If you use the Script editor, Studio saves the script to this folder for you.
- Do not nest double quotes (") in double quotes or single quotes (') in single quotes. Use a combination of double quotes and single quotes for nesting. For example:

```
result = "<_char font_name=' /Charter BT'>Name</_char>"
```

## ► To combine two variables using VBScript

The following example script shows how a script can combine two profile variables into a single variable. This is also called “concatenating.”

The example uses the following variable names. For your script, substitute variable names that match the variables in your project.

- **Profile Variables:** first\_name and last\_name
- **Content Variable Name:** full\_name

Using a text editor, write a script using the following text as a guide.

```
Function VBFullName() ' combines first and last names
    VBFullName = PFGetValue("first_name") & " "
    & PFGetValue("last_name")
End Function
```

For example, if the first name is “Sam” and the last name is “Brown”, the script returns the value “Sam Brown”.

## ► To mathematically evaluate variables using VBScript

In this example, the script evaluates a numerical field from the profile data source to determine which text string to return. It uses an “if-then-else” statement to determine which string to return based on how large the customer’s total purchases were. The example uses the following variable names. For your script, substitute variable names that match the variables in your project.

- **Profile Variable:** total\_purchases
- **Content Variable Name:** qualification

Using a text editor, write a script using the following text as a guide.

```
Function vbqualify()
  If PFGetValue("total_purchases") >=2000 Then
    vbqualify = "Dear Platinum Customer."
  ElseIf PFGetValue("total_purchases") >= 1000 Then
    vbqualify = "Dear Golden Customer."
  Else
    vbqualify = "Dear valued customer."
  End If
End Function
```

For example, if the customer spends \$1,500, the script returns the text, “Dear Golden customer.”

---

# Creating Jobs

13

Templates provide the form for your variable publishing project. Jobs are the instructions for creating the final output for the project from your templates and variable content. This chapter explains how create jobs. It also explains the steps to take if you are using Pageflex Studio to submit transactional jobs from a Web browser or another application.

## Overview of Jobs

Jobs are the instructions for creating the final output for your project. You can set up as many jobs as you need to generate output in the formats you require. The output driver uses the information you supply in the job, along with the data sources, variables, and template for the project, to generate output.


Configure jobs using the Job Setup window. Job setup offers the ability to set the following job options.

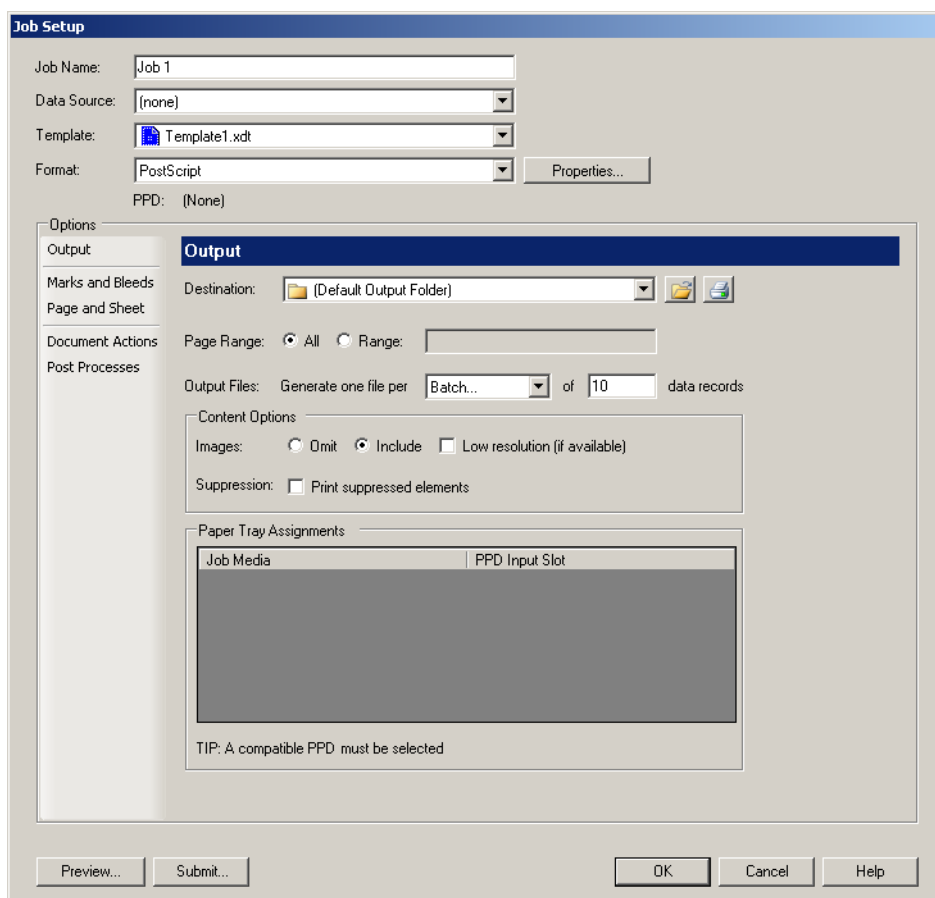
- **Record Selection.** When a data source exists, you can set rules for the data records to use for data ingest. When a data source does not exist, this option is not available.
- **Output.** Set options such as the destination to place final output, page ranges to print, and choose content options for images and print suppression.
- **Marks and Bleeds.** Set the crop marks and bleed area for the document. You can set this option only for jobs with XDT template-, PostScript-, and PDF-based formats.
- **Page and Sheet.** Set the page and sheet imposition styles and sizes. You can set this option for jobs only with XDT template, PostScript, and PDF formats.
- **Document Actions.** Specify a sequence of actions to be performed whenever a document is assembled during job execution or preview, for example, to change form attributes for an element based on profile variable values.
- **Post Processes.** Choose a program or batch file to perform additional tasks after each record is created or after each job is finished, or after both of these events have been completed.

The rest of this chapter goes over these job options.

To create a transactional job for Web submissions, see “Creating and Previewing Transactional Jobs” on page 340.

# Adding a New Job

Click **Add Job**  on the Jobs tool bar in the Project panel. Studio displays the **Job Setup** dialog box.



The **Job Setup** dialog box is shown with the following settings:

- Job Name:** Job 1
- Data Source:** (none)
- Template:** Template1.xdt
- Format:** PostScript
- PPD:** (None)
- Properties...** button
- Options** tab is selected in the left sidebar.
- Output** section:
  - Destination:** (Default Output Folder)
  - Page Range:** ☒ All ☐ Range:
  - Output Files:** Generate one file per **Batch...** of **10** data records
  - Content Options:**
    - Images:** ☐ Omit ☒ Include ☐ Low resolution (if available)
    - Suppression:** ☐ Print suppressed elements
  - Paper Tray Assignments:**

Job Media	PPD Input Slot
- TIP:** A compatible PPD must be selected
- Buttons:** Preview..., Submit..., OK, Cancel, Help

## Primary Job Settings

Enter the primary settings for the job at the top of the window.



The **Primary Job Settings** section of the **Job Setup** dialog box is shown with the following settings:

- Job Name:** Job 1
- Data Source:** (none)
- Template:** Template1.xdt
- Format:** PostScript
- PPD:** (None)
- Properties...** button

- **Job Name.** Type a name for the job. A job name can include spaces and symbols.
- **Data Source.** Select the data source, or select **(none)** for no data source. For example, you would choose **(none)** if you are using Studio for transactional jobs. See “Creating and Previewing Transactional Jobs” on page 340 for details.  
  
**Note:** If you choose **(none)**, the record selection properties are no longer necessary, so these properties no longer appear on the Job Setup window.
- **Template.** Select a template to use. Each job uses a single template. This list displays templates that exist in the project folder, therefore, you must have a template in the project folder for it to appear in the list. If the template you want to use does not appear in the list, exit the Job Setup dialog and save the template to the project folder. Then open the Job Setup dialog again and choose the template from the list.
- **Format.** Select the format for the final output. Click **Properties** to set the format properties, such as the PostScript Printer Description (PPD), if appropriate. Once selected, your choice of PPD is listed below the format on the Job Setup window, or the text is hidden if the format does not allow for a PPD. See “Selecting Output Formats” on page 315 for details.

## Record Selection

Select a **Data Source** and click the **Record Selection** option to identify the records you want to include in the job. Under **Selection Tools**, click **Simple** to use a set of simple tools for record selection, or click **Advanced** to enter a SQL statement.



## Simple Record Selection

The **Simple** method lets you select records from a single table in the data source. If you are using more than one table in the data source, you must use advanced record selection.

**Record Selection**

Selection Tools: ☒ Simple ☐ Advanced

Simple

In Table: prospects

Sort by: (none)

Select: ☐ All Records ☒ Subset of Records, Where:

×	LastName	Starts With	A	And
×	LastName	Ends With	S	

- In the **In Table** list, select the table from the data source.
- In the **Sort By** list, select a field to use for sorting the records. Studio sorts the records alphanumerically in descending order (for example, 0-9 or A-Z). If you choose **(none)**, Studio sorts records in the same order as the database table. The sort order may be important for arranging records for imposition.
- Under **Select**, click **All Records** or click **Subset of Records**.  
If you click **Subset of Records**, build a statement in the box to specify how to select the records to use.

Begin each statement with a field in the selected data source table. Connect that field with an operator to another field or to literal text you type. You can connect multiple statements using “and” or “or.”

The screenshot shows a query builder interface with two rows of criteria. The first row contains 'LastName' in a dropdown, 'Starts With' in a dropdown, and 'A' in a text field. The second row contains 'LastName' in a dropdown, 'Starts With' in a dropdown, and 'S' in a text field. Between the two rows is a connector dropdown set to 'Or'. A label 'Field in Data Source Table' points to the 'LastName' dropdown in the first row. A label 'Text or a Field in Data Source' points to the 'Starts With' dropdown in the first row. A label 'Connector' points to the 'Or' dropdown.

In the example above, Studio selects the records in which the “LastName” field begins with the letter A or the letter S.

**Advanced Record Selection**

The Advanced method lets you write your own SQL query. In the **SQL Statement** box, type the text of the query. If you are using two tables in the data source, you must write a SQL query to join them.

## Output

Click the **Output** option to select output options.

**Output**

Destination: (Default Output Folder)

Page Range: ☒ All ☐ Range:

Output Files: Generate one file per Data Record

**Content Options**

Images: ☐ Omit ☒ Include ☐ Low resolution (if available)

Suppression: ☐ Print suppressed elements

**Paper Tray Assignments**

Job Media	PPD Input Slot

TIP: A compatible PPD must be selected

In the **Destination** field, choose a folder or a printing device to send the final output. The **Default Output Folder** is the Final Output Folder that you set for the Pageflex Server host when you configure task processing settings. See the *Pageflex Server Guide* for details.

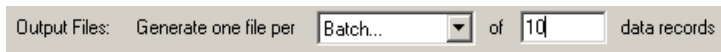
If you want to direct output to a different location—such as to override the Final Output Folder set on your Pageflex Server host or send output directly to a printer—click the folder icon to browse for a folder, or the printer icon to browse for a printer.

For **Page Range**, choose the range of pages to output:

- Click **All** to output all pages.
- Click **Range** to enter a range of pages to output. Enter the page range in the box. Use a hyphen to denote a consecutive page range and separate non-consecutive pages with commas. For example, to print pages 1 through 15 and page 22 and 25, enter “1-15, 22, 25”.

For **Output Files**, choose how you want to group output into files.

- **Data Record.** Choose to generate one document per data record. This is the default output method.
- **Job.** Choose to generate all documents for the job in one combined output file.
- **Batch.** Enter a specific number of data records to combine into a single output file. For example, to create output files with 10 data records in each file, enter “10” in the data record field, as shown below.



- **Page.** When producing bitmap or .eps output, you can only choose to output one file per page.

**Note:** If you are going to impose multiple pages on one output sheet, for example, using step and repeat or cut and stack imposition styles, you cannot generate one document per data record. However, you can create one output file per sheet by entering the minimum number of data records per sheet in this field. See “Specifying Page and Sheet Settings” on page 293 for more information about imposition styles.

## Content Options

In the **Content Options** section, choose whether to omit or include images, include low resolution images, or print suppressed elements:

- **Images.** Pageflex Studio allows you to customize image data output for your project. The options you select depend on several factors, such as whether you are using an Open Prepress Interface (OPI) server, what type of printing device you are using, and whether you are using a content source plug-in that supports substituting different image resolutions. Select from the following options:
  - **Omit.** Click **Omit** to send no image data for EPS, TIFF, or JPEG file formats. Other formats, such as GIF or placed PDF, are always included. This is useful if you are using OPI or some other mechanism to insert the images downstream. If selected, the output will not include image data for the above formats, but will preserve the OPI comments for an OPI server to use. In the final output, the job includes only the OPI comments and no image data. If you are not using an OPI server, image containers will be empty. For VPS, omitted images are supplied by the imaging device using a VPS-specific mechanism.
  - **Include.** Click **Include** to include image data using the format specified under output properties.

If you include images in **Binary** format, the driver includes the high-resolution image files and creates Binary data. Select these options if your printing device supports it.

If you include images in **ASCII** format, the driver includes the high-resolution image files and creates ASCII data. Select these options for printers that do not support Binary data.

See “Options” on page 319 for details on how to set the format in the **Image Format** setting for PostScript PPDs or “PDF” on page 320 for details on how to set it in the **Page Content Format** setting for PDFs.

- **Low resolution (if available).** Select this check box to include low resolution image data, if it is available, if you are using a content source plug-in. See the *Pageflex Programming Reference Guide* for details about content source plug-ins.
- **Suppression.** Select the **Print suppressed elements** check box to override the print suppression property. See “Suppress Printing” on page 99 for an explanation of the suppress printing property for elements.

**Note:** If you chose to omit images and print suppressed elements, if the suppressed element is an image, it will still be omitted.

## Paper Tray Assignments

In the **Paper Tray Assignments** section, you can assign custom job media name, such as cover pages or inside pages to specific paper trays on PostScript printers using the PPD Input Slot. See “Adding Paper Tray Assignments” on page 332 for details.

## Marks and Bleeds

Click **Marks and Bleeds** to set these options.

**Marks and Bleeds**

**Crop Marks**

☒ Include Crop Marks

Offset:  inches      Length:  inches

**Bleed Area**

☒ Include Bleed Area

Top:  inches      Left:  inches

Bottom:  inches      Right:  inches

**Page Information Area**

☐ Include general page information

☐ Include custom information:

On this page, you can set marks and bleeds for your output. The screen shot above displays unit values of **Inches**, but the units are based on your system locale.

The following options are available:

- **Crop Marks.** Select the **Include Crop Marks** check box to add crop marks to show the edges of the document. Clear this check box to remove crop marks. Set the **Offset** and **Length**.

**Note:** If you are using step and repeat or cut and stack imposition styles, make sure the paper size you have selected can accommodate the space needed for crop marks.

- **Bleed Area.** Select the **Include Bleed Area** check box to print any elements that extend beyond the edges of the document. Clear this check box to disable bleed area. Set the **Top**, **Bottom**, **Left**, and **Right** margin sizes.

- **Page Information Area.** Choose whether you want to show custom information in your output.
  - **Include general page information.** Select this check box to add the project name, job name, template file name, data record number, page number, current date, and current time to the bottom edge of the page, outside the bleed area. Clear this check box if you do not want to include this information.
  - **Include custom information.** Select this check box to add custom text to the bottom edge of the page. Enter the text in the box.

Click the arrow to choose from a list of system variables to include, such as Project Name, Job Name, Transaction ID, Destination Directory, or Current Document.

Type system variables in brackets to insert them as custom information, for example, to insert the project name, type:

```
<<_sys_ProjectName>>
```

**Note:** Page information extends .5 inches below the page. This space is added to display page information, even if no bleed is specified. Consider this when setting bleed area margins or footers.

See the sections below for setting page and sheet settings, document actions, and post processes. These job options allow you more control over your output. You can use the defaults for these options to create a simple job. When you are finished setting up the job options, click:

- **OK** to save the job options and close the dialog box.
- **Preview** to preview the job on screen using the options you have selected. See “Previewing a Job” on page 337.
- **Submit** to submit the job to Server for final output. See “Submitting a Job” on page 341.

## Specifying Page and Sheet Settings

Click the **Page and Sheet** option to specify the orientation and scale of each document page, as well as how each page will print on a physical **sheet** of paper.

### Imposition Style

Click **Imposition Style** to configure how each page will be printed on a sheet of paper.



Imposition Style: Step and Repeat (Single Record) ▼

Sheet Size: US Letter ▼ Width: 8.5 Height: 11 inches

Choose from the following imposition styles in the list box to impose the pages onto a sheet:

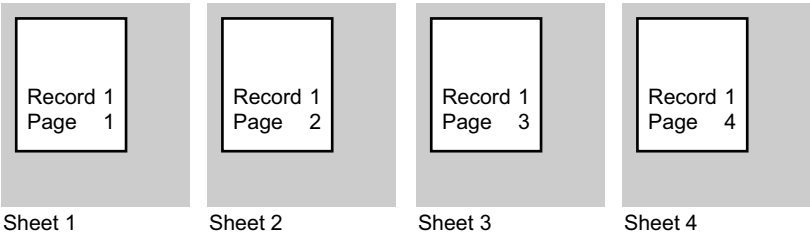
- **Single Page.** Each page of a document with variables ingested from a single data record is laid out on its own sheet.
- **Step and Repeat (Single Record).** Each page of a document with variables ingested from a single data record is repeated on a sheet. The result is that each sheet has the exact same document page repeated multiple times on it and the number of sheets will correspond to the number of data records—one record is imaged per sheet.
- **Step and Repeat (Multi Record).** Each page of a document with variables ingested from multiple data records is laid out a sheet. The result is that each sheet has the same template page with different data merged on it in a sequence across each sheet that corresponds to the order of records in the database.
- **Cut and Stack (Multi Record).** Each page of a document with variables ingested from multiple data records is laid out a sheet. Only, the result is that each sheet has the same template page with different data merged in an order that proceeds sequentially between sheets, resulting in cuttable stacks of documents.

Sheets with multiple document pages imaged onto them are most appropriate for simple two-sided documents such as business cards and postcards. The imposition styles are described in detail below.

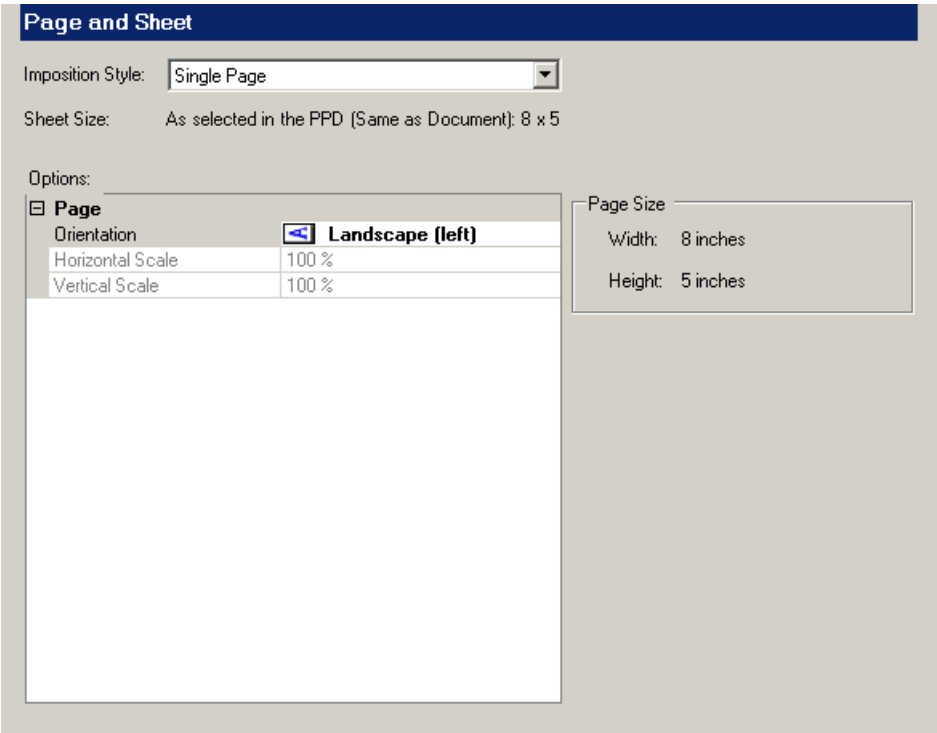


# Single Page

Choose the single page imposition style to lay out each page of a document on its own sheet, with variables ingested from a single data record, as illustrated below.



This is the default mode for printing. It is appropriate for documents with any number of pages. Pageflex Server outputs each page once on its own sheet and generates a complete set of sheets for each merged data record. Click **Single Page** in the **Imposition Style** field to choose this style.

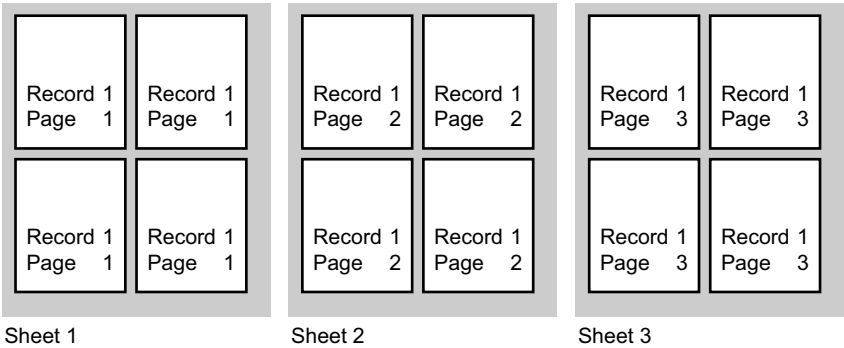


Single page imposition style shows only page options and no sheet options because there are no sheet layout options for single page imposition, since there is only one page image. Studio determines the sheet size by examining the document size plus any marks and bleeds, if no PPD is selected or if it does not

apply. If you selected a PPD, the PageSize specified in the PPD determines the sheet size. Single page imposition style only offers horizontal and vertical scale.

**Step and Repeat (Single Record)**

Choose the step and repeat “single record” imposition style to lay out each page of a document multiple times on the same sheet, with variables ingested from a single data record, as illustrated below.



This style is good for getting multiple copies of each page on one sheet. It is appropriate to use for documents with any number of pages. Pageflex Server

generates a complete set of sheets for each merged data record. Click **Step and Repeat (Single Record)** in the **Imposition Style** field to choose this style.

**Page and Sheet**

Imposition Style: Step and Repeat (Single Record)

Sheet Size: As selected in the PPD: 11 x 17

Options: Maximum Pages Per Sheet..

**Page**

Orientation ☐ Landscape (left)

Horizontal Scale 100 %

Vertical Scale 100 %

**Sheet**

Number of Page Rows 2

Number of Page Columns 2

Gaps between Rows 0.25 inches

Gaps between Columns 0.25 inches

Top/Bottom Margins 0.125 inches

Left/Right Margins 0.125 inches

Print Style ☐ One Sided

Page Size

Width: 8 inches

Height: 5 inches

Data Merge Sequence

(No Options)

1

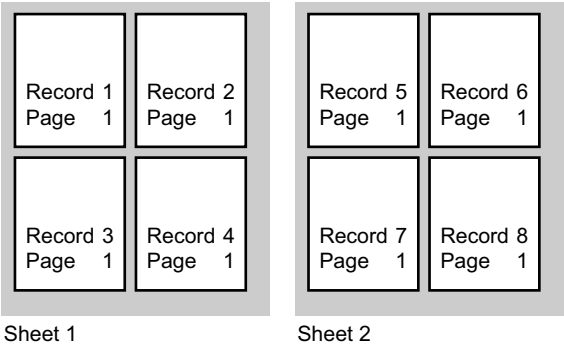
1

1

1

**Step and Repeat (Multi-Record)**

Choose the step and repeat “multiple record” imposition style to lay out each page of a document multiple times on the same sheet, with variables ingested from multiple data records. The illustration below shows a one-sided document with eight different merged data records.



This style is good for one- or two-sided cards, such as business cards or postcards. Pageflex Server merges different data records in a sequential order that you can set to proceed by rows (across from left) or columns (down from top) on

each sheet before filling the next one. Click **Step and Repeat (Multi-Record)** in the **Imposition Style** field to choose this style.

**Page and Sheet**

Imposition Style: **Step and Repeat (Multi Record)**

Sheet Size: As selected in the PPD: 11 x 17

Options: **Maximum Pages Per Sheet..**

**Page**

Orientation: **Landscape (left)**

Horizontal Scale: 100 %

Vertical Scale: 100 %

**Sheet**

Number of Page Rows: 2

Number of Page Columns: 2

Gaps between Rows: 0.25 inches

Gaps between Columns: 0.25 inches

Top/Bottom Margins: 0.125 inches

Left/Right Margins: 0.125 inches

Print Style: **One Sided**

Page Size

Width: 8 inches

Height: 5 inches

Data Merge Sequence

**Across from left**

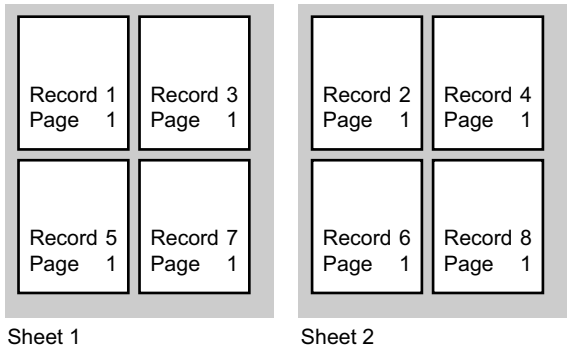
1 2

3 4

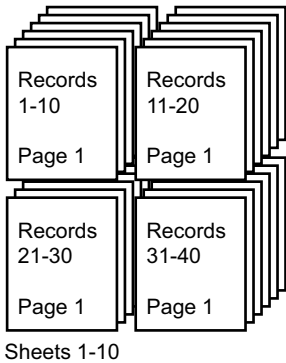
### Cut and Stack (Multi-Record)

Choose the cut and stack “multiple record” imposition style to lay out each page of a document multiple times on the same sheet, with variables ingested from multiple data records and arranged so that documents are stacked in the proper page order when cut. The illustration below shows a one-sided document with eight different merged data records. Notice the difference between the order of

these records and those in the illustration for the step and repeat “multiple record” imposition style on page page 297.



The illustration below shows how documents, such as business cards or postcards, would be stacked using a 40-record data source. For example, you could use this imposition style to arrange postcards by zip code.



**Note:** The stacks are evened out to impose the maximum number of pages per sheet.

Pageflex Server merges different data records in a sequential order that you can set to proceed in a stacking order so that when the sheets are aligned and cut, the sort order you chose in the Record Selection option in the Job Setup dialog is preserved. As with the step and repeat multiple record imposition style, you can also set the data merge sequence order to proceed by rows (across from left) or

columns (down from top). Click **Cut and Stack (Multi-Record)** in the **Imposition Style** field to choose this style.

**Page and Sheet**

Imposition Style: **Cut and Stack (Multi-Record)**

Sheet Size: As selected in the PPD: 11 x 17

Options: **Maximum Pages Per Sheet..**

**Page**

Orientation: **Landscape (left)**

Horizontal Scale: 100 %

Vertical Scale: 100 %

**Sheet**

Number of Page Rows: 2

Number of Page Columns: 2

Gaps between Rows: 0.25 inches

Gaps between Columns: 0.25 inches

Top/Bottom Margins: 0.125 inches

Left/Right Margins: 0.125 inches

Print Style: **One Sided**

Page Size

Width: 8 inches

Height: 5 inches

Data Merge Sequence

**Across from left**

1-10 11-20

21-30 31-40

## Sheet Size

The **Sheet Size** displays the size of the physical sheet of paper to impose document pages on. For single page imposition, this is the same as the page size, plus any marks and bleeds.

If you choose an imposition style other than **Single Page**, you can set the sheet size in the PPD. Most PPDs list the sheet size in the **PageSize** field. If you are using a format that does not support PPDs, such as PDF output, you can choose the sheet size from a list box, or choose **(Custom)** and enter a custom width and height (see screen shots below).

If Studio detects a default sheet size from the PPD, it sets the sheet size to that value by default. Otherwise, the default setting is **(Custom)** with 0 height and 0 width. You must choose a sheet size to produce output using imposition styles other than single page. Studio displays a warning if you haven't chosen a size or entered a custom size.

## PDF and Custom Sheet Size

Choose a sheet size from the drop down list, for example, choose **Tabloid** to impose pages onto an 11 by 17 inch sheet of paper:



Sheet Size: Tabloid Width: 11 Height: 17 inches

Choose **(Custom)** and enter a custom width and height for the sheet:



Sheet Size: (Custom) Width: 22 Height: 22 inches

**Note:** The units for sheet size—such as inches or millimeters—are derived from your regional and language settings in your installation of the Microsoft Windows operating system. Click **Regional and Language Options** in the **Control Panel** to change these settings. Studio uses inches for non-metric regions and millimeters for metric regions.

### ► To set the sheet size with a format that supports PPDs

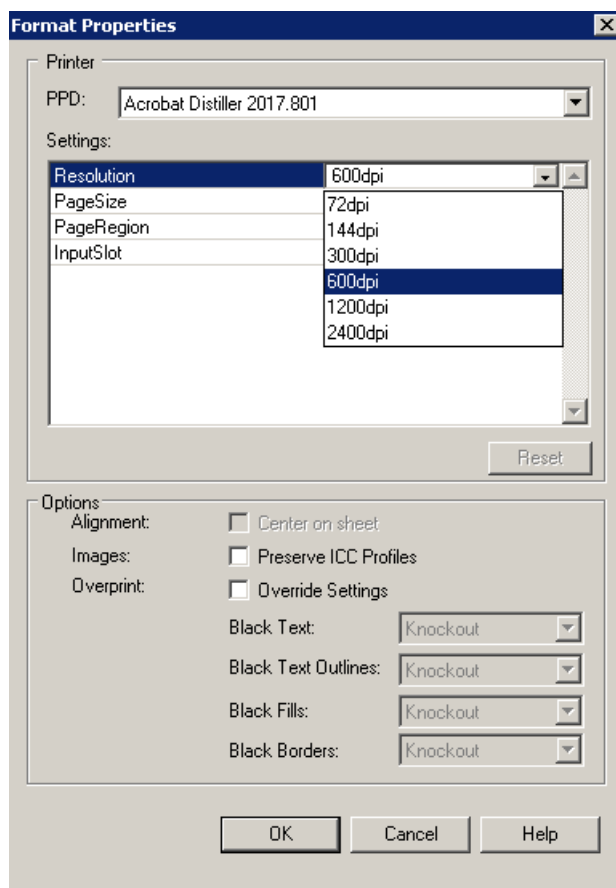
- 1 Click **Properties** next to the **Format** box in the primary job settings area.



Format: Adobe Acrobat Distiller PDF Properties...  
PPD: (None)



- 2 Select a sheet size in the **PageSize** property. Select **Same as Document** to set the sheet size as the same size as the template page size.



- 3 Click **OK** to save these settings.

## Page Size

The page size section displays the size of the job template. This information may be useful when planning the number of pages to output on a sheet. You cannot change these values as they are set in the template.

**Note:** Set the units for **Page Size** and all other properties in the **Job Setup** dialog in the **Preferences** dialog on the **Edit** menu.

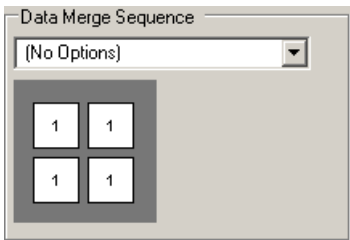
## Data Merge Sequence

The data merge sequence section offers options for determining the sequence that data records are merged with multiple instances of a document template page. The available options for the data merge sequence change based on the imposition style you select. A graphic shows an example of how the records will be laid out for this type of imposition and data record sequence. The styles are described below.

Since the **Single Page** imposition style uses one sheet per page, the data merge sequence is not used, and is hidden from view.

### (No Options)

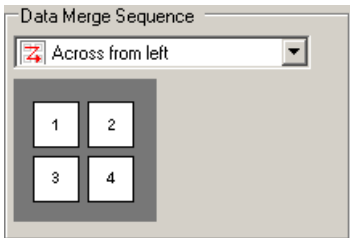
The **Step and Repeat (Single Record)** imposition style offers no options for the data merge sequence, but the sequence is shown to illustrate how a single record will be merged multiple times on a sheet, making all page instances the same.



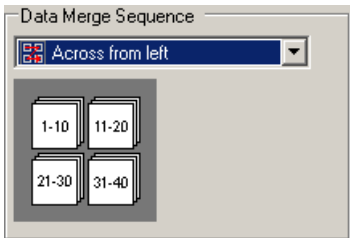
### Across from left

The **Step and Repeat (Multi Record)** and **Cut and Stack (Multi Record)** imposition styles offer two options. When you select **Across from left** for the data merge sequence, the data is merged by row. Once a row is filled, the next row to the right is filled.

#### Step and Repeat



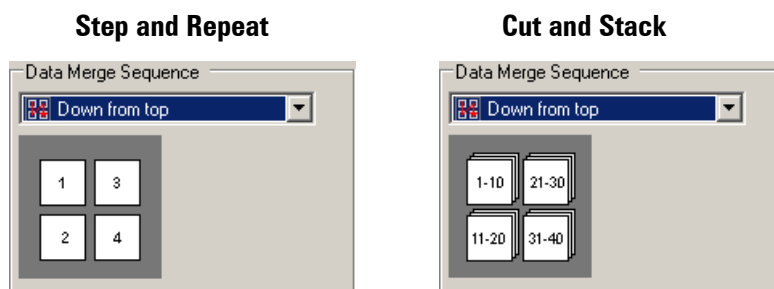
#### Cut and Stack



**Note:** With cut and stack imposition, the data records are filled one on top of the other in sheets, so that, for example, you can sort printed output destined for the same place in stacks, such as by zip code.

### Down from top

The second option offered for the **Step and Repeat (Multi Record)** and **Cut and Stack (Multi Record)** imposition styles is **Down from top**. In this data merge sequence, the data is merged by column. Once a column is filled, the next column below is filled.



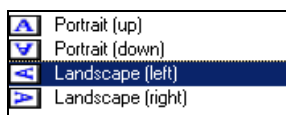
**Note:** With cut and stack imposition, the data records are filled one on top of the other in sheets, so that, for example, you can sort printed output destined for the same place in stacks, such as by zip code.

## Options

The following options are displayed for each imposition style.

**Page Options** are displayed for all imposition styles.


- **Page Orientation.** Select an orientation for the template page from the choices provided. The page orientation describes the way in which the page is oriented on the sheet, not whether the template is a landscape format (wider than it is high) or a portrait format (higher than wide) template. Set the template orientation using the **Template Setup** dialog available from the **File** menu in Studio. Use the page orientation to describe how the template page is oriented on the sheet.



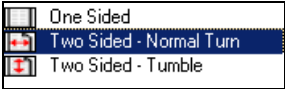
- **Portrait (up).** Choose this option to orient the page with the text facing up.

- **Portrait (down).** Choose this option to orient the page with the text facing down.
- **Landscape (left).** Choose this option to orient the page with the text moving from left to right.
- **Landscape (right).** Choose this option to orient the page with the text moving from right to left.
- **Horizontal and Vertical Scale.** Scale options can only be set for the **Single Page** imposition style. For the other three imposition styles, the values are automatically set to 100% and cannot be changed. Enter a percentage value in either of these fields to scale the horizontal and vertical axis by that amount.

**Sheet Options** are displayed for all imposition style selections except **Single Page**.

Sheet	
Number of Page Rows	2
Number of Page Columns	2
Gaps between Rows	0.25 inches
Gaps between Columns	0.25 inches
Top/Bottom Margins	0.125 inches
Left/Right Margins	0.125 inches
Print Style	 One Sided

- **Number of Page Rows** and **Number of Page Columns.** Enter the number of page images to be laid out in rows and in columns on a sheet. The default value for each of these is 2.
- **Gaps between Rows** and **Gaps between Columns.** Enter the size of the horizontal and vertical spaces that should appear between pages on each sheet. The default value for each of these is .5 inches.
- **Top/Bottom Margins** and **Left/Right Margins.** Enter the minimum size of the horizontal and vertical space to preserve around the outside of the grid of pages to be printed on a sheet. The default value for all margins is .5 inches.
- **Print Style.** Select the print style for the output.

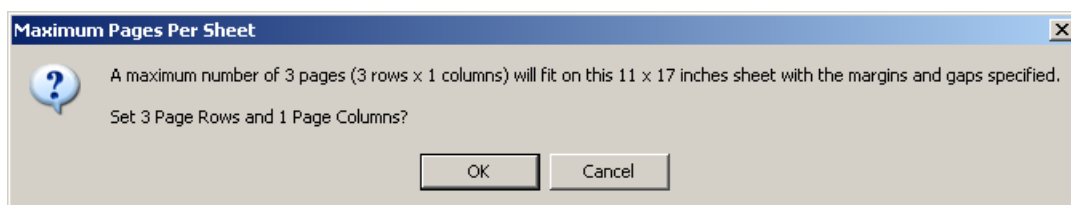


- **One Sided.** Select this option for simplex output.
- **Two Sided—Normal Turn.** Select this option for duplex output that will be flipped over from the right or left side when the back of a sheet is printed. This is the default setting.

- **Two Sided—Tumble.** Select this option for duplex output that will be flipped over from the top or bottom when the back of the sheet is printed.

## Maximum Pages Per Sheet

The **Maximum Pages per Sheet** button is displayed for all imposition style selections except **Single Page**. Click this button to raise the **Maximum Pages per Sheet** dialog. This dialog calculates the maximum number of pages that can be imposed on the sheet size specified and offers to set the **Number of Page Rows** and **Number of Page Column** option values to achieve this maximum. For example:



Studio calculates the maximum number of pages that can be imposed based on the template page size and the currently specified sheet, gap, margin sizes, marks, and bleeds. Click **OK** to accept the suggested page rows and columns or **Cancel** to exit without making changes.

## Error Handling: Imposition Setup Problems

The following imposition errors may occur during setup:

- **Imposition setup specified doesn't fit on sheet.** The horizontal or vertical size of the layout of pages, gaps, and margins exceeds the bounds of the sheet size.
- **Marks and Bleeds don't fit in gaps.** The size of the crop marks, bleeds, or document information marks exceed the size of the page gaps.
- **Marks and Bleeds don't fit in margins.** The size of the crop marks, bleeds, or document information marks exceed the size of horizontal or vertical margins available.

## Configuring Document Actions

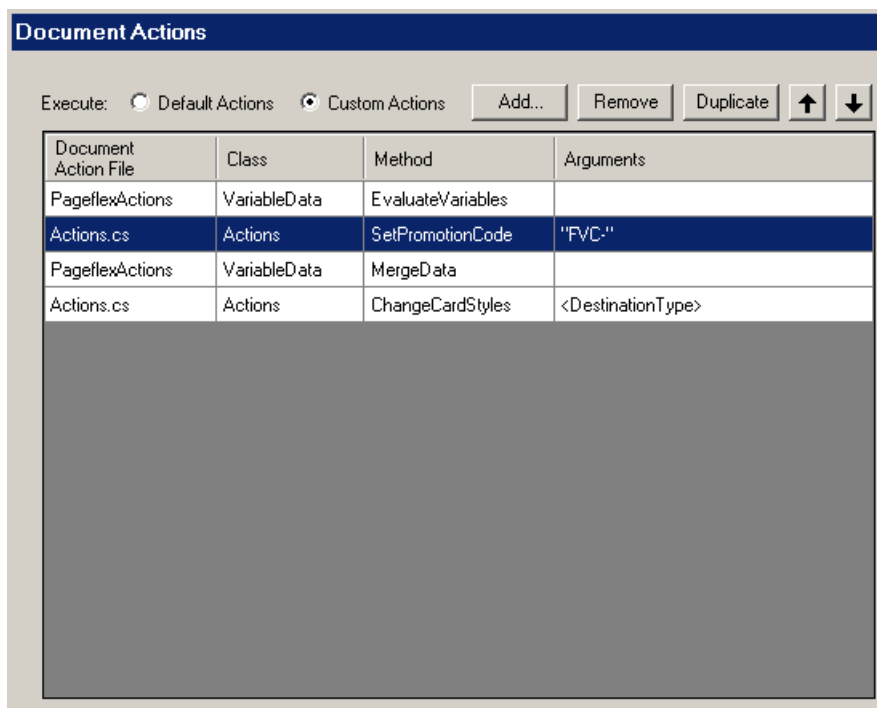
Document actions are a series of functions, specified as scripts or compiled code, that describe changes that should be made to a document each time it is assembled during job preview and execution. These functions can cause a variety of property changes to many document elements.

For example, you can change form attributes, such as color, border, or style, of template elements based on profile variable values, such as favorite color, gender, or age. So if you are designing a marketing campaign that will customize documents based on a customer's favorite color, you can set a document action to use this profile variable for the title, picture border, and rule colors in a brochure that they order online.

You can use the **Name** property on the **Info** tab to refer to elements in a template by name in a document action. For example, if you use an element named "BoundingBox" to show a background color in your template, you can write a document action script to find this element by name and set its fill color.

You can create document actions using a variety of code file formats, including Jscript.NET, VB.NET, C#, and .NET compiled as DLL assembly files. Studio loads these files from the **Document Actions** project folder. See the *Pageflex Programming Reference Guide* for details on how to create document actions.

Click **Document Actions** in the **Job Setup** dialog to display the **Document Actions** section.



The **Execute** field at the top of the document actions section offers a choice of whether default actions or custom actions should be executed when the job is run.

## Default Actions

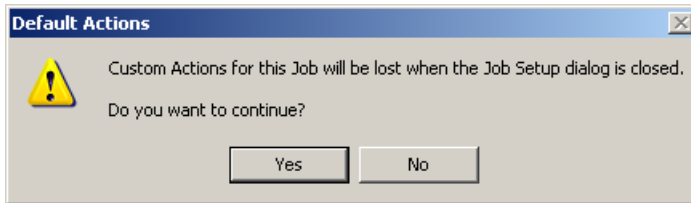
Select **Default Actions** to assemble documents normally. Two document actions normally performed by Pageflex, evaluating variables and merging variable data, are derived from a virtual **PageflexActions** file. These are the **EvaluateVariables** and **MergeData** actions, which are listed and disabled.

## Custom Actions

Select **Custom Actions** to enable the document action controls. You can now add, remove, duplicate, and arrange the execution order of all actions, including the **PageflexAction** default actions.

If you create a custom action sequence and then switch back to using default actions, you will lose your custom action list when you click **OK** to close the **Job**

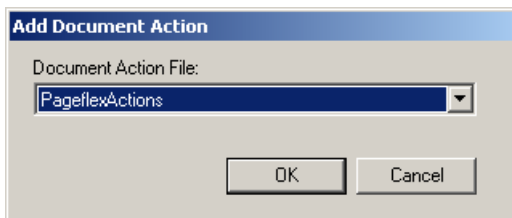
**Setup** dialog, therefore, Studio displays a dialog to confirm that this is what you want to do.



Click **Yes** to continue to switch to default actions, or **No** to cancel. If you choose to continue, your custom action list is preserved as long as the **Job Setup** dialog is open, which allows you to switch back. However, once you click **OK** to close the Job Setup dialog, the list is lost.

## Adding Document Actions

Click **Add** to add a **Document Action** file.



The drop-down list enumerates all files in the **Document Actions** folder as well as **PageflexActions**, the virtual file containing the **EvaluateVariables** and **MergeData** actions. Select a file and click **OK** to add the file to the **Document Action** list. When you click **OK**, Studio attempts to compile the file. If Studio encounters any errors in this process, it displays an error dialog and does not add the **Document Action** file.

## Removing Document Actions

Select a **Document Action** file and click **Remove** to remove it. To cancel removal, click **Cancel** at the bottom of the Job Setup page.

## Duplicating Document Actions

Select a **Document Action** file and click **Duplicate** to copy it to the bottom of the list.



## Moving Document Actions

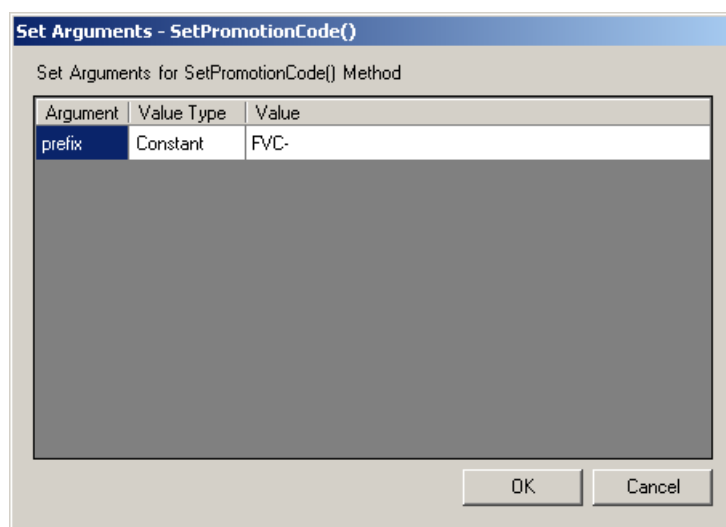
Select a **Document Action** file and click the up or down arrow to move it up or down in the list. Actions execute from top to bottom in the order listed.

## Specifying Action Class, Method, and Arguments

Select a row to reveal controls for specifying class, method, and arguments available in the document action file, described below:

- **Class.** Choose a class from the drop-down list that enumerates all public classes found in the file, or “Default” if no classes are specified.
- **Method.** Choose a method from the drop-down list that enumerates all static, public methods with string arguments for the selected class.
- **Arguments.** This field displays the arguments chosen for the action and a **Set Arguments** button. Mouse over this field to display the full text of the arguments. When the action requires no arguments, this field displays “(No Arguments)” and disables the **Set Arguments** button.

Click the **Set Arguments** button to set arguments. This brings up the **Set Arguments** dialog.



The dialog lists all arguments required by the method with the name in the **Argument** field, a drop-down list box with choices for the value type in the **Value Type** field, and the value in the **Value** field.

Choose from two different value types, constant or variable, described below:

- **Constant.** Choose this value type for Studio to interpret the value as a string constant. The **Value** field becomes an editable text field where any value can be typed.
- **Variable.** Choose this value type for Studio to interpret the value as a variable name. The **Value** field becomes a drop-down list box that enumerates all project variables.

## Compilation Errors

When you click the Class, Method, or Arguments controls on a selected row, if the date and time of the file when it was first compiled and added is out of sync with the date and time of the file when the row is clicked, then Studio makes a new attempt to compile the action. If Studio finds errors, it displays the **Compilation Errors** dialog to indicate the problem.

---

## Adding Post Processes

A post process is an executable program (.exe), a batch file(.bat), or script you create to perform additional tasks after each record is created, after each batch file is created, or after the whole job is completed. For example, you can create a post process to move files to another folder or to attach a final PDF file to an e-mail message.

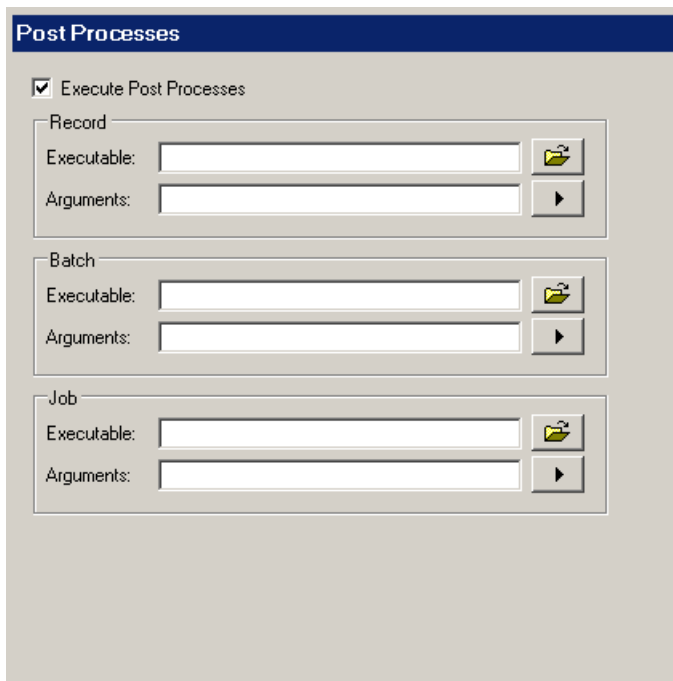
The post process can use any user-defined variables in the project as arguments. It can use the profile and content variables you created for your project, as well as system variables defined during output creation. System variables include values such as the Project Name, the Job Name, and the Transaction ID. For a complete list of system variables, see the *Pageflex Server Guide*. You can pass system variables as arguments to the post process.

When processing a record or job that has a post process, the output driver launches the post process and then moves on to the next record or job without waiting for the post process to complete.

### ► To add a post process

- 1 Open an existing job or add a new one. See “Adding a New Job” on page 285.

- 2 Click **Post Processes** and select the **Execute Post Process** check box (Clear this check box to prevent post processes from being executed). Studio displays the **Post Process Setup** dialog box.



The image shows a dialog box titled "Post Processes". At the top, there is a checked checkbox labeled "Execute Post Processes". Below this, there are three sections: "Record", "Batch", and "Job". Each section contains two text input fields: "Executable:" and "Arguments:". To the right of each "Executable:" field is a folder icon button, and to the right of each "Arguments:" field is a right-pointing arrow button.

You can add post processes in three areas:

- **Record.** The driver will run a record post process after creating each record.
- **Batch.** The driver will run a batch post process after creating each batch.
- **Job.** The driver will run a job post process after creating the job.

Fill in the post process fields as explained in the table below.

Box Name	Description
<b>Executable</b>	<p>Enter the full path to the post process file, either an executable program (.exe) or a batch file (.bat). Click the folder button to browse for the file. The file must be available to the computer running Pageflex Server.</p>
<b>Arguments</b>	<p>You can pass arguments to the post process from Pageflex Server by typing the argument in the Arguments box with a space between arguments. To pass a user-defined variable or system variable, type the variable name in double angle brackets, such as &lt;&lt;FirstName&gt;&gt;, for example. Click the button beside the Arguments box to select a commonly-used system variable from the drop-down list. See the <i>Server Setup and Reference Guide</i> for a complete list of system variables.</p>

## Selecting Output Formats

In the **Format** drop-down list on the **Job Setup** dialog, select the format for the final output. There are several different formats you can use, including custom formats created with the Pageflex renderer plug-in interface. The most common formats are listed below.

**Note:** Studio displays all supported formats in the drop-down box, but you will be able to generate output only with those you have licensed to use.

- **Bitmap.** A format that generates a simple raster image (JPEG, TIFF, etc.) representation of a document page. This may be useful for previewing and proofing output, as well as printing on non-standard devices.
- **Convert PostScript to PDF.** This format uses Adobe Normalizer to create PDF output. It generates PostScript output and processes the output with a Distiller joboptions file to produce a PDF file. Be sure that the Template orientation (“Building New Templates” on page 39) and the Page orientation (“Options” on page 304) are configured to produce the output you desire. See “PostScript” on page 318 for instructions on using a PPD.
- **CreoScitex VPS.** A variable data format based on PostScript. It allows caching of images to maximize printing speed.
- **Document Instance.** A format is unique to Pageflex projects. A document instance is a Pageflex template format with the variable contents of one record ingested into the template as the default contents. You can open and edit a document instance with Pageflex Studio.
- **Encapsulated PostScript (EPS).** A format that allows document pages to be printed or used as images on other document pages. The resulting EPS files, which contain low resolution TIFF previews, can be inserted into pages of other documents with Studio or other publishing software.
- **Indigo JLYT.** This format is supported by HP/Indigo for variable data printing. It supports various optimizations for HP/Indigo presses, especially the ability to cache recurring images for high speed printing.
- **Optimized PostScript.** This PostScript format caches images for reuse so that the same image does not have to be processed multiple times. This reduces file size and transmission time for print jobs which contain recurring images. This may speed up the printing process if the press is equipped to optimize the handling of PostScript forms.

- **Portable Document Format (PDF).** A de facto standard for document interchange and printing. It is based on the Adobe PostScript imaging model, but has been both refined and expanded to make it more universal. It uses the Adobe PDF Library to ensure the highest reliability and optimization.
- **PostScript.** A de facto standard in the print industry. Pageflex applications produce PostScript that has been tested with a variety of print systems and workflows.
- **PPML/PostScript.** Personalized Print Markup Language (PPML) is an industry standard that Pageflex, as a member of the Print On Demand initiative (PODi) helped to define. This format allows recurring images to be cached for high speed printing. As a standard, PPML allows interoperability across a wide range of presses from different vendors. Pageflex PPML output has been certified by PODi as being fully standards compliant, and has been tested with many presses and workflows.
- **PPML/VDX.** A standard developed by the Committee on Graphic Arts Technical Standards (CGATS), based on PPML. PPML/VDX is distinguished from PPML in that all the content is in PDF format, and the XML portion of the data is embedded within PDF. This enables the production of a single output file that permits interoperability and very efficient printing on presses that support this output format.
- **Xerox VIPP.** A format based on PostScript. VIPP offers a variety of modes for different printing workflows. Pageflex supports hybrid mode VIPP, which mixes PostScript and VIPP operators in output. The VIPP operators allow caching of recurring images for high speed printing. In the Pageflex implementation of this format, the driver fully composes all document pages before it generates output.

**Note:** You can also choose an HTML or HTML-email format. However, you must choose an HTML template in the **Template** list in order to see this output format. See Chapter 14, “HTML Output,” on page 347 for details.

## Setting Format Properties

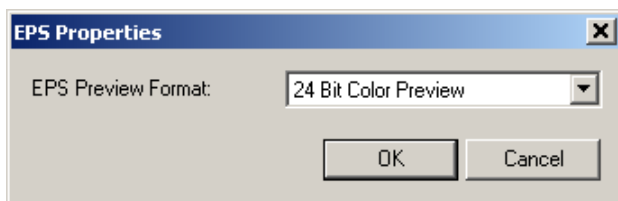
Once you have chosen a format, click **Properties** (next to the **Format** field) to open the **Output Properties** dialog box. The options available to you will change depending on the output format you chose:

- **EPS.** Choose between displaying an EPS preview or no preview. See below for details.
- **PostScript.** If you chose the Convert PostScript to PDF, CreoScitex-VPS, Indigo-JLYT, Optimized PostScript, PostScript, PPML/PostScript, or any other format derived from PostScript, choose a PostScript printer description (PPD), settings, and options for output. See “PostScript” on page 318 for details.
- **PDF.** If you chose native Portable Document Format (PDF) or PPML/VDX (which is derived from PDF), choose a multitude of options, including page content, meta data, image, security, font, and view options. See “PDF” on page 320 for details.
- **Bitmap.** Choose format, compression, color matching, and size options. See “Bitmap” on page 330 for details.

**Note:** The Document Instance and Xerox VIPP formats do not have properties, so the **Properties** button is unavailable.

### EPS

If you chose to create EPS output, click **Properties** to display the **EPS Properties** dialog box.



Choose between the following EPS Preview Formats:

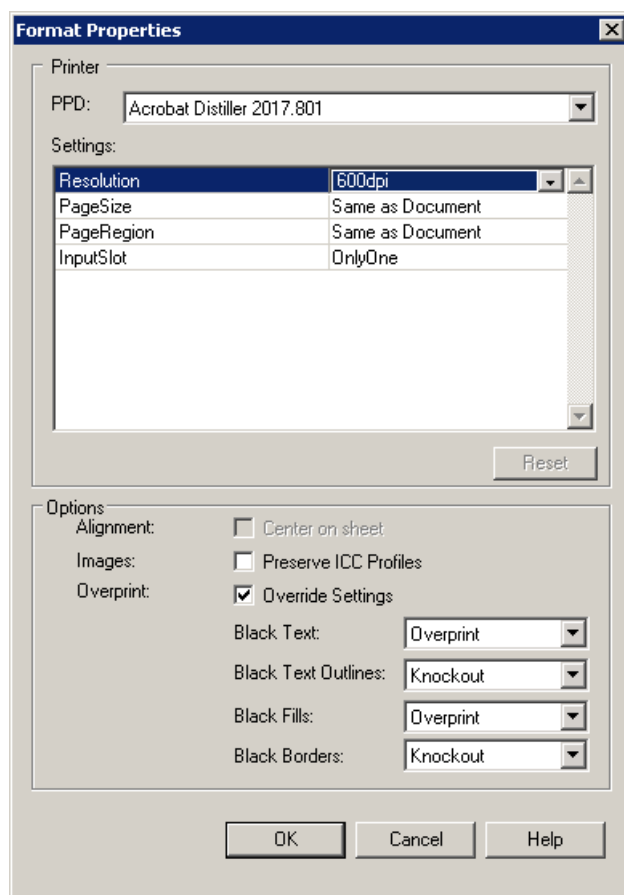
- **24-Bit Color Preview.** Choose this option to create a 24-Bit TIFF color preview of the EPS for viewing. The TIFF preview is embedded in the EPS file, and is used by applications that cannot directly display EPS directly, such as Studio, Adobe FrameMaker, and Microsoft Word. By using the TIFF preview, these programs can show an approximation of the final image on screen during editing.



- **No Preview.** Choose this option if you do not want to create a preview.

## PostScript

If you chose to create **PostScript** output or you are using a proprietary output format that require a PostScript Printer Definition (PPD), click **Properties** to display the **Format Properties** dialog box.



## PPD

Each printer vendor supplies a PPD file for their print device. This enables those who create documents and templates to specify specific settings for the print device. Each PPD has a settings unique to the printer it was designed for. In the **PPD** list, select a PPD file to use or **(None)** for no PPD. A PPD file contains information about the capabilities of a printing device. The available options for each PPD file vary with each printing device.

The PPD may contain device-specific PostScript code which will be inserted into your output if those options are selected. Be sure to use a PPD that matches the actual printing device that will receive the PostScript data.

**Note:** If your PPD file is not listed while creating the job, copy it to the **Programs\PPDfiles** directory and restart Studio. If you are using Pageflex Server to create output, also copy the PPD file to the **PPDfiles** directory on each Server machine (see the *Pageflex Server Guide* for details).

## Settings

Select the properties you want for the PPD file you selected. Most PPD options let you specify a paper or page size to use. When a property reads “Same as Document,” the PPD property uses the value from the template setup. For example, if the template page size is “letter,” the PPD uses letter-size as well. Studio uses the following settings to enhance your output options:

- **PageSize.** The **PageSize** field determines the size of the sheet. Choose a size from the drop-down list. See “Sheet Size” on page 300 for details about how Studio uses this setting for imposition.

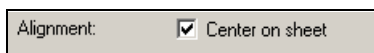
**Note:** If you are printing bleeds, you must select a page or paper size large enough to accommodate the bleed area in addition to the size of the template.

- **InputSlot.** The **InputSlot** field specifies the printer paper tray to use for output. See “Adding Paper Tray Assignments” on page 332 for details.

## Options

Select from the following options.

- **Alignment.** If you are using single page imposition, select the **Center on page** check box to center the document on the output page.

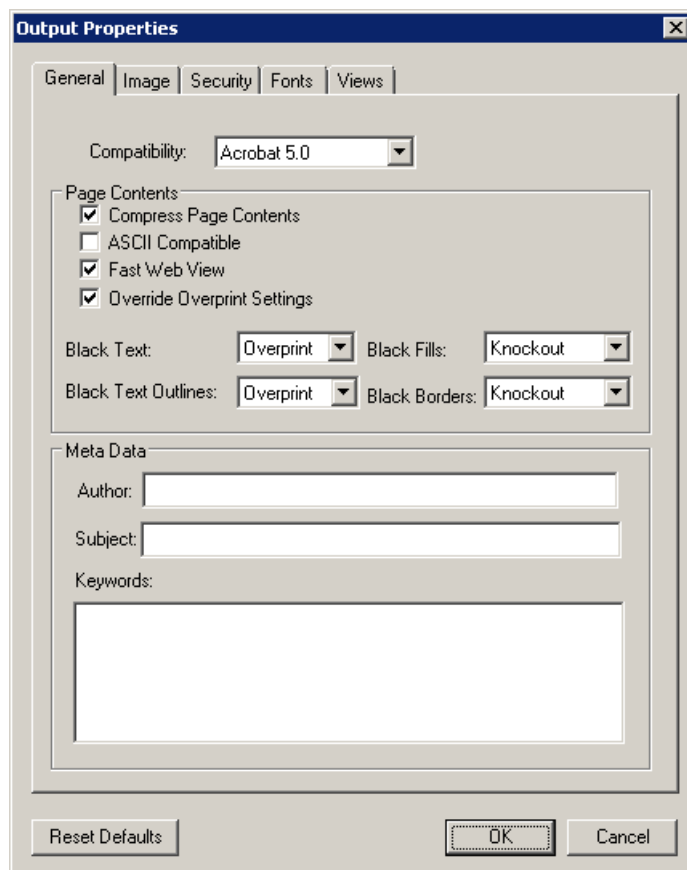


Studio uses the **PageSize** value for page centering. To make this option available, you must select a **PageSize** other than “Same as Document” in the **Settings** section.

- **Preserve ICC Profiles.** Select this option to preserve color profiles in JPEGs and TIFFs that have been tagged with ICC profiles.
- **Overprint.** Select **Override Settings** to override overprint properties for text, text outlines, fills, and borders using the color black in the document. Select “Knockout” to disable overprint or “Overprint” to enable it.

## PDF

Pageflex drivers can create PDF output using a built-in Adobe PDF Library. When you create a PDF output job, you have to select the PDF options to use. These options are also available when you use the PPML/VDX format. You can find out more information about these settings in the Distiller Parameters documentation and the PDF Reference guide published by Adobe. The Adobe Acrobat online help may also have some helpful information as many of the features are similar. Click **Properties** to display the **Output Properties** dialog box.



## General

Set general options on the **General** tab. Choose from the following options:

- **Compatibility.** Select the version of Acrobat you want the document to support. Currently, the Pageflex PDF Renderer makes use of features that are only compatible with Acrobat 3.0 (PDF 1.2). Only the version number of the PDF version in the file header changes.
- **Page Contents.** Select a check box to enable the function, or clear the check box to disable it.
  - **Compress Page Contents.** Instructs the renderer to compress the page contents using the “Flate” or “ZIP” encode filter. This can reduced the sizes of page contents by as much as 60% depending upon the contents.
  - **ASCII Compatible.** Encodes binary streams as pure ASCII if selected, or includes binary streams in the output if not selected. This uses the **ASCII85EncodePages** Distiller parameter. ASCII 85 encoding allows safe transmission over 7 bit channels. This instructs the PDF Renderer to encode the page contents with an ASCII 85 Encode filter to enable transmission of the page contents over a 7-bit communications channel.

**Note:** For backward compatibility purposes since most data communication channels these days are 8-bit. Old e-mail channels used to be 7-bit only, hence the reason for Base64 encoding of e-mail attachments.

- **Fast Web View.** Optimizes the file for fast Web view. This includes quickly displaying pages, such as the first page when the file is first opened and subsequent pages when the reader goes to another page; enabling the user to follow links before the page has been fully loaded; and displaying pages as they load.

This instructs the PDF Renderer to save the PDF as “linearized” for faster viewing over the Web. Linearization reorders the objects in the PDF so that the objects required to view the first page of the PDF are placed first in the PDF. In this way, these objects are transmitted first and can be displayed before the rest of the PDF is transmitted.

- **Override Overprint Settings.** Override the overprint properties for text, text outlines, fills, or borders using the color black in the document. This overrides all of the settings for black objects in the entire document. The check box is cleared by default to prevent the overprint settings for legacy artwork from being unexpectedly changed. Select the check box and select “Knockout” to disable overprint or “Overprint” to enable it for a property.

- **Meta Data.** Add an **Author**, **Subject**, and **Keywords** to associate with this PDF file. Acrobat displays these items in the **Description** field in the **Document Properties** dialog box.

There are several positive benefits to these exposed features:

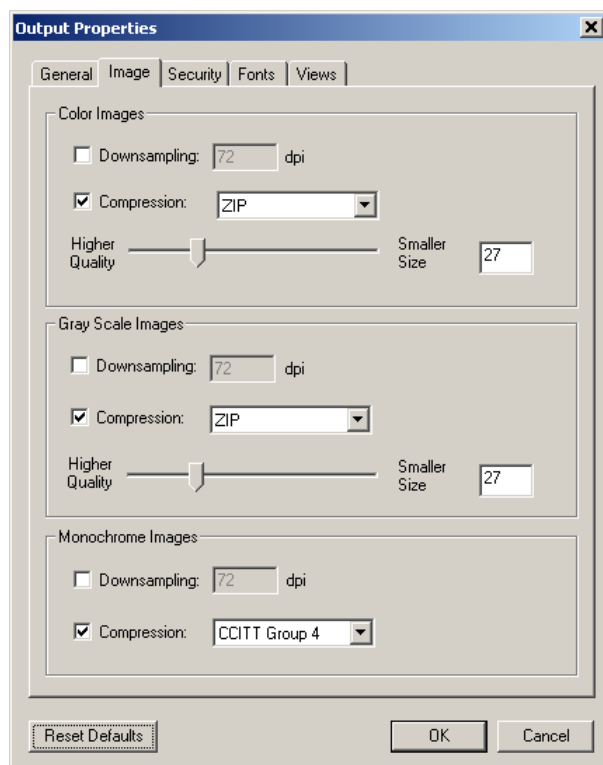
- **Author.** You can attribute the job or author to a specific firm or person.
- **Subject.** You can attribute the job to a particular firm.
- **Keywords.** Useful for Copyright statements.

Additionally, Acrobat Catalog will pick up on these fields and allow you to search a collection of PDFs based on the contents.

**Note:** At any time, you can click **Reset Defaults** to reset all the fields on every tab back to the defaults. You can also click **OK** to save the changes, or **Cancel** to exit without saving changes.

## Image

Click the **Image** tab to set image options.



The image options specify compression and downsampling for images. You may want to experiment with these options to find an appropriate balance between

file size and image quality. You can choose downsampling and compression for color, grayscale, and monochrome images.

- **Downsampling.** Select this check box and a resolution to reduce the number of pixels in an image by averaging the values of surrounding pixels using a Bicubic filter. Enter the resolution for the downsampling.

Adobe recommends that the resolution setting for color and grayscale be 1.5 to 2 times the line screen ruling at which the file will be printed. The resolution for monochrome images should be the same as the output device, however, saving a monochrome image at a resolution higher than 1500 dpi increases the file size without noticeably improving image quality. You may also want to consider whether users need to magnify a page. For example, if you are creating a PDF of a map, consider using a higher image resolution so users can zoom in on the map.

**Note:** Resampling monochrome images can have unexpected viewing results, such as no image display. If this happens, turn off resampling and convert the file again.

The following table shows common types of printers and their resolution measured in dpi, their default screen ruling measured in lines per inch (lpi), and a resampling resolution for images measured in pixels per inch (ppi). For example, if you were printing to a 600-dpi laser printer, you would enter 170 for the resolution at which to resample images.

Printer resolution	Default line screen	Image resolution
300 dpi (laser printer)	60 lpi	120 ppi
600 dpi (laser printer)	85 lpi	170 ppi
1200 dpi (imagesetter)	120 lpi	240 ppi
2400 dpi (imagesetter)	150 lpi	300 ppi

Images should be sampled at a rate suitable for the desired, ultimate output. For example, if the output is destined for a high speed digital press then 600 dpi should be good enough. If it is for a display then 100 dpi should be more than adequate. If the output for a high speed digital press is to be displayed for proof purposes, consider JPEG compression at a low QFactor (see below) instead of resampling. That will increase the PDF Renderer throughput as well as significantly reducing the file size of the PDF. Downsampling will only slow down the PDF Renderer and cause significant memory consumption.

It is best to have a single high resolution image (for example, 600 dpi) and then to apply the following filters to it in the following situations:

- **Display, preview, and proof**—no downsampling (if possible) and a low JPEG quality factor (QFactor).
- **Print production**—no downsampling (if possible) and ZIP (Flate) or JPEG encoding with a high QFactor.

**Note:** There are some image types that the PDF Renderer does not and cannot downsample, such as Masked images, Images with Alpha Channels (Soft Mask), and Indexed Images. Downsampling of these images may create image artifacts that may not meet quality expectations.

- **Compression.** Select this check box and a compression format. This option reduces the file size using the compression algorithms of the selected format. For **Color Bitmap Image Compression**, choose **JPEG** or **ZIP** compression.
  - **JPEG.** Select this compression method for color or grayscale images. JPEG works well on continuous-tone photographs that contain more detail than can be reproduced on-screen or in print.
  - **QFactor Slider.** Use the slider to adjust the quality, or **QFactor**. The higher the QFactor the higher the compression and the lower the quality. The lower the QFactor the lower the compression but the higher the image quality. Move the slider to the right to increase the QFactor and therefore the compression. Move the slider to the left to lower the QFactor and therefore decrease the compression and improve the image quality. The text box next to the slider lists the size in kilobytes. You can also enter the size directly into this box.
  - **ZIP.** Select this compression method for color, grayscale, or monochrome images. ZIP is a lossless encoding scheme, which is not true with JPEG. JPEG is a lossy encoding scheme. ZIP works well on images with large areas of single colors or repeating patterns, such as screen shots, simple images created with paint programs, and black-and-white images that contain repeating patterns. ZIP compression does not allow you to set the quality with the slider. Studio uses 8-bit zip compression.
  - **CCITT Group 4.** Select this compression method for monochrome images. CCITT (International Coordinating Committee for Telephony and Telegraphy) is appropriate for black-and-white images made by paint programs and any images scanned with an image depth of 1 bit. CCITT is a lossless method.

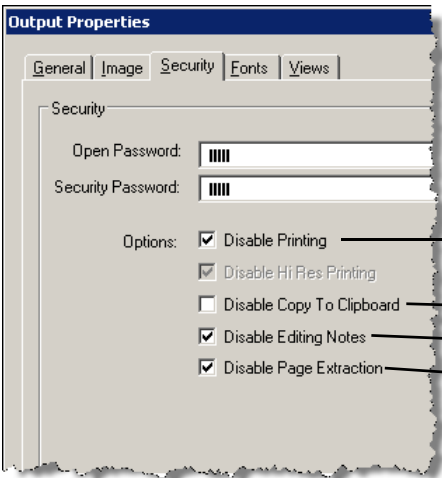
**Note:** Be sure to scan monochrome images as monochrome, not grayscale. Some scanners save scanned text as grayscale images by default. Grayscale text compressed with the JPEG compression method may be muddy and unreadable.

Click **Reset Defaults** at any time to reset all the values on both tabs of the dialog box.

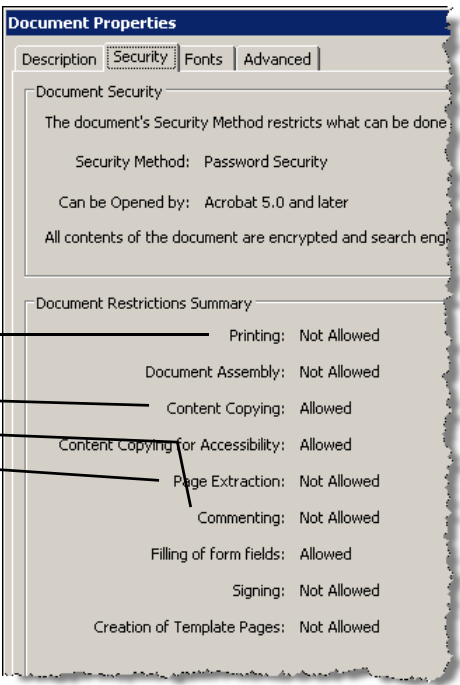
**Security**

Click the **Security** tab to set these options.

**PDF Output Properties**



**PDF Document Properties**



**These images show the relationship between the PDF output properties you can set when creating the PDF, and how the PDF document properties reflect these settings.**

You can limit access to a document by setting passwords and by restricting certain features, such as printing and editing. When a document has restricted features, any tools and menu items related to those features are unavailable. The following security options are available.



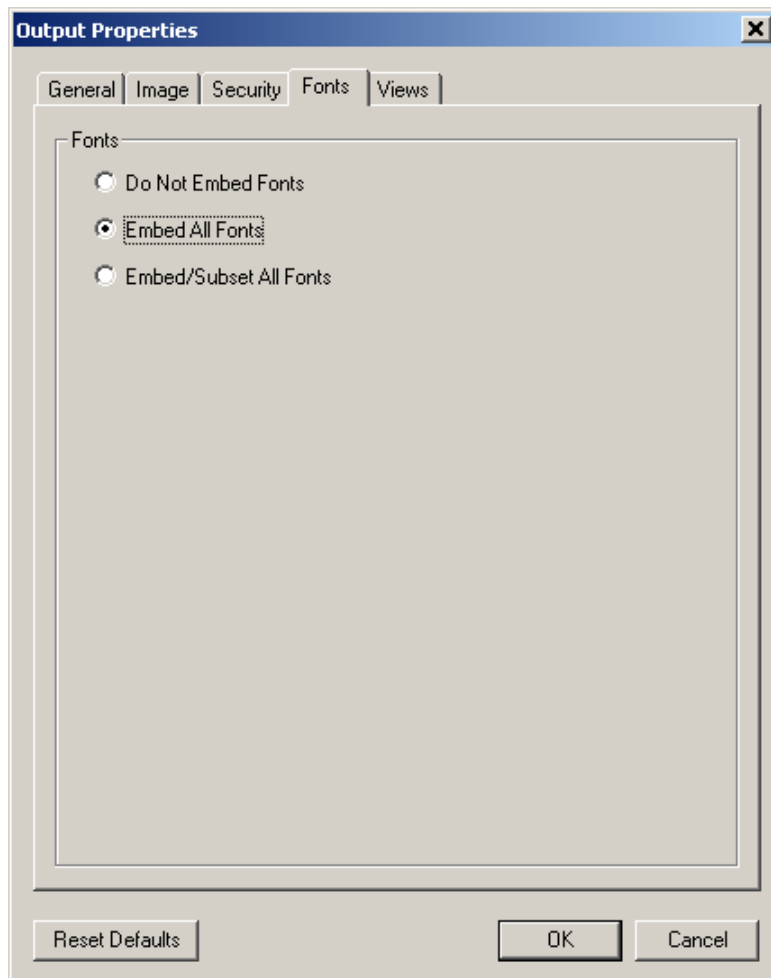
- **Open Password.** This password, also known as the document open password, is just for opening the document. Set a password if you want to restrict who can view the document. Acrobat uses the RC4 method of security from RSA Corporation to password-protect documents. If you want to restrict printing or changing the document then include the security settings below.
- **Security Password.** This password, also known as the permission or owner password, is necessary to change the security settings for the document. Set a password that for someone to enter to be able to change security settings. Studio uses the same security methods as Adobe Acrobat; if the user chooses to select one of the security options and fails to assign a security password then there will be no way of changing the security settings. In this way, you can create a PDF with security settings that can never be changed.

**Note:** If you forget a password, there is no way to recover it from the document. It's a good idea to store passwords in another secure location in case you forget them. Also, keep a backup copy of the document that is not password-protected.

- **Disable Printing.** Prevents users from printing the PDF.
- **Disable Hi-res Printing.** Prevents users from printing high resolution output. This setting prints the document at no higher than 150-dpi resolution. Acrobat viewers earlier than version 5.0 do not recognize this security setting. For viewers that do recognize the setting, this option disables the conversion of the document to PostScript.
- **Disable Copy To Clipboard.** Prevents users from selecting and copying text, images, and other content onto the clipboard. It also prevents utilities that need access to the contents of the file, such as Acrobat Catalog, to get those contents. The PDF Document properties refer to this setting as “Content Copying”.
- **Disable Editing Notes.** Prevents users from entering editing notes. The PDF Document properties refer to this setting as “Editing”.
- **Disable Page Extraction.** Prevents users extracting pages from the document. Users cannot insert pages from the PDF into another PDF using **Document ⇨ Insert Pages** or **Document ⇨ Replace Pages**.

## Fonts

Click the **Fonts** tab to set font options.

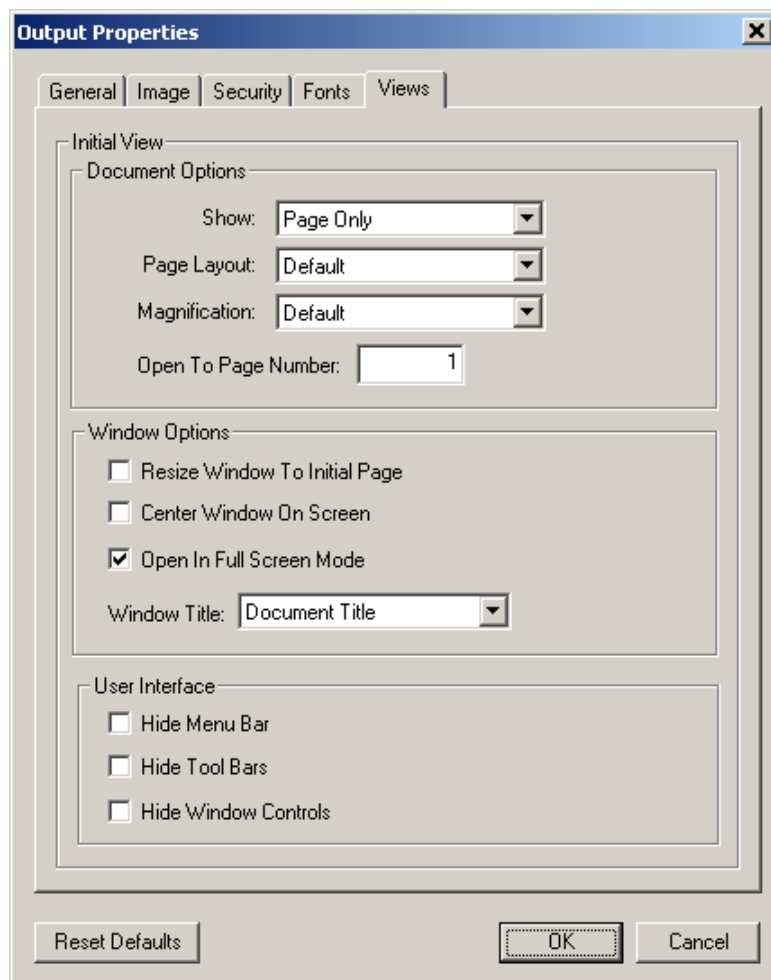


Choose an option for how to handle the fonts used in each document.

- **Do Not Embed Fonts.** This option does not embed the fonts. The font names are retained if the fonts are available when the document is opened.
- **Embed All Fonts.** This option embeds all the characters for all the fonts used in each document, even unused characters.
- **Embed/Subset All Fonts.** This option embeds all the fonts, but only the characters that actually appear in the document.

## Views

Click the **Views** tab to set view options.



Choose options to configure the initial view settings for your PDF. In the **Document Options** section, choose how you want to display the document.

- **Show.** Choose the panels to display when someone first views the document.
  - **Page Only** displays only the page in the **Document** pane.
  - **Pages Panel and Page** displays the thumbnail view in the **Navigation** pane as well as the page in the **Document** pane.
- **Page Layout.** Choose how to layout pages in the **Document** pane.
  - **Default** uses the defaults set by the user in their viewer.
  - **Single Page** displays one page at a time in the Document panel.

- **Continuous** arranges the pages in a continuous vertical column.
- **Facing** arranges the pages side-by-side, displaying only one or two pages at a time, with odd pages to the left.
- **Continuous Facing** arranges the pages side-by-side in a continuous vertical column, with odd pages to the left. If a document has more than two pages, the first is displayed on the right to ensure proper display of two-page spreads.
- **Magnification.** Choose the initial magnification.
  - **1600%-25%** fits the page to the selected magnification.
  - **Fit Page** resizes the page to fit entirely in the window.
  - **Fit Width** resizes the page to fit the width of the window.
  - **Fit Visible** resizes the page so that its text and graphics fit the width of the window. Part of the page may be out of view.
  - **Default** uses the defaults in the user preferences. See **Edit⇒Preferences** in the Acrobat viewer to set these options.
  - **Open to Page Number** opens the document to the specified page number.

In the **Window Options** section, choose the properties of the window for when someone opens the document.

- **Resize Window to Initial Page.** Select this check box to resize the window to the page size of the initial page of the document.
- **Center Window On Screen.** Select this check box to center the window on the screen.
- **Open in Full Screen Mode.** Select this check box to open the window in full screen mode.

**Note:** If you enable full screen mode, the page layout and magnification options will be disabled, as the page layout is automatically set to single page and the magnification will be set to fit page.

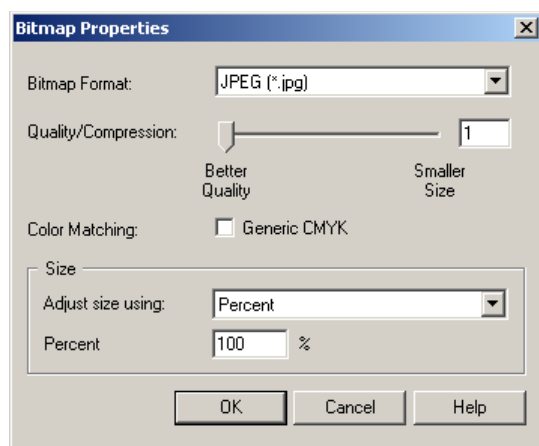
- **Window Title.** Choose to use the **File Name** or the **Document Title** as the title of the window.

In the **User Interface** section, choose to hide or show specific controls.

- **Hide Menu Bar.** Select this check box to hide the menu bar.
- **Hide Toolbars.** Select this check box to hide all toolbars.
- **Hide Window Controls.** Select this check box to hide all window controls.

## Bitmap

If you chose to create **Bitmap** output, click **Properties** to display the **Bitmap Properties** dialog box.



**Note:** If you are using a Pageflex WebForm to submit the job to Pageflex Server, also select **Default Output Folder** in the **Send to** box.

Select from the following options.

- **Bitmap Format.** Select a bitmap output format. The Pageflex Bitmap driver supports one of three bitmap formats: **JPEG**, **TIFF**, or **Compuserve GIF**. Use one of these bitmap formats to create image files as the final output. The bitmap driver does not support PostScript options.
- **Quality/Compression.** If you select the **JPEG** format, you must choose between a better quality image with a larger file size or a lesser quality image with a smaller file size. Move the slider between the two options, or enter a number from 1 to 100 in the box, where 1 is the best quality and 100 is the smallest file size.
- **Color Matching.** Select the **Generic CMYK** check box to create the bitmap using a generic CMYK color profile. The result is bitmap output that more closely matches CMYK print colors.

Under **Size**, select options to set the size of the bitmap.

- In the **Adjust size using** list box, choose **Percent**, **Width**, or **Height**.
  - If you choose **Percent**, the size is determined as a percentage of the document size. Enter a percent for the image size in the **Percent** box.

- If you choose **Width** or **Height**, enter the number of pixels for the dimension you specified. The other dimension is calculated in proportion to the size you specify.

Click **OK** when you are finished to save changes, **Cancel** to exit without saving, and **Help** for online help.

---

## Adding Paper Tray Assignments

You can assign paper trays specified in the **PPD InputSlot** to specific job media to be used for each page in your template, including master pages. For example, you can load hard paper stock for report covers in one paper tray of your printer and glossy paper for insert pages in another paper tray, then set the job media for each page using the **Info** tab on the **Properties** panel.

You can set job media for master pages so that whenever you apply that master page to a page in your template, the associated job media will also be used.

Mapping Job Media values to PPD input slots, rather than mapping pages to input slots, provides for portability of templates between projects and jobs with different PPD settings.

### ► To add paper tray assignments

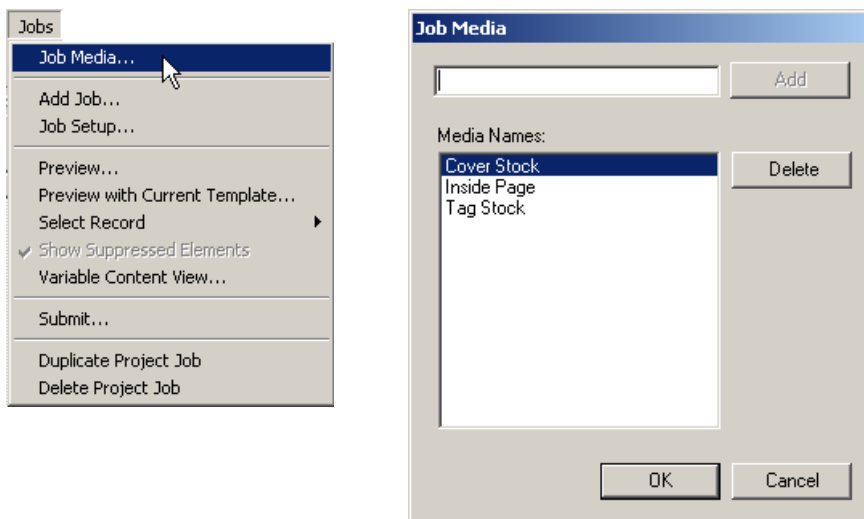
- 1 Create Job Media names.
- 2 Assign job media to pages in your template.
- 3 Select an output format and PPD that supports the Input Slot parameter.
- 4 Map job media to input slots.
- 5 Put the appropriate paper into the printer tray before you submit the job to generate output.

These steps are described below in detail.

## Create Job Media Names

Job Media is a user-defined name for the type of media to use for output for a specific page. Studio saves job media names as part of a project. You then assign these names to template pages in Studio.

Select **Job Media** from the **Jobs** menu to add or delete job media names.

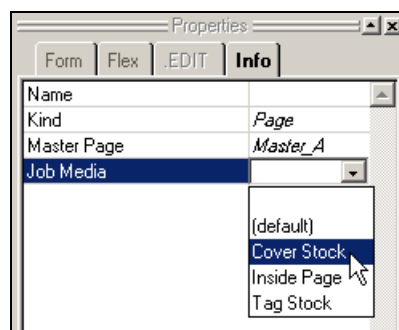
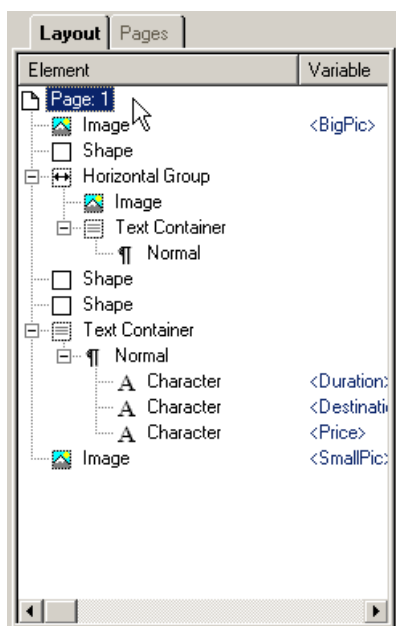


Enter a job media name and click **Add**. To delete a media name, highlight the name and click **Delete**. Click **OK** to save changes and exit the **Job Media** dialog, or click **Cancel** to exit without saving changes.

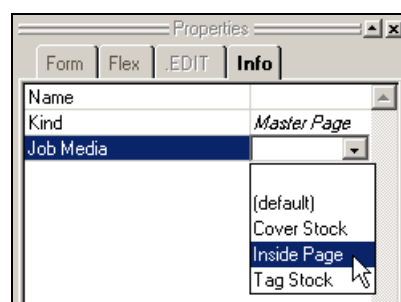
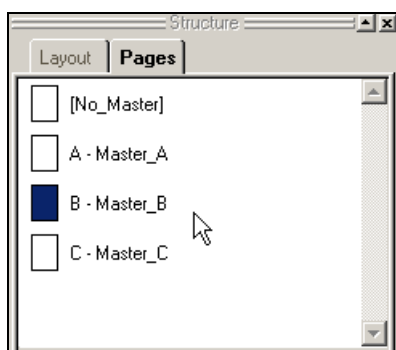


## Assign Job Media to Pages

Select a page in your template and click the **Info** tab in the **Properties** panel.



Choose a job media name to assign to the page output. Choose the empty space to use the paper tray used by the previous page. Choose **(default)** to use the default paper tray as specified in the PPD. To assign a master page to job media, click the **Pages** tab, double-click a master page to select it, and click the **Info** tab in the **Properties** panel.



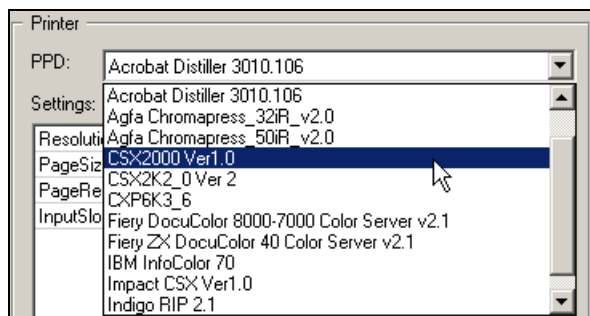
Select a job media type to apply it.

## Select Output and PPD

In the **Job Setup** dialog, select a format that supports PPDs.



Click **Properties** to open the **Format Properties** dialog. Choose a PPD that supports the **InputSlot** parameter.



### Paper Tray Assignments Not Available

If you chose an incompatible format, such as a format that does not use PPDs, the paper tray assignments will not be available in the **Output** section of the **Job Setup** dialog.

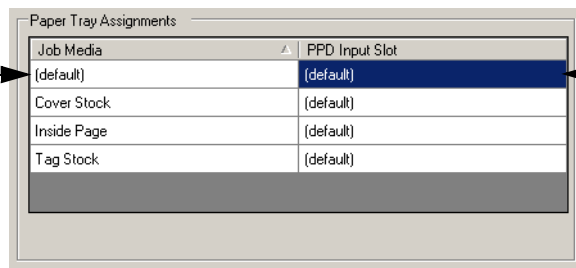
## Map Job Media to PPD Input Slot

The **Paper Tray Assignments** section in the **Output** section of the **Job Setup** dialog lists all job media assignments available in the project.

### Default

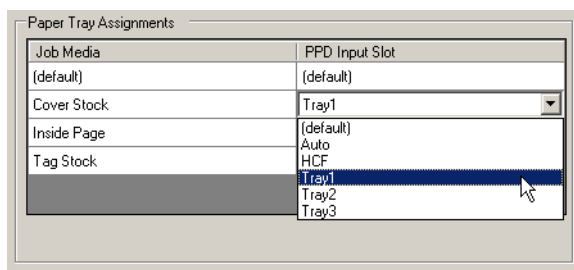
### Job

### Media



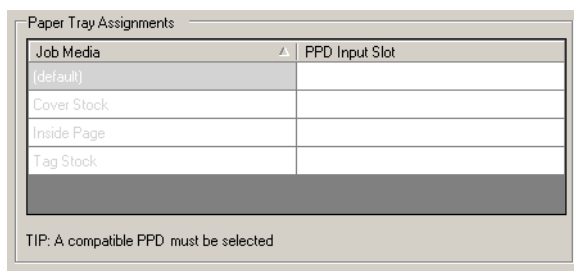
### Default Input Slot

By default, Studio assigns the **default input slot** to all job media. The **default job media** represents the input slot value for all pages that are not assigned to a specific job media. You can map the default media value onto the default input slot or to any specific tray. To map job media to an input slot, click the box next to the job media and choose a tray from the drop-down list.



## Incompatible PPD Format

If you chose an incompatible PPD format, you will not be able to map job media to an input tray and the paper tray assignment controls will be disabled.



# Previewing a Job

Once you have applied some project variables, you can preview the project records in a job. Previewing helps you determine whether your template correctly accommodates the variable content of the project.

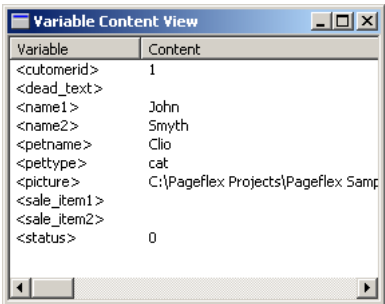
You have two options for previewing the project records for a job, depending on whether the job specifies a profile data source. The data source for a job is listed on the **Input** tab of the **Job Setup** dialog box.

- **Jobs using a data source.** If the job has a data source, you can preview the records in that data source. Before you can preview the records for a particular job, you must make sure you have set up ODBC for each of the data sources you use in the project.
- **Jobs with no data source (transactional jobs).** If a job has no specified data source on the **Job Setup** dialog box, you can enter information to use for each variable. Using this information, Studio creates a preview for a single record. You have the option to submit the preview record for final output.

**Note:** This type of preview is helpful if you are designing your project to accept transactional job submissions from another application such as a Web browser. See “Creating and Previewing Transactional Jobs” on page 340.


► **To preview a job with a data source**

- 1 Select a job that lists a **Data Source** on the **Job Setup** dialog box. For a job with no data source, see page 341.
- 2 If you want to view the variable content used in each record, choose **Jobs > Variable Content View**. The **Variable** column shows the name of each variable. The **Content** column shows the value for each variable:




Open the **Variable Content View** before opening a preview window, as you will not be able to open it after you have begun previewing a job.

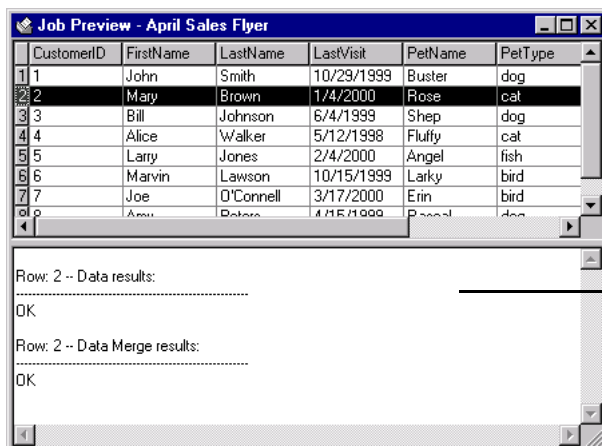
**3** To open the Job Preview window, perform one of the actions below.

- On the **Job Setup** dialog box, click **Preview**
- Select a job in the Project panel, and choose **Jobs > Preview**
- Select a job in the Project panel, and choose the Preview Job icon  in the Job toolbar

Or to preview the job using the template currently selected in the document area, perform one of the actions below.

- Select a job in the Project panel, and choose the Preview Job with current template icon  in the Job toolbar.
- Select a job in the Project panel, and choose **Jobs > Preview with Current Template**

**4** Studio displays the template connected to the job in the Document window. It also displays the Job Preview window.



— **Profile Data  
Source Table**

— **Status Messages  
for the Data Ingest**

- 5** The top of the Job Preview window displays the database table for the profile data source. Each column represents a field in the database, and each row is one record.
- 6** To preview a particular record, click the row for the record. Studio ingests the variable contents for the selected record and displays the results in the Document window.

- If Studio encounters any problems ingesting the data, it displays an error message in the lower part of the Job Preview window.
  - You can choose to show or hide suppressed elements while you are previewing. See “Previewing Suppressed Elements” below.
- 7 To preview additional records, click other rows. You can also use the arrow keys on your keyboard to scroll up and down through the records.
  - 8 When you have finished previewing records, close the Job Preview window.

## Previewing Suppressed Elements

While previewing a job, you can choose whether you want to show elements you have suppressed in the template using the suppress printing property.

Showing or hiding suppressed elements has no effect on how these elements appear in the final output. When you create the job, you can choose whether or not to include suppressed elements in the final output. See “Adding a New Job” on page 285.


### ► To view or hide suppressed elements

- 1 Preview a job, either a job with a data source or a transactional job.
- 2 Choose **Jobs > Show Suppressed Elements**. If a check mark appears beside this menu item, the preview includes elements with the Suppress Printing property set to **Yes**.
- 3 If there is no check mark beside the menu item, the preview does not include elements with the Suppress Printing property set to **Yes**.

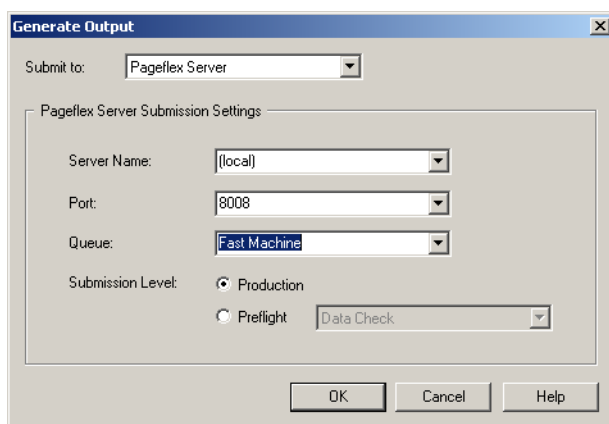
# Submitting a Job

Submitting a job sends a request to Server for output. Submitting the job is the “hand-off” to Server. Before submitting a job, make sure that the Server is running.

## ► To submit a job

- 1 Perform one of the following actions to display the Submit Job dialog box.
  - On the **Job Setup** dialog box, click **Submit**.
  - Select a job in the Project panel, and choose **Jobs > Preflight Check**
  - Select a job in the Project panel, and choose **Jobs > Submit Job**
  - Select a job in the Project panel, and choose the Submit Job icon  in the Job toolbar

Studio displays the **Generate Output** dialog box.



- 2 In the **Submit to** box, make sure Pageflex Server is selected.
- 3 Under **Server Submission Settings**, enter the following information about your connection to Server.
  - **Server Name.** If you are using Server on the same machine as Studio, choose (local). Otherwise, type the machine name. The machine name is the name you see in the Network Neighborhood window.
  - **Port.** Enter the number of the port that Server is set to monitor. You can find the port number in Server on the **Setup** dialog box under **Port**.

- **Queue.** Enter the queue to assign the job to or leave it set to **(default)** to use the default job queue associated with this port. See the *Pageflex Server Guide* for more information about queues.
- 4 Under **Submission level**, you can choose how far you want Server to go towards producing the final output. Choose one of the following.
- **Production.** Use this option when you are ready to submit the job for final output. Server performs all data checks, composes each document, and runs any post processes you have specified.
  - **Preflight, Data Check.** This is the first level of preflight that Server can perform. Server reports any problems it encounters with opening the data source and interpreting the variable definitions. It checks if the variables are valid but stops before composing the page or running any post processes.
  - **Preflight, Compose.** Server checks the project data and composes each page. It stops before it creates the final output and before it runs any post processes.
- 5 Click **OK**. If Server accepts the job, Studio displays a response from Server. If Server is unable to accept the job, it returns a message explaining the problem.
- Click **Cancel** to exit without sending the job, or **Help** for online help.



# Creating and Previewing Transactional Jobs

A transactional job is a job that uses the application driving the submission, such as a Web page, to collect profile data instead of a database or ODBC connection. Typically, transactional jobs create one record at a time, as when a customer uses a form on a Web page to submit a single request for information.

Before you create a transactional job, you should set up a database with test data to use while you are developing the project. Use the fields in the test database to create the variables for the project. Get the project up and running with the test data before you attempt to create transactional jobs.


Develop the Web page or the application for the job submission. Use the same variable names as the ones you created with the test database. You can use Pageflex WebForm Wizard to make an Active Server Page (ASP) or ASP.NET page as a starting point, and then edit the HTML file it creates to match the look and feel of your Web site. See the *Pageflex Server Guide* for details.

When you are ready to make a transactional submission, follow the steps below to create the transactional job.


## ► To create a transactional job

- 1 Click **Add Job** on the Project panel to create a new job. Studio displays the **Job Setup** dialog box.
- 2 Enter a **Job Name**.
- 3 Set the **Data Source** to **(none)**. This causes all profile variables (including constant variables) to have no values. This is because the Web Form or other application that submits the job provides the variable values.
- 4 Select a template to use in the template list. The list displays all the templates you have added to the project.
- 5 Choose an output format.
  - To have the job create a PDF file, select **Portable Document Format (PDF)** in the format list.
  - To have the job create a bitmap, select **Bitmap** in the format list.
- 6 Click **OK** to save the job.

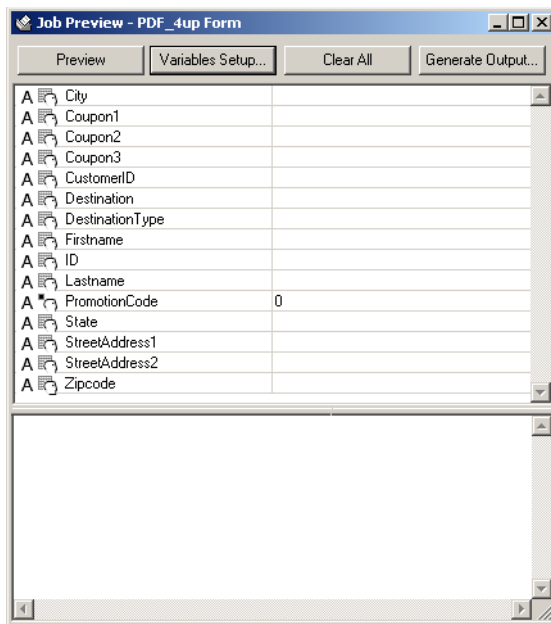
## ► To preview a transactional job

- 1 Select a job with a **Data Source** of **(none)**.
- 2 Open the Job Preview window by performing one of the actions below.
  - On the **Job Setup** dialog box, click **Preview**
  - Select a job in the Project panel, and choose **Jobs > Preview**
  - Select a job in the Project panel, and choose the Preview Job icon  in the Job toolbar

Or to preview the job using the template currently selected in the document area, perform one of the actions below.

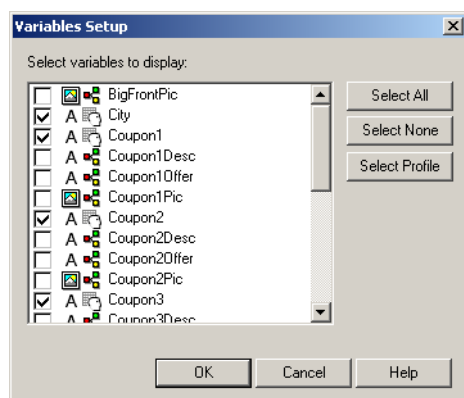
- Select a job in the Project panel, and choose the Preview Job with current template icon  in the Job toolbar
- Select a job in the Project panel, and choose **Jobs > Preview with Current Template**

Studio displays the **Job Preview** window for a transactional job. The top part of the window lists the variables in the project and the values you want to use for the preview.



Variable	Value
A City	
A Coupon1	
A Coupon2	
A Coupon3	
A CustomerID	
A Destination	
A DestinationType	
A Firstname	
A ID	
A Lastname	
A PromotionCode	0
A State	
A StreetAddress1	
A StreetAddress2	
A Zipcode	

- 3 To change the variables in the preview list, click **Variables Setup**.



- 4 Do any of the following until you have selected the variables you want to include in the list.
- Select the check box next to a variable you want to include.
  - Clear the check box for a variable you want to exclude.
  - Click **Select All**, **Select None**, or **Select Profile** to change more than one variable at a time.
- 5 Click **OK** when you are finished. Studio returns to the **Job Preview** window.
- 6 Type values for each of the variables in the top part of the **Job Preview** window. For variables that require a file name instead of a text value, click the button in the value column to choose a file from the project folder.

Remember the following:

- Any variable you leave blank has an empty value for the preview.
- You can click **Clear All** at any time to reset the values of all the variables.
- Profile variables use the new values you assign to them.
- The value that you assign to a content variable overrides its calculated value from a rule, script, library query, or plug-in.
- Make sure that any variables you leave empty are allowed to be empty. If you leave variables empty that are not allowed to be empty, Studio displays a warning message when you attempt to create the preview.
- You can choose to show or hide suppressed elements while you are previewing.

- 7 Click **Preview** to see the template using the values you have assigned.

If Studio encounters any problems, it displays error messages in the lower part of the Job Preview window.

To submit the job using the values you have entered, click **Submit Job**. Studio displays the Submit Job dialog box. See “Submitting a Job” on page 341 for information on submitting a job for final output.

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# HTML Output

14

This chapter explains how to use Studio as a variable tagging tool to create customized HTML output for use as personalized Web microsites or HTML e-mail blasts that can be sent immediately.

# What is HTML Output?

HTML output is a way of applying new variable definitions to HTML files and repurposing existing variable definitions for HTML files for use as personalized Web microsites or HTML-formatted e-mail messages.

Studio operates as a variable tagging tool, allowing you to add variables to previously created HTML files and send HTML jobs to an HTML output driver. This driver generates Web microsites or HTML-formatted e-mail messages from HTML templates with custom images or text. You can set the driver to send e-mail messages directly to customers, or you can post output as Web microsites for personalized access by clients.

This chapter describes the process for creating HTML output. The steps below give a brief overview of the steps to take to create HTML output. The rest of this chapter goes over each of these steps in detail.

## ► Overview of steps to create HTML output

- 1 Create a project and variables in Studio or open an existing project to use to repurpose variables in an HTML document, for example, for use in a marketing campaign.
- 2 Create an HTML template using an HTML editor. We recommend that you save your HTML template and associated images and files in the WebPages project folder. Save the HTML file in UTF-8 format and add a meta tag designating the UTF-8 charset for use in the file. For Example:

```
<HTML>
  <HEAD>
    <META http-equiv=Content-Type content="text/html; charset=utf-8">
  </HEAD>
  <BODY>This is an HTML encoded emdash –
    and this is an HTL encoded ndash –
  </BODY>
</HTML>
```

- 3 Open your HTML template in Studio and tag it with variables.
- 4 Create a job for HTML output. Choose to output files for a personalized website or send out personalized HTML-formatted e-mail messages.
- 5 Preview your HTML job in Studio.
- 6 Once you are satisfied, submit the job to the driver to generate output.

# Setting Up Your Project

You do not need to create a new project to take advantage of HTML output capabilities. You can use an existing project that is already set up with print templates (XDT and TSL files), jobs, and variables, and apply those same variables to HTML files. In this way, you can reuse content from your print marketing campaigns in your HTML campaigns.

## Project Folders

The contents of your folders are limited to or expanded by the following capabilities:

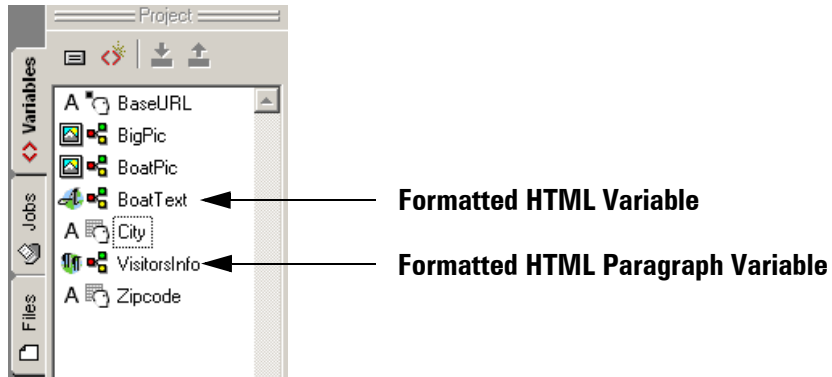
- **Area Templates.** HTML Output templates cannot take advantage of area template variables, so any area templates in this folder will not be available.
- **Images.** The Images subfolder of your main project folder continues to be the repository for your image variable content.
- **Scripts.** You can continue to use scripts for variables, for example, you may want a script to create an HTML fragment:
 

```
Function getLink(BaseURL, UserID)
    url = BaseURL & UserID
    getLink = "<a href=' " & url & "'>Click here for details</a>"
End Function
```
- **Text.** You can continue to place all text variables in this folder, as well as the two HTML variables described in “Creating Variables for HTML Elements” on page 354.
- **WebPages.** You should build your HTML files in this folder. This folder contains sub folders for image handling.
  - **Images.** The primary function of this folder is to serve as a repository for images that you do not want the HTML driver to automatically generate for display on the Web. The driver checks for files with the same name as files in your Images folder and does not automatically generate them if they exist.
  - **Autogen.** This folder contains image variable content the HTML driver automatically generates for your HTML output.

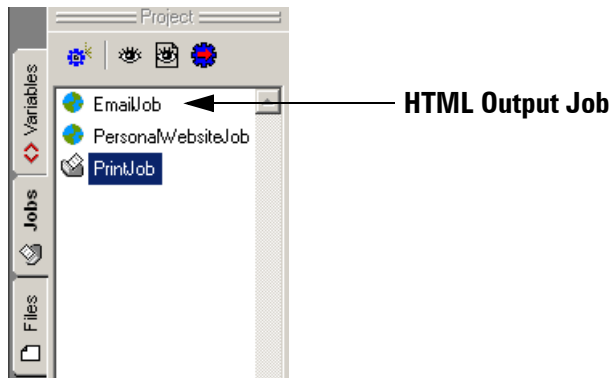
## Project Panel

The Project panel displays the HTML-specific variables, jobs, and templates with different icons to distinguish them from the others.

### Variables Tab



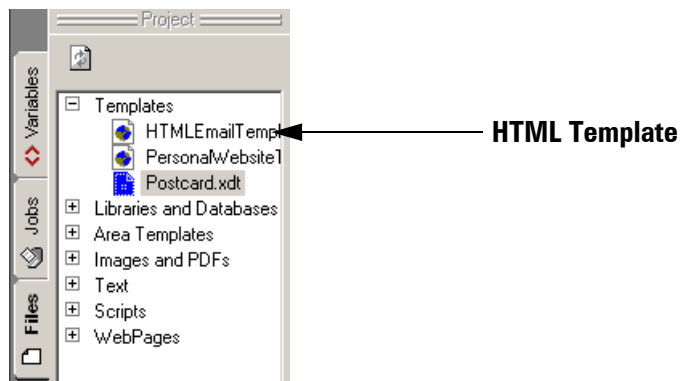
### Jobs Tab





## Files Tab

Studio displays HTML Templates stored in your WebPages folder in the Templates view of the files tab, so all of your templates, print and HTML, are accessible from the same area.



Once you have opened or created the project you want to use to create HTML output, you can create your HTML template using an HTML editor.

## Create an HTML Template

An HTML template is an HTML file with variables applied so that an HTML job can be run to create multiple instances of a personalized Web page or HTML-formatted e-mail message. Studio cannot create HTML files, instead, the program functions as a variable tagging tool to convert pre-created HTML files into HTML templates. You must create the HTML file using an HTML editor and load it into Studio for tagging with variables.

To create an HTML template, first use an HTML editor to create an HTML file and save this file to the WebPages folder of your main project folder in UTF-8 format. Open this file in Studio. Once you have tagged and saved this HTML file, Studio makes changes to the HTML source so that it can be recognized as an HTML template.

Studio should not be used as a substitute for your HTML editor. Although you can make small text edits in your HTML using Studio, you should use your HTML editor for everything else. If you find that you need to make changes to your HTML, close the template in Studio, open it in your HTML editor, make the changes, save the template, and open it again in Studio for tagging and previewing.

## Using Placeholder Text For Variables

Any text in your template that you decide to replace with a variable will be overwritten by the variable name. Do not spend too much time crafting this variable placeholder text, as once you apply a variable to it, Studio replaces the text with the variable name.

## Viewing HTML Source

You can view the source of your HTML file at any time. To do so, **right-click** anywhere on the HTML template in the document window and choose **View HTML Source**. You cannot edit the source in this window, but you can copy, paste, or find code within it. To do so, **right-click** in the window and choose the appropriate action.

## Using CSS

You can reference external CSS files in HTML output files generated for Web pages. However, if you are using CSS in HTML output files intended for e-mail distribution, you should include the CSS information inline with the HTML template. If you include CSS inline, the line cannot start with a period. Insert spaces or tabs before the period, as shown in the example below.

### Example

```
<STYLE>
  .body {font-family: Verdana; font-size: 11px;}
  .legaltext {font-family: Verdana; font-size: 10px;}
  .title {font-family: Verdana; font-size: 15px; font-weight: bold}
</STYLE>
```

You can use images within CSS used for HTML output that will exist on Web pages, but do not include images within styles that will be used for e-mail, as Studio cannot include CSS-embedded images when it generates the e-mail.

## Creating Variables for HTML Elements

In addition to repurposing your plain text, formatted text, formatted paragraph, and image variable content from your print template to HTML templates, you can create new variables for these types of content, as well as the following HTML-specific variables:

- **Formatted HTML** variables for inline HTML content with no paragraph breaks, such as HTML links. These variables can contain line breaks.
- **Formatted HTML paragraph** variables for block-level HTML content such as paragraphs, headers, horizontal rules, and tables.

HTML templates do not support area template or document variables and print documents cannot use HTML-specific variables. Create HTML variables using the same methods to create other variables, as described in the “Adding or Editing Variables” section on page 261.

### Formatted HTML

A formatted HTML variable is a section of HTML that belongs within a paragraph but does not form a paragraph by itself. Formatted HTML may contain inline HTML elements, such as bold or italic text and line breaks, but may not contain any block-level HTML elements, such as paragraphs, headings, and horizontal rules. Formatted HTML can include other inline and text variables, but not block-level or paragraph variables.

Create formatted HTML content in a text editor and save it to the Text folder in your Project folder. Save formatted HTML with the extension “.hft”. The following sample is an example of formatted HTML content:

```
<a href="http://www.example.com">U Rent-A-Car</a><br>  
<font color="blue">Serving over 200 cities nationwide!</font>
```

## Character Entities

When the following characters are used in formatted HTML for human-readable text, they must be in the character entity format listed below.

Glyph	Entity	Description
<	&lt;	Less than
>	&gt;	Greater than
&	&amp;	Ampersand
"	&quot;	Double quote

For example:

```
<P>The dog said &quot;Woof&quot;;</P>
```

## Formatted HTML Paragraph

Formatted HTML paragraphs contain at least one whole paragraph. They contain block-level HTML elements, such as headings, horizontal rules, and paragraphs. They can also contain inline HTML elements, such as bold or italics. Formatted HTML paragraphs can include other inline, text, block-level, and paragraph variables.

Create a formatted HTML paragraph in a text editor and save it to the Text folder in your Project folder. Save formatted HTML with the extension “**.hfp**”. The following sample is an example of a formatted HTML paragraph:

```
<P>Tanzania's vibrant culture offers a wonderful blend of <b>music</b>,
<i>dance</i>, and <u>food</u>.</P>
<P>During your stay you will learn about authentic African
customs, history, musical instruments, masquerades, and legends.</P>
<P>Contact <a href="http://www.example.com">My Compass Travel</a> to
schedule your trip to Tanzania!</P>
```

A formatted HTML paragraph is an HTML fragment. The same rules regarding character entities that apply to formatted HTML must be observed when creating formatted HTML paragraphs.

## Text Variables

You can apply text variables (.txt) to HTML templates. Studio enters this plain text in the output of the HTML template.

## Formatted Text Variables

Formatted Text variables may be used in HTML templates. The HTML output driver strips all formatting from variable content when it is used in an HTML output job. It inserts formatted text variables inline within a `<SPAN>` element. Formatted text variables may include other text variables.

## Formatted Paragraph Variables

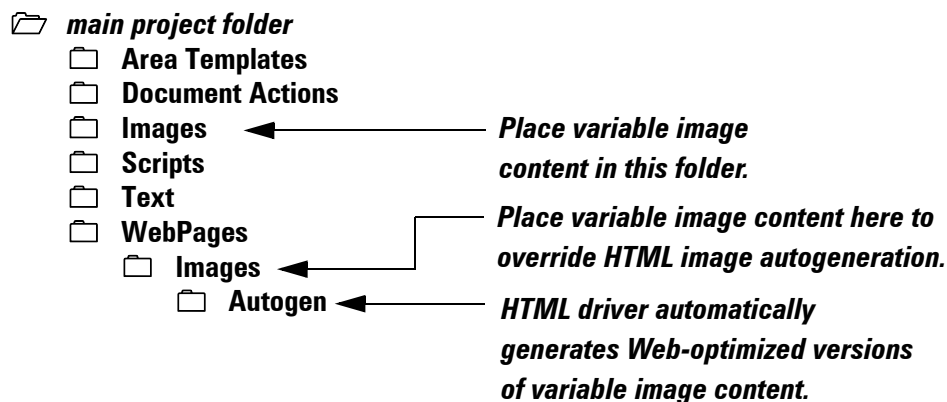
Formatted paragraph variables may be used in HTML templates. The HTML output driver strips all formatting from variable content when it is used in an HTML output job. It inserts formatted paragraphs as block-level HTML within a `<DIV>` element. It replaces new paragraph markers with `<P>` HTML elements. Formatted paragraph variables may include other text or paragraph variables.

## Image Variables

You can apply image variable content to HTML templates in the same way that you apply them to print templates. There are three ways you can associate images with your templates:

- **Autogen.** You can leave images in your Project\Images folder and the HTML driver will automatically generate image variable content in GIF (.gif) or JPEG (.jpg) format for HTML output, then save the generated image output in the Autogen folder.
- **Images.** You can convert images yourself and place them in your Project\WebPages\Images folder. If you decide to do this, save your image with the same root name as the original image in the Project\Images folder.
- **Absolute URL Reference.** You can save your images to a central place on your network and refer to them in your templates using absolute URLs. We recommend this method if you want to save space in your output folder, or if you want to be able to change the images in the future.

The following diagram shows the relationship between the two Images folders and the Autogen folder:



► **The HTML output driver resolves image variable content in the following order:**

- 1 The driver first looks in the WebPages\Images folder for a JPEG or GIF image file with the same root name as the image in the Project\Images folder. If an image exists, it is used and no image processing occurs.
- 2 If there is no comparable image in the WebPages\Images folder, the driver looks in the Images folder for the variable content.
- 3 The driver looks in the WebPages\Images\Autogen folder for an automatically-generated version of the image. If it is newer than both the image found in step 2 and the last modified date and time for the job, the driver uses the automatically-generated image.
- 4 If no image exists in the Autogen folder, the driver converts the image in the Images folder to a JPEG or GIF image, as specified in the job properties, and places the converted image in the WebPages\Images\Autogen folder for use.

To bypass image conversion and save space, you can serve images from a remote server, using absolute URLs in your image variable references. For example, you can place the complete URLs in your database to be imported as links. Alternatively, you can use a script to prepend an absolute URL to image names.

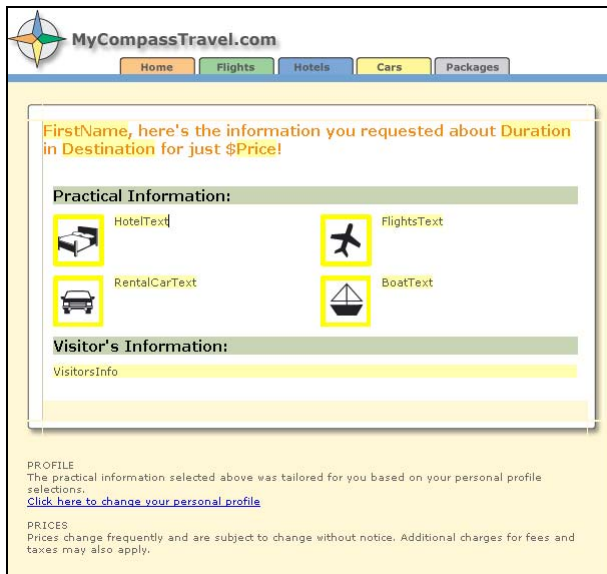
## Tagging Your HTML Template

When you apply variables to HTML elements, Studio tags the source of the HTML template with `<div>`, `<span>`, and `<img>` tags. Studio resolves variables that are embedded within other variables, unless they are embedded within area template or document variables, which HTML templates do not support.

Studio provides a user interface so that you can tag your HTML template with variables in much the same way that you apply variables to your print templates. However, there are some differences in how Studio displays variables in the document window and saves them to the HTML template code.

**Note:** Studio replaces the text in your HTML template with the variable name, so do not invest too much energy creating placeholder text for your template before loading it into Studio.


The image below shows a sample template after variables have been applied:



The highlighted text and images above are the areas where the user has applied variables have been applied to the template. Studio honors any default image content in the HTML file, even when tagged to be variable. It will not provide any placeholder text. However, if the current text selection is a sliver, Studio will insert the variable name as placeholder text. It does not provide any default images.



## ► To tag your HTML template

- 1 Select a variable from the Variables tab.
- 2 Select an image or placeholder text.
- 3 Click the **Apply Variable**  icon on the **Variables** tool bar.

**Note:** For text-based variables, you can place the cursor where you want the variable value to be inserted, and apply the variable to place it there.

Remove variables in the same way as described in “Adding or Editing Variables” section on page 261. When you remove variables, your placeholder text will not return. Instead, the variable name will become plain text in your template.

When you tag your HTML template, Studio adds the variable name to a PFVar attribute in a `<span>`, `<div>`, or `<img>` tag, which it saves to the source of your HTML template so that it can resolve variable content when rendering output. Studio uses the Microsoft HTML Engine (MSHTML) to rewrite the HTML and tags when you save HTML files. This may alter the HTML DTD, for example, such as changing a properly constructed XHTML1 document into an HTML4 document. If you do not want your HTML to be rewritten in this way, you should manually tag your HTML as shown below.

**Note:** When running a job, Pageflex Server generates the HTML using MSHTML, for example, for e-mails, microsites, and other HTML jobs. In this case, the final HTML output will be rewritten in MSHTML's only available format.

## Formatted HTML

For formatted HTML (.hft) variables, Studio inserts variable names in the PFVar attribute of `<span>` tags. The following examples show the HTML source before and after variable ingest.

### Before Ingest

```
<SPAN PFVar="PersonalURL">PersonalURL</SPAN>
```

### After Ingest

```
<SPAN><A class=link
    href="http://www.example.com/Samples/TravelAd.asp?id=1002">
    Click here for details of your trip</A></SPAN>
```

## Formatted HTML paragraphs

For formatted HTML paragraph (.hfp) variables, Studio inserts variable names in the PFVar attribute of <div> tags. The following examples show the HTML source before and after variable ingest.

### Before Ingest

```
<DIV PFVar="VisitorsInfo">VisitorsInfo</DIV>
```

### After Ingest

```
<DIV><H1>Culture of Tanzania</H1>
<HR>
<P>Tanzania's vibrant culture offers a wonderful blend of
  music, dance, and food.</P>
<P>During your stay you will learn about authentic African customs,
  history, musical instruments, masquerades, and legends.</P>
<P>The program entertains, but educates as well.</P>
<HR></DIV>
```

## Images

For image variables, Studio inserts variable names in the PFVar attribute of <img> tags. The following examples show the HTML source before and after variable ingest.

### Before Ingest

```
<IMG src="Images/hotel_icon.gif" PFVar="HotelPic">
```

### After Ingest

```
<IMG src="Images/Autogen/fancy_hotel_icon.gif">
```

**Note:** The example shows an image from the WebPages\Images\Autogen folder, but it could have been from the WebPages\Images folder if you decided to place the image there rather than have the HMTL driver automatically-generate the image, or it could have been the absolute URL of the network location of the image.

## Text

For text (.txt) variables, Studio and Pageflex Server insert variable names in the PFVar attribute of <span> tags. The following examples show the HTML source before and after variable ingest.

### Before Ingest

```
<SPAN PFVar="FirstName">FirstName</SPAN>, you can spend<BR>
<SPAN PFVar="Duration">Duration</SPAN> in
<SPAN PFVar="Destination">Destination</SPAN> for just $
<SPAN PFVar="Price">Price</SPAN>!
```

### After Ingest

```
<SPAN>Bob</SPAN>, you can spend<BR>
<SPAN>5 days</SPAN> in
<SPAN>Caracas</SPAN> for just
<SPAN>1200</SPAN>!
```

## Formatted Text

For formatted text (.xft) variables, Studio inserts variable names in the PFVar attribute of <span> tags. This is similar to how Studio handles formatted HTML, except all text styles, such as bold or italics, are stripped from the content.

## Formatted Paragraphs

For formatted paragraph (.xpf) variables, Studio inserts variable names in the PFVar attribute of <div> tags. This is similar to how Studio handles formatted HTML paragraphs, except all text styles, such as bold or italics, are stripped from the content. However, Studio preserves paragraph breaks.

## Creating an HTML Output Job

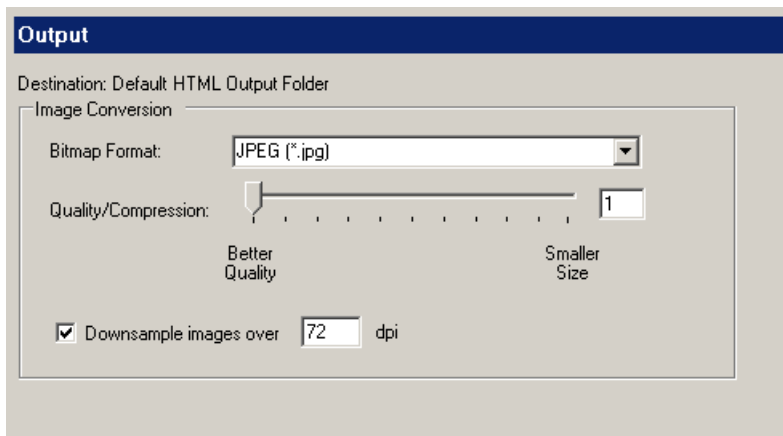
HTML Output jobs operate in the same way as print jobs, with some additional options. The HTML output driver treats HTML job output slightly different from other job output. For example, the HTML driver places HTML output in a different folder from print output—the HTML Output folder you specified on the Server Setup dialog. When creating output, the driver appends the transaction ID for the job to both the HTML Output folder and the HTML Output URL to form the actual directory and corresponding URL.

To create HTML output, create a job in the same way as described in Chapter 13, “Creating Jobs,” on page 283, except choose an HTML Template to access the HTML or HTML e-mail output formats.

HTML format generates output that can be served as a Web page. **HTML Email** generates multi-part e-mails with a primary HTML body and alternative text-only body. The remainder of this section will go over the options that appear if you choose HTML format. The next section goes over the HTML e-mail format.

The following options are available when you choose HTML format.

- **Destination.** This field becomes read-only text. When the HTML driver creates output, it copies the contents of the WebPages folder, including all referenced images and templates into the **Default HTML Output Folder**, set in Server. This control is for display purposes only, therefore it is always disabled.



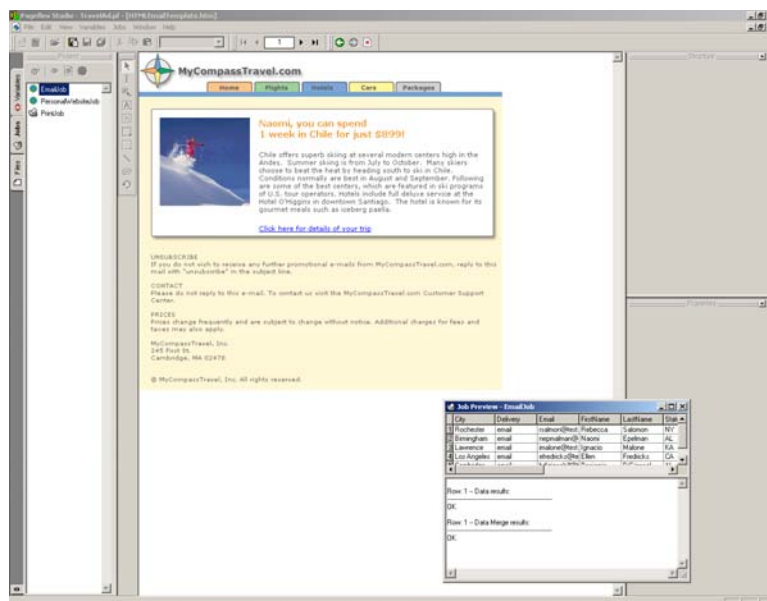
The following options are available for image formats:

- **Bitmap Format.** Choose between JPEG (\*.jpg) or CompuServe GIF (\*.gif) as the format for images to be converted. The HTML driver does not convert images that have been referenced in absolute URLs.
- **Quality/Compression.** Choose to optimize image quality or size. This option is only available for the JPEG format.
- **Downsample images over [a specified] dpi.** Select this check box and enter the dots per inch (DPI) value over which the HTML driver will downsample images. This is optional. When selected, images over the specified DPI threshold are downsampled to the specified DPI. Images at or below the threshold are not upsampled.

Generate output the same way you would with print jobs. See Chapter 14, “Generating Output,” on page 345 for details. The post process steps are also the same as with print jobs. See “Adding Post Processes” on page 312 for details.

## Previewing HTML Output

Preview your HTML Output on screen as with your other templates. The screen shot below shows a sample:



Studio opens in browse mode, enabling links and image conversion. Click the rows to see a live preview of each HTML microsite or e-mail message. If you click a link, it opens the associated page in a new window of your default Web browser.

## Creating an E-mail Output Job

Create a job in the same way as with an HTML Output job. The Output tab for HTML e-mail jobs is the same as that for HTML jobs. Select an HTML template, choose HTML Email format, and fill in the options in the Input and Output tabs, and click the **Output** tab. The **Properties** button enables you to set HTML e-mail output properties.

**Note:** Before you can send e-mail output, you must set up a local or remote SMTP server. Enter the SMTP Server Settings for E-mail on the Output Setup screen (page 348).

## Output Properties

Press **Properties** to display HTML E-mail Output Properties.

The screenshot shows a dialog box titled "HTML E-mail Output Properties". It is divided into three main sections: "E-mail", "Options", and "SMTP Server".

**E-mail Section:** This section contains several dropdown menus for email configuration. The "Subject" dropdown is set to "<SubjectLine>". The "Recipient" dropdown is set to "<Email>". The "Sender" dropdown is set to "Museum of Art". The "Reply To" dropdown is empty. The "CC" and "BCC" dropdowns are also empty. The "E-mail Address" dropdown is set to "<Email>". The "Name" dropdown is set to "<SenderEmail>". There are asterisks (\*) next to the "E-mail Address" and "Name" dropdowns, indicating they are required fields. A red text label at the bottom of this section reads: "\* Value required for job submission".

**Options Section:** This section contains two checkboxes. The first checkbox is "Embed images in e-mails" and is unchecked. The second checkbox is "Purge output directories after e-mail is sent" and is also unchecked.

**SMTP Server Section:** This section contains two radio buttons. The first radio button is "Use default SMTP Server settings" and is unchecked. The second radio button is "Use the following SMTP Server settings:" and is checked. Below the second radio button, there are two text boxes: "SMTP Server:" set to "mail.example.com" and "Port Number:" set to "25". There are also two checkboxes: "Use SSL" (unchecked) and "Use SMTP Authentication" (checked). Below the "Use SMTP Authentication" checkbox, there are two text boxes: "User Name:" set to "communicator" and "Password:" with a masked password represented by a series of asterisks.

At the bottom right of the dialog box, there are two buttons: "OK" and "Cancel".

## E-mail

You have a number of e-mail header options to choose from. You can use variables from your template, by clicking on the drop-down box to choose from a list, or typing in a static value for the e-mail subject, recipient, sender, reply to address, carbon copy (CC) and blind carbon copy (BCC) boxes. The recipient and sender boxes are required for job submission. All other boxes may be blank.

## Options

- **Embed images in e-mails.** Select this check box if you want to embed images in e-mails. Some e-mail reader programs block images served from the internet. Select this option to send images within your e-mail output. Embedding increases the size of each e-mail but does not require a Web server to serve the images when the e-mail is opened.  
Not all images are embedded when you select this option, only <img> tags. Other areas, such as a background image, are not embedded.
- **Purge output directories after e-mail is sent.** Select this check box to delete all of the output files after the e-mail has been sent. You may not want to keep a record of every e-mail you send. If you choose this option, all output files will be deleted after being sent.

## SMTP Server

You can choose whether to use the default SMTP server to send HTML e-mail messages or a custom SMTP server.

- Choose **Use default SMTP Server settings** to use the default Microsoft SMTP Service to send HTML e-mails.
- Choose **Use the following SMTP Server settings** to enter a different SMTP server and enter the information below.
  - **SMTP Server.** Enter the name of the SMTP server to use.
  - **Port Number.** Enter the port number to use. The default is 25.
  - **Use SSL.** Select this check box to use Secure Sockets Layer (SSL), if the mail server supports it.
  - **Use SMTP Authentication.** Select this check box if the mail server supports authentication, then enter the User Name and Password for authentication.

Click **OK** when you are done setting HTML e-mail output properties, or **Cancel** to exit without saving changes.



## Serving Images from the Internet

Images used in HTML e-mails can be embedded in the e-mail, or they can be referenced with an absolute URL. Not embedding is the default. The following is strongly recommended when not embedding images in HTML-formatted e-mail messages:

- 1 Create a website that will be used to serve the images.
- 2 Prepare all images that will be used by the e-mail blast.
- 3 Copy the images to the image source website.
- 4 Use the absolute URL of this website for all image references in the HTML template. For example:

```
http://www.example.com/yourimages/bigimage.jpg
```

Listed below are some suggestions for how you can do this:

- Use an absolute URL in the database column corresponding to the image source. For example:  

```
http://www.example.com/yourimages/bigimage.jpg
```
- Store the image file name in the database, and use a script or constant to prepend the image URL to the image file name.

## Testing E-mail Output

Create some e-mail accounts on your network to test e-mail output. Set HTML e-mail out jobs to use these addresses to receive your e-mails.



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# Conversion Tools

15

You can design your templates using Adobe® InDesign® or QuarkXPress™ and import them into Studio using template conversion plug-in and extension utilities for the appropriate application. This chapter describes these tools in detail.

# Using the Pageflex Plug-in for Adobe InDesign

The Pageflex DesignOut Plug-in for Adobe InDesign exports documents from InDesign into the Pageflex document format. A document exported by the plug-in, when viewed with a Pageflex application, closely resembles the original InDesign document. The plug-in preserves text, text composition, images, graphics, and layout positions as accurately as possible while converting InDesign properties to corresponding Pageflex properties.

Each export creates an XDT file containing the document content and layout information in XML format, and a TSL file containing the document models and styles. Exported documents can be opened by current Pageflex applications.

**Note:** Not all Adobe InDesign features have equivalent features and settings in Pageflex products. Your exported Pageflex templates may not exactly match the original Adobe InDesign documents. Always review exported templates and be prepared to make edits and adjustments if needed.

## Latest Update

You can download the latest plug-in from the Pageflex Support website: <http://www.pageflex.com/support>. New and updated builds of the plug-in are periodically posted at this site.

## Installing

Extract the plug-in, “PFExport.pln” and follow the steps below to install it.

### ► To install the plug-in

- 1 Exit Adobe InDesign if the application is running.
- 2 Copy “PFExport.pln” into the Plug-Ins folder inside the Adobe InDesign application folder (the “\Plug-Ins\Filters” folder in Adobe InDesign CS).
- 3 Restart InDesign.
- 4 Choose **Configure Plug-in** from the **Help** menu on Windows or the **InDesign** menu on Mac OS. Look for “PFEXPORT.PLN” in the **All Plug-ins** list.
- 5 Enter the location of the plug-in.

## Exporting InDesign Documents

The plug-in exports InDesign documents in their current state, whether saved or not.

### ► To export document templates

- 1 Make a document active in InDesign and choose **Export** from the **File** menu. This opens an Export dialog box.
- 2 Enter a name for the exported document. The file extension “.xdt” will be automatically applied by the plug-in if you do not type it yourself.
- 3 In the dialog box, choose **Pageflex Template** from the **Save As Type** menu.
- 4 Click **Save**. The document is saved as an XDT file with an associated TSL file in the Pageflex format.

## Opening an Exported Template in Studio

To open a Pageflex template with Studio, choose **Open** in the **File** menu and browse to the template.

Carefully examine the exported document and make any corrections necessary due to conversion inaccuracies.

## Notes on Supported and Unsupported Features

While the plug-in attempts to export all properties as accurately as possible, you may see some unavoidable differences in areas such as text composition or color management. See the readme that comes with this plug-in for the latest updates.

## Using the QuarkXPress XTension

The Pageflex QuarkXPress XTension exports documents from QuarkXPress into the Pageflex document format. An exported document, when viewed with a Pageflex application, closely resembles the original QuarkXPress document. The extension preserves text, text composition, images, graphics, and layout positions as accurately as possible while converting QuarkXPress properties to corresponding Pageflex properties.

Each export creates an XDT file containing the document content and layout information in XML format, and a TSL file containing the document models and styles. Exported documents can be opened by current Pageflex applications.

**Note:** Not all QuarkXPress features have equivalent features and settings in Pageflex products. Your exported Pageflex templates may not exactly match the original QuarkXPress documents. Always review exported templates and be prepared to make edits and adjustments if needed.

### Latest Update

You can download the latest XTension from the Pageflex Support website:

<http://www.pageflex.com/support>

New and updated builds of the XTension are periodically posted at this site.

### Installing or Uninstalling

Follow the instructions below to install or uninstall the plug-in.

#### ► To install the QuarkXPress plug-in

- 1 Exit QuarkXPress if the application is running.
- 2 Decompress the software archive.
- 3 Copy the “PFExport.xnt” file into the “XTension” folder within your QuarkXPress application folder.
- 4 Launch QuarkXPress to use the Pageflex XT.

### ► To uninstall the plug-in

To uninstall Pageflex XT, remove it from the XTension folder.

## Exporting a Document as a Pageflex Template

Follow the steps below to export a document template.

### ► To export a document template

- 1 Choose **Export Pageflex Template** in the **Utilities** menu.
- 2 Choose a filename and location for the exported template and click **OK**. Your document is saved as an XDT file with a supporting TSL file.

The plug-in creates a log file (with the extension “.log”), providing timestamps, filenames and other export details, and any errors encountered during the export process.

## Opening an Exported Template in Studio

Converted files can be opened the same way as Studio-generated files. In Studio, choose **Open** from the **File** menu and browse to the template that you want to open. Highlight it and click **Open**.

## Notes on Supported and Unsupported Features

While the plug-in attempts to export all properties as accurately as possible, you may see some unavoidable differences in some areas. See the ReadMe that comes with this plug-in for the latest updates.

## Latest Versions

To download the latest version of Pageflex XT, go to the Pageflex Support website, listed below, and look for the **Free Stuff** at the bottom of the page:

<http://www.pageflex.com/support/>





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# Librarian

16

You can use Pageflex Librarian to manage your data assets and create complex rules for variable insertion. This chapter describes the Librarian application.

# Introduction

Pageflex Librarian lets you create a library for the content files for your variable publishing project. Librarian uses the same file folder hierarchy that all Pageflex projects use. Image files are in the Images folder; text files are in the Text folder. A library can contain the following types of content files:

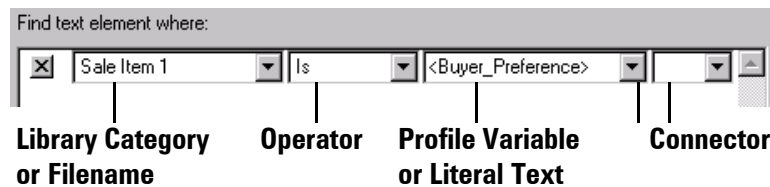
- Plain text files
- Image files
- Formatted content files (formatted text, formatted paragraphs, and area templates)

In the library for a project, you define a set of categories. For each content file, you can assign a term under each category. The categories and terms you assign should help you identify the content file or its purpose in the project.

In Pageflex Studio, you use the categories and terms to create a library query as part of the definition of a variable. A library query is a command to search the library for a content file that matches the categories and terms you specify. When you assign the terms and categories to the content of the library, you want to make sure each content file has a unique combination of categories and terms to identify it.

## Using a Library Query

In your variable publishing project, you can use a library query to define a variable. The library query can retrieve content files based on the values you entered in the categories. A library query can have one or more statements joined together with “And” or “Or.” Each statement has four parts.



- **Library Category.** Library categories contain the words used to classify each library item. You can also use the filename of the content file.
- **Operator.** The operator is the “verb” for the statement. It defines the relationship between the library category and the profile variable or literal text that follows.

- **Profile Variable or Literal Text.** In this box, you can select a profile variable to use, or you can type literal text to use to create a relationship to the library category.
- **Connector.** You can connect multiple statements using the expressions “And” or “Or.”

In the following example, the library query retrieves the content based on the parameters of the query. **Pet Type**, **Pet Breed**, and **Pet Color** are categories in the library.

### Library Query

Find image element where:

<input checked="" type="checkbox"/>	Pet Breed	Ends With	retriever	And	
	Pet Color	Is	gold		

**Library Category**

**Pet Shop Library**

Filename:	lab_retriever.tif
Pet Type:	dog
Pet Breed:	labrador retriever
Pet Color:	black

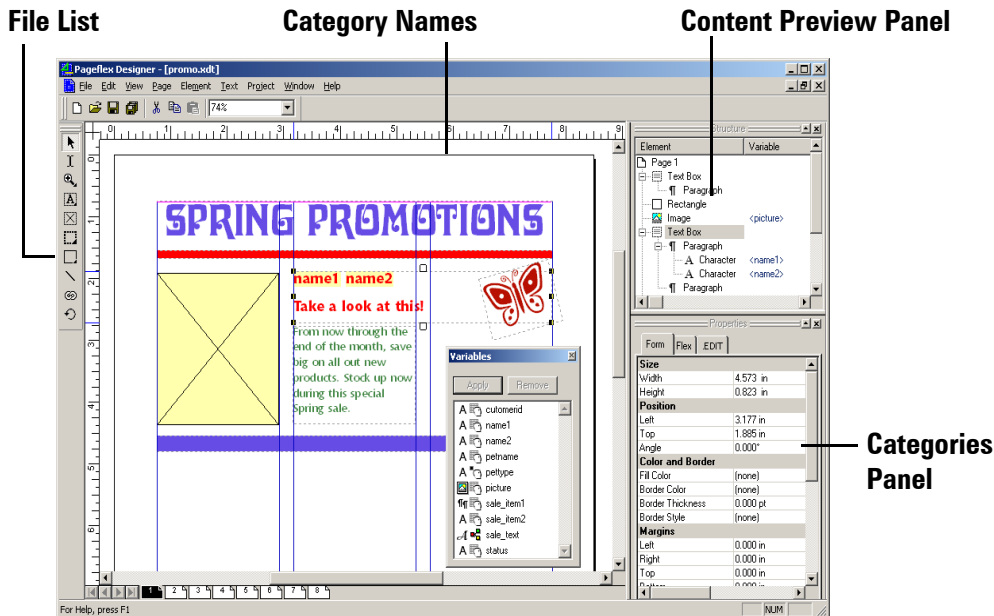
Filename:	ger_shepherd.tif
Pet Type:	dog
Pet Breed:	german shepherd
Pet Color:	tan





Filename:	gold_retriever.tif
Pet Type:	dog
Pet Breed:	golden retriever
Pet Color:	gold

Filename:	poodle.tif
Pet Type:	dog
Pet Breed:	french poodle
Pet Color:	white

## Understanding the Librarian Environment







The Librarian application window displays the library information.



- **File List.** The file list shows all the content files in the library. The icon in front of each content file indicates what kind of file it is.
  - A Plain Text
  -  Image
  -  Formatted Text
  -  Formatted Paragraphs
  -  Area Templates
- **Category Names.** A library can include up to 10 category names to classify the library content files. Each category has its own column following the columns for Filename and Kind. Click a column head to sort files by the column values.
- **Content Preview Panel.** The content file appears in the Preview panel. Drag the menu bar to detach this panel. You can resize the Preview panel to display larger or smaller previews as needed.
  - Image files appear as image previews.
  - Plain text files appear as text. Formatted text and formatted paragraphs appear as text including the formatting codes.
  - Area templates do not display a preview.
- **Categories Panel.** In this detachable window, classify files by assigning values to categories. Select a file to display its values in this panel.

# Working with Libraries

To use a library with a project, you must create the library in the main project folder. If you have not created the project folder yet, Librarian creates the project folders when it creates the new library. You can create more than one library in the same project folder.

-  **Main Project Folder**
  -  **Area Templates**
  -  **Document Actions**
  -  **Images**
  -  **Scripts**
  -  **Text**
  -  **WebPages**


Store the content files according to the folder name:

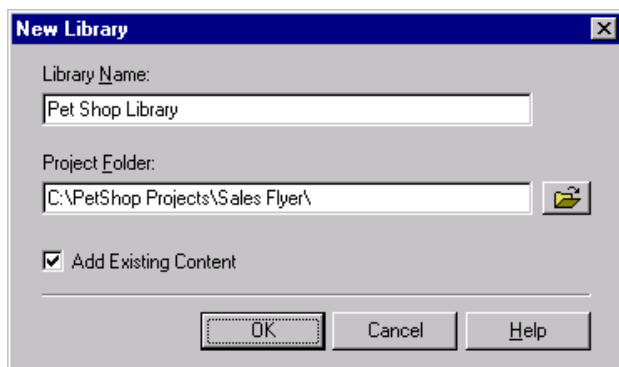
- **Text**—stores all plain text, formatted text, and formatted paragraph files.
- **Images**—stores all image files (EPS, TIFF, JPEG, GIF and PDF).
- **Area Templates**—stores all area template files.

Studio creates the following folders, but librarian does not manager them. Do not store any library content in these folders as you will not be able to access it.

- **Scripts**—stores scripts used in your variable publishing project.
- **WebPages**—stores HTML content.

## ► To create a new library

- 1 Choose **File > New** or click the **New** button on the toolbar .



- 2 Type the name of the library in the **Library Name** box.
- 3 In the **Project Folder** box, type the path to the project folder.

-or-


Click on the folder button  to select a folder.

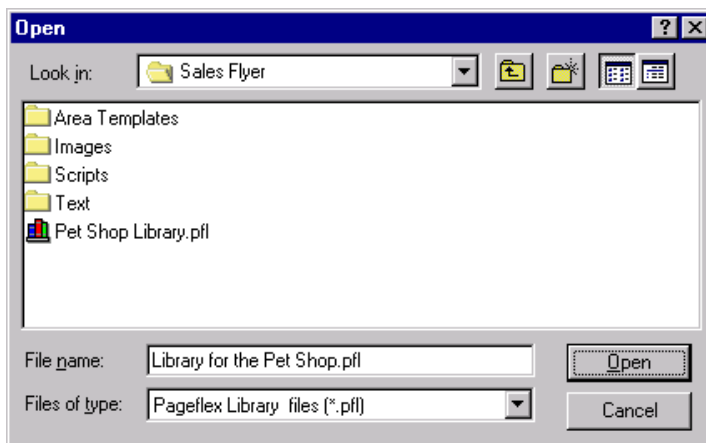
**Note:** If you enter a project folder that does not exist, Librarian creates the main project folder and the content folders inside it.

- 4 Click the **Add Existing Content** box if you want to add any existing content already stored in the project folders to the new library. If the project folders are empty, this option has no effect.
- 5 Click **OK** to create the new library.

Librarian automatically saves all changes to the library immediately.

## ► To open an existing library

- 1 Choose **File > Open**, or click the **Open** button on the toolbar .



- 2 Navigate and select the library file (\*.pfl) you want to open.
- 3 Click **Open**. Librarian displays a list of all files in the library.

# Setting Up Categories

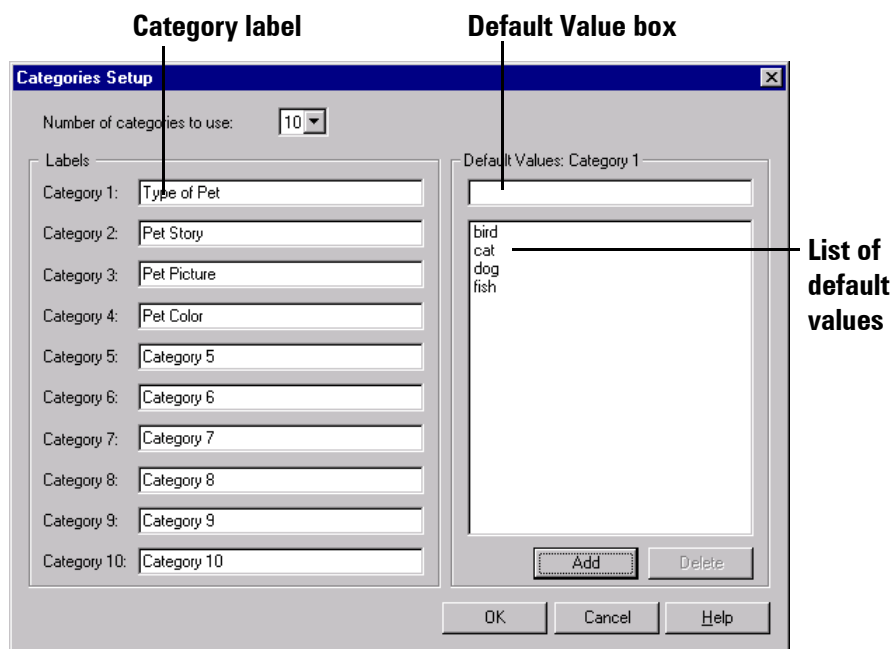
All new libraries begin with 10 categories using default names.

When you create a library query in your variable publishing application, use the category names to define the query parameters. You can change the category names at any time, and the variable publishing application updates the library queries to use the new category names.

To help with categorizing content files, you can add a list of default values for a category. When you classify content files, you use a default value from the list or type new value.

## ► To set up a category

- 1 Choose **Content > Categories Setup**. Librarian displays the **Categories Setup** dialog box.



- 2 You can specify the number of categories that Librarian displays for each file in the library by selecting a number in the **Number of categories to use** box. The maximum is 10.

If you reduce the number of categories, Librarian deletes categories starting from the last one in the list. Any values you have assigned to that category are deleted when you delete the category.

- 3** To change a category label, type the new label in the box beside the category number.
- 4** You can add default values to use for any category. When you classify the library contents in the categories editor, you can select default values from a list rather than typing them every time. Add the most commonly used values to the list.
  - Select a category by clicking inside its label. The category name appears in the heading to the Default Values section.
  - In the **Default Values** box on the right side of the dialog box, type a default value.
  - Click **Add**. Librarian adds the default value to the list.
  - Repeat these steps to add additional values. To remove a value, select it and click **Delete**.
- 5** When finished editing category names, click **OK**.

Librarian automatically saves all changes to the library immediately.

#### ► **To edit the default values**

- 1** On the **Categories Setup** dialog box, click an entry in the Default Values list. the entry appears in the **Default Values** box.
- 2** Edit the value.
- 3** Click **Add**. Studio changes the default value in the list.




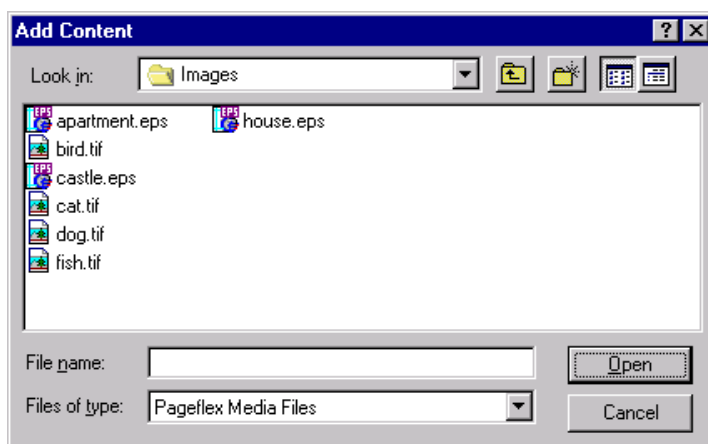
## Adding and Removing Files

You can add Text, Image, Formatted content, or Area Template content files to the library at any time. Librarian requires that all content files be stored in the folders inside the main project folder. When you add a new content file, one of the following occurs:

- If a content file already exists in the correct project folder, Librarian makes a new library entry and leaves the content file where it is.
- If the content file exists outside the project folders, Librarian creates the new library entry *and* copies the content to the correct project folder for the kind of content it is.

### ► To add a file to the library


- 1 Choose **Content > Add**, or click the Add Content button on the toolbar . Librarian displays the **Add Content** dialog box.



- 2 Locate the content file you want to add. To add more than one file from the same folder, hold down the CTRL key and click each content file. Hold down the SHIFT key to select a range of files.
- 3 Click **Open**. Librarian adds the selected files to the library.  
Librarian automatically saves all changes to the library immediately.

## ► To remove a file from the library

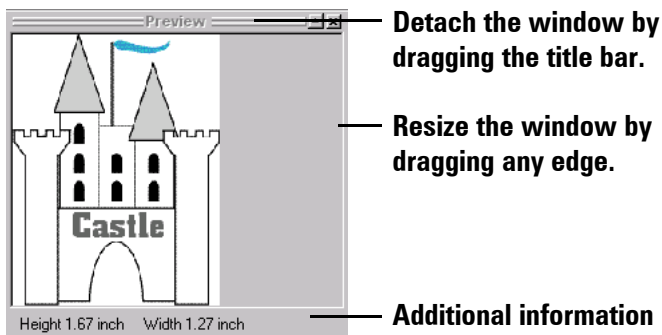
You can remove a file from a library at any time. When you remove a file, Librarian only removes its entry in the library; the actual file content remains in the project folder.

- 1 Select the library entry in the file list. To select multiple files, hold down the CTRL key, and click each file, or hold down the SHIFT key to select a range.
- 2 Choose **Content > Remove**, or click the **Remove Content** button  on the toolbar.

Librarian removes the selected entries from the library. The content source files remain in the project folder.

## ► To preview a file

- 1 Click a content file in the file list.
- 2 The content file appears in the Preview window.
  - Image files appear as image previews.
  - Plain text files appear as text.
  - Formatted text and formatted paragraphs appear with formatting codes.
  - Area templates appear as with a generic area template icon.



- 3 The bar below the Preview window provides additional information.
  - For text (including formatted text and formatted paragraphs), it indicates the type of text and the number of characters.
  - For an image, it displays the height and width.
  - For an area template, it displays the type (area template).

# Classifying Library Content

Classifying library content is the process of giving values to categories for each content file in the library. You do not have to fill in a value for every category. A library query can find empty values.

## ► To classify a content file

- 1 Click a content file in the file list.
- 2 In the Categories editor, type a value next to the category name. If the category has default values, you can select one from the list.



- 3 Press the ENTER key to enter the value, or press the TAB key to move to the next category.

The new values for the file appear in the category columns in the file list. Librarian saves all changes to the library immediately and automatically.

## ► To classify more than one file at a time

- 1 Select multiple files by holding down the CTRL key and clicking each file or by holding down the SHIFT key and selecting a range of files.

The Categories editor displays the values for each category that are the same for all the selected files. If the selected files have mixed values for a category, the category appears empty.

- 2 Type a value in any category. If the category has default values set up, you can select a value from the list.
- 3 Press the ENTER key.

Studio updates the category value for all the selected content files. If the selected files have different values in the category, Studio makes them all the same.



---

# Packager

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If you need to package a Pageflex project for archive or to move it onto another machine, you can use the Pageflex Packager utility. This chapter describes how to use Packager.

# Introduction

Pageflex Packager is a utility that collects and saves the entire Pageflex project tree into a folder or zip file (a package), so that projects can be archived or transferred to other computers. Packager also unpacks and saves the contents of a package file so that it can be modified by Pageflex applications. Linked images, fonts, and Web pages are copied and saved into the package, as well as the contents of the project folder.

Packager maintains the entire project tree structure including any custom sub-folders created by the user when creating a package. Packager also creates any project folders in the package that may not have existed in the source project tree.

When a package is unpacked, the underlying project folder tree of the source project is recreated, including any project element and font files needed to make the package complete.

Packager lists the name and location of the project folder in the Window title.

## Status Bar

Located at the bottom of the dialog box, this displays the action being currently taken by the Packager utility, or the size of project folders (this is a virtual representation of the size of your project folder, as some elements such as fonts or images may be linked to your project from other folders).

## Using Packager Folders

Before opening and editing a project folder that has been packaged, you must install the fonts in the Project Fonts folder on the system the package now resides on. You must also install the ODBC connections in the new location.

---

# Creating Packages

Follow the steps below to create packages.

## ► To create a new package from an existing project

- 1 Choose the **New package** command on the File menu, or click the **New Package** icon .
- 2 Browse for the project folder that contains the project you would like to package.
- 3 Highlight this folder and click OK to collect the project elements. The status bar displays “Collecting Project Elements.”
- 4 If any project elements could not be found, Packager displays the Missing Contents dialog.

If no elements were missing, Packager displays the project folders in the **Collected Contents** window. Click on a folder in the collected contents window to display the folder’s contents in the opposite pane.

- 5 Save your package.

## ► To save a project to a folder

- 1 Choose the **Save to Folder** command on the File menu, or click the **Save to Folder** icon.
- 2 Browse to the location where you would like to save your project folder.
- 3 Click **New Folder** if you would like to create a new folder in which to save your project folder. Rename this folder, if necessary.

**Note:** This folder will be the parent folder of your project folder. For example, if you chose to save your project folder to “C:\Pageflex\Projects”, your project files would be located in “C:\Pageflex\Projects\YourProjectFolder”.

- 4 Click **OK** to save your package to this location, or **Cancel** to abort.

► **To save a project as an archive or zip file**

- 1** Choose the **Save as Archive** command on the File menu, or click the **Save as Archive** icon.
- 2** Browse to the location where you would like to save your archive file.
- 3** Choose a **Package Compression level**:
  - **No compression.** Packager performs no compression action.
  - **Medium compression.** Packager performs some compression actions. This option is faster than maximum compression.
  - **Maximum compression.** Packager performs the most compression. This option is the slowest archive option.
- 4** Choose a location to save your file and click **Save** to save your file to this location, or **Cancel** to abort.



---

## Finding Missing Contents

Packager displays the **Missing Contents** dialog if the referenced file no longer exists, was moved, or exists on a network location that wasn't available when Packager created the package. Packager displays the **Missing Fonts** dialog if the machine running Packager does not have the referenced fonts installed.

Therefore, it is recommended that you run Packager on the machine on which your project files are located to insure that you are getting the correct files and/or fonts.

Packager creates a “PackagerErrors.log” file that lists the missing contents, if the package is missing anything.

### Missing Files

Click **Locate Files** to bring up a browser window to re-associate the files.

You don't need to re-associate missing contents in order to create a package, but if you don't re-associate the contents, the missing contents will not be included in your package.

### Missing Fonts

Fonts must be installed on the computer running Packager. This could cause a discrepancy if you have different fonts with the same name installed on both the machine running Packager and the machine with the project files. Packager will use the fonts installed on the machine running the Packager utility.

If you get this dialog, install the fonts if they were not previously installed, and click **Re-collect Fonts** to add them to the package.

If you see missing fonts when running Packager to create packages across a network, it is recommended that you run Packager on the machine that the project folder is located on, as presumably all the fonts needed by the project will be installed this machine.

# Opening Packages

Follow the steps below to unpack and save an existing package.

## ► To unpack and save an existing package

- 1** Choose the **Open package** command on the File menu, or click the **Open Package** icon.
- 2** Browse for the package you would like to open.
- 3** Highlight the package you would like to open and click **Open** to open it. Packager displays the project folder in the **Archived Contents** window.
- 4** Highlight folders in the **Archived Contents** window to display the contents of these folders in the right pane.

After opening a package you may want to save it as a project folder so that you can use it.

---

# Glossary

- **Archive Contents**—The display panel in the content area that displays the archive folders in one pane, and the archive folder contents in the other.
- **Content Area**—The main panel in Packager that displays project folders and project folder contents.
- **Collected Contents pane**—The display panel in the content area that displays the project folders in one pane, and the project folder contents in the other.
- **Menu bar**—The window area that displays the menu options.
- **Missing contents**—Project elements referenced in the project template or data source that could not be found in the project folder or referenced folders.
- **Package**—The collected contents of a Pageflex project, including referenced images, fonts, and Web pages.
- **Pageflex project**—A marketing-on-demand solution that allows you to assemble content into unique documents, each customized for a particular use, or personalized for a particular individual.
- **Project folder**—The folder that contains the elements necessary for a Pageflex project. Does not need to include referenced images, fonts, or Web pages.
- **Status Bar**—The window area located at the bottom of the dialog box that displays the size of project folders and packages, or the action being currently taken by the Packager utility.
- **Tool bar**—The window area that displays icons corresponding to file menu options.
- **Window Title**—The window area that displays the name and location of project folders and archive files.



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