

Docuflex

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Introduction

Overview

Docuflex™, a Skywire Software software application, is a general-purpose document composition and assembly tool. While Docuflex is not a product geared towards writing simple letters, it excels at creating a variety of complex documents such as

- Utility Bills
- Financial Statements
- Contracts

Docuflex is designed for acquiring, managing, and personalizing information that results in rapid development, automation, and customizing of all types of documents.

Unicode Support

Both Docuflex and Transall let you process text information in Unicode. Unicode is a standard designed to allow text and symbols from the world's various writing systems to be consistently represented and manipulated. The Unicode support in Docuflex and Transall makes dealing with Unicode as seamless as possible.

Unicode support in Docuflex and Transall extends to all text information in the form of content, data, and logic control. It includes Unicode text processing by all the GUI controls that display information or allow information to be entered into the system. It also extends to all configuration files and all files in general, with support for writing Unicode values in both the names of files and in file contents.

Docuflex and Transall automatically *up-convert* non-Unicode text values to Unicode when reading them into the system, which enables them to be mixed with other Unicode text and seamlessly provides backward compatibility with legacy content and data sources.

Docuflex and Transall then automatically *down-convert* Unicode values into the desired format of output targets when writing information out of the system. This provides the significant benefits of Unicode to Docuflex and Transall users while minimizing Unicode's complexities.

Docuflex and Transall hold text information as Unicode by representing the information in memory in the Unicode Universal Character Set 2 (UCS-2LE) encoding format. When Docuflex and Transall interact with text information sources that are not already in a Unicode encoding format, the text is changed from its original format into a Unicode format as it is read into the system.

When Docuflex and Transall write textual information, either in the form of presentation files such as AFP, Metacode, PDF, PCL, and so on, or in the form of traditional data files, the Unicode text values in Docuflex and Transall are converted into a format that is supported by the target file.

For example, the PDF file format supports transporting Unicode text natively, so Unicode encoded information displayed via a font that is also Unicode compliant, is fully represented when Docuflex produces a PDF file. Conversely, Xerox Metacode files do not support Unicode encoded data, but require text data to be in the ASCII format, so Docuflex automatically down-converts the Unicode text data it is carrying into ASCII when writing Metacode.

ASCII, EBCDIC and Unicode

There are no issues when you are up-converting to Unicode from legacy data sources in ASCII or EBCDIC encoding formats. The Unicode standard supports all the character points represented in these legacy encoding formats. There is, however, the possibility that Unicode encoded text may not successfully down-convert to a particular legacy encoding format such as ASCII or EBCDIC because of limitations in the physical structure of some legacy formats.

For example, Unicode data represented as UCS-2LE, or *double byte*, supports a universe of 65,536 distinct character points that are defined as the Unicode Basic Multilingual Plane (BMP). This Unicode encoding format specifies that each physical character is represented by two bytes. The ASCII and EBCDIC encoding formats specify that each physical character be represented by only one byte, meaning that the ASCII and EBCDIC encoding formats only define a universe 255 possible character points. Because of the limitations of these single-byte encoding formats, it is possible that character points (outside of English in this case) supported by Unicode cannot be converted into the legacy encoding format. This is because legacy single-byte formats do not have the physical capacity to represent all the character points the Unicode encoding formats can represent.

When Docuflex and Transall encounter a problem converting from Unicode to a legacy format, a question mark (?) is placed in the converted results to represent the place holder of a character that could not be down-converted properly.

Unicode Written to Docuflex System Files

When the Docuflex tools write Unicode text to files such as DDP (Docuflex Document Project), DSC (Docuflex Stylized Content), and DCD (Docuflex Compound Document), the Unicode text is converted from the UCS-2LE format used to hold the text in memory, to a UTS-6 (Unicode Technical Specification 6) format that is then used to write the Unicode text to the file.

This UTS-6 data format is largely compatible with the legacy ANSI (Windows 1252) data encoding format which was used by prior versions of Docuflex to write text data to these types of files. By representing Unicode text data in UTS-6, Docuflex version 11.3 can work with legacy versions of these files which were written by earlier versions of Docuflex that did not include Unicode support.

Regarding UTS-6's compatibility with legacy ANSI (Windows 1252) encoded files, only the meaning of the form feed (FF) character (code-point value 12) differs between the UTS-6 and ANSI (Windows 1252) standards. For UTS-6 the FF character is used to trigger special processing on the values that immediately follow it. This special processing lets UTS-6 encode and save Unicode values whose code point values are larger than 255. Since Docuflex does not directly support the use of the FF character, legacy DDP, DCD, DSC, DDE, DDF, INI, and other files do not contain them and are therefore compatible with the UTS-6 format.

Editing Configuration Files with Unicode

Use the DPAD file editing tool, included in version 11.3, to place hand-edited text into configuration files used by Docuflex and Transall, such as the INI and DDE files. DPAD displays and edits text in UCS2 mode, which lets you directly enter Unicode text, but saves the files in UTS-6 format for use by Docuflex or Transall.

In most cases you can update these files with Unicode values using the Docuflex GUI tools such as the Environment Manager. You only have to use DPAD to update these files if Unicode values need to be placed in them in ways that are unsupported by the GUI tools in Docuflex. If only standard ANSI (Windows 1252) data is in the files, then you can use any editor, such as Windows Notepad, to update the files outside of Docuflex.

To type Unicode character values into DPAD, or any of the GUI elements of Docuflex and Transall, you must enable Windows International support. This support includes a Windows feature called the Input Method Manager. This manager lets you remap the keys on a standard Windows keyboard for a particular locale. The remapping setup for a particular locale is called an Input Method Editor (IME) and it allows Unicode characters to be typed directly into all internationalized applications such as Docuflex and Transall from a standard Windows keyboard.

Docuflex Composition of Unicode Content

Many fonts supplied with Windows do not provide character glyphs for the thousands of character code points supported by the Unicode specification. One font that does attempt to provide maximum coverage is Arial Unicode MS from Microsoft. When a font is used to render Unicode content that does not have a glyph for each requested Unicode character, the missing character glyphs are often represented by a box symbol in the resulting output. Fonts can also provide a special glyph symbol to represent missing character glyphs.

Docuflex also now supports dynamic composition of Unicode scripts that flow either left to right or right to left. This includes support for composition of complex scripts that require special ligature handling, such as Arabic.

NOTE

Docuflex 11.3 does not support dynamic composition of scripts that flow from top to bottom, at this time. Docuflex does, however, support the rendering of precomposed content that contains Unicode scripts it can not reflow.

Affect of Locale Information

Docuflex carries locale information for every piece of content and data it processes. The locale information is a set of values that define language, country, and other special variant settings and information. You can use this information to affect the processing performed by Docuflex when composing output. The locale value for content is reflected in the Docuflex Studio GUI in areas where content can be viewed or edited. You can select the locale using the Windows IME that is available after you enable Windows Internationalization support.

Docuflex Components

Docuflex is a composition system for producing custom documents. It utilizes processing rules and variable data from an information system to build a custom document. The document may be comprised of a mixture of document content, including:

- Pre formatted document components, including DCD and FAP
- Docuflex Studio Document Segments, such as recurring heading topics or common formatting styles
- Rich text-formatted documents, such Microsoft RTF
- Unformatted text
- Graphical representations, including Enhanced Metafile (*.emf) and Windows Bitmaps (*.bmp)

Docuflex is comprised of four major components: Docuflex Studio, the Composition Engine, Transall, and the Post Processors.

Docuflex Studio

Docuflex Studio builds a Docuflex Document Project (*.ddp) file. The Project contains the formatting, composition, assembly, and inclusion rules for building one or more documents, including:

- Sections and Members
- Style Definitions
- Page Layouts
- Overflow Definitions
- Variable data Schema
- Data file
- Processing Rules
- Inclusion Rules
- Document Segments
- Optional Contents
- Externally-referenced projects
- Table Definitions
- Table of Contents
- Drawing Objects

For an expanded discussion, see “[Docuflex Studio](#)” on page 145.

Composition Engine

The composition engine builds a custom document, based on the data provided by Transall (see below), the rules, and the definitions created in the project.

For an expanded discussion, see “[The Composition Engine](#)” on page 507.

Transall

Transall defines the Docuflex data schema and collects the data for building a document.

For an expanded discussion about Transall, see the Transall documentation.

Post Processors

The Docuflex Post Processors encompass the post-processing library components of the application.

For an expanded discussion, see “[The Post Processors](#)” on page 527.

System Requirements

Docuflex Studio

Hardware Requirements

These are the minimum hardware requirements to install and run Docuflex Studio:

- Processor: Intel-compatible; 1 GHz or faster Pentium 4 or better processor required, or equivalent
- Memory: 1 GB available RAM or more recommended
- Hard disk: 40 MB of available hard disk space required for installation (hard disk usage will vary based on configuration)
- Monitor: recommend 19" monitor or better at 1280 x 1024 resolution or better for viewing and working with documents in workstation software

Software Requirements

These are the minimum software requirements to install and run Docuflex Studio:

- Windows 2000 Professional, XP Professional, Windows 2003 Workstation (the latest service packs for each operating system are highly recommended)
- Database support requires Microsoft ODBC Level 2 drivers (Level 3 drivers recommended)
- Docucorp Common Objects 11.3
- Docutoolbox 5.0
- Transall 11.3

Installing Docuflex

Installation

The procedure for installing Docuflex is identical in design to many other Windows applications. Simply follow the on-screen instructions and dialog boxes to complete the task successfully.

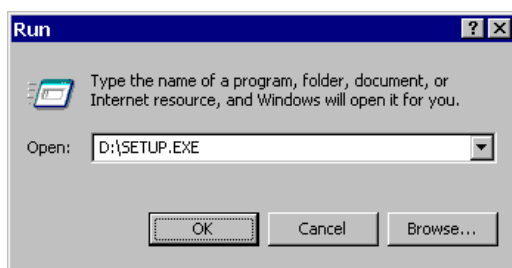
To install	See:
the entire Docuflex suite	“To Install the Docuflex Suite” on page 29
Docuflex by itself	“To Install Docuflex” on page 33

To Install the Docuflex Suite

IMPORTANT

We strongly recommend that you run the installer from your local hard drive.

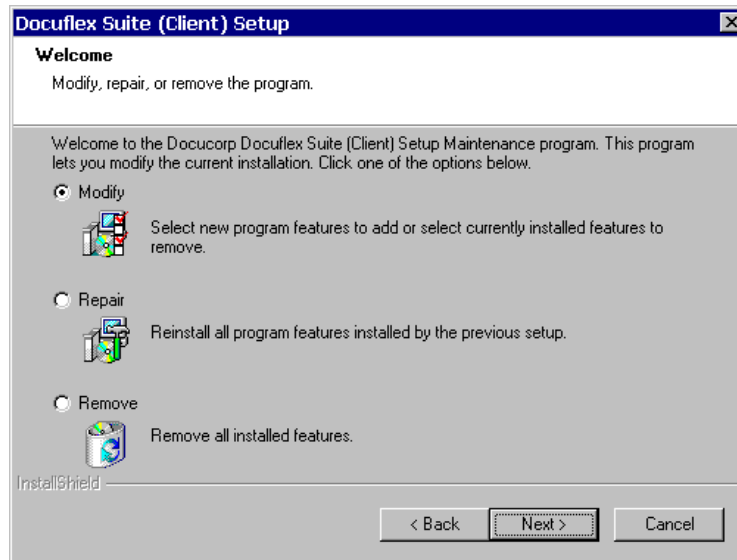
- 1 Insert the Docuflex Suite Installation CD in the appropriate drive.
- 2 Select **Start>Run** and Windows displays the Run dialog box.



- 3 In the Open text box, type **D:\SETUP.EXE** and click **OK**.
-or-
Click **Browse** to locate the program.

If the installation disc is in a drive other than D:, enter the appropriate drive letter specification.

The installation routine displays a dialog box indicating the InstallShield Wizard's progress, followed by the Welcome dialog box.



- 4 Select the option button that best describes the procedure you want to perform.

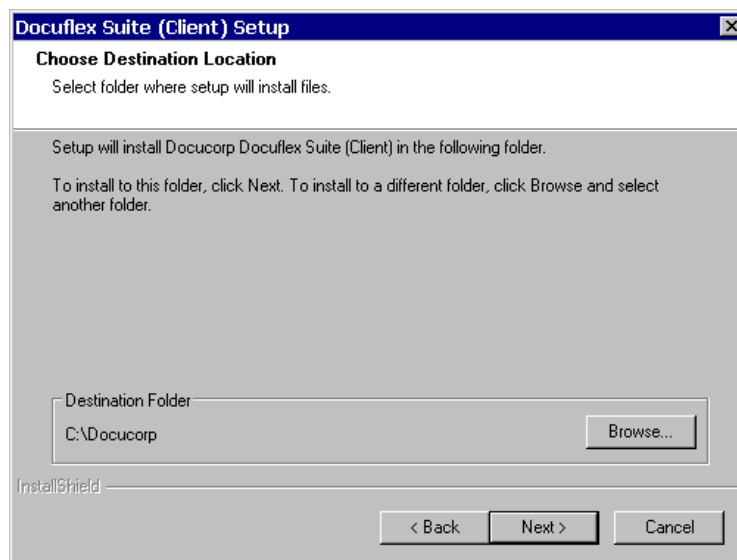
The first time you use this routine, **Modify** is automatically selected (which allows you to selectively install or remove specific products); thereafter, **Repair** is selected.

NOTE

The Docuflex Suite installation routine simply allows you to install, update, or remove one or more Skywire Software applications with a single procedure. You can still install and remove individual products as in the past.

- 5 Click **Next>** to continue with the installation or **Cancel** to quit the program.

The routine then displays the Choose Destination Location dialog box, prompting you for the folder name/directory path into which you want to install the program.

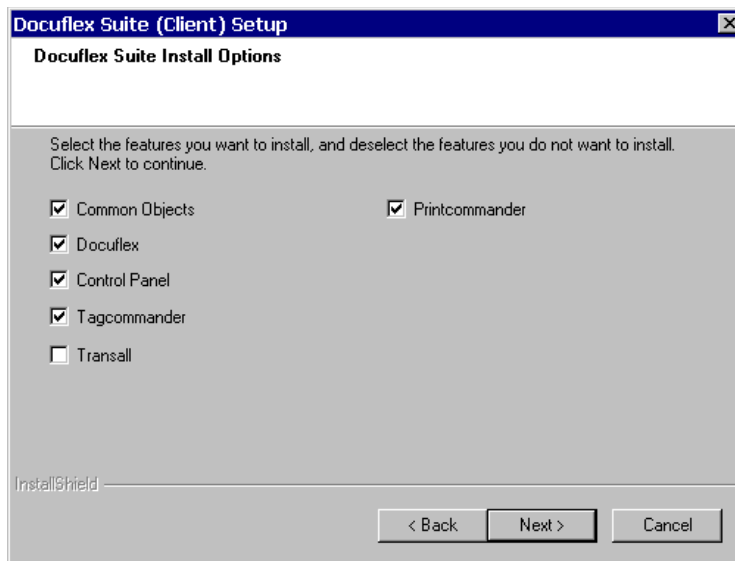


- 6 Perform one of the following procedures:

To	Perform this action
Accept the default path the installation routine proposes	Click Next> .
Enter another path for the installation	Click Browse , select a new path, and then click Next> .

- 7 Click **Next>** to continue with the installation if you have not already done so. You can also click **<Back** to return to the previous screen or **Cancel** to abort the routine.

You'll next see the Docuflex Suite Install Options dialog box prompting you to select the application(s) you want to install.



- 8 Select or deselect the check box(es) next to the application(s) you want to install.

NOTE

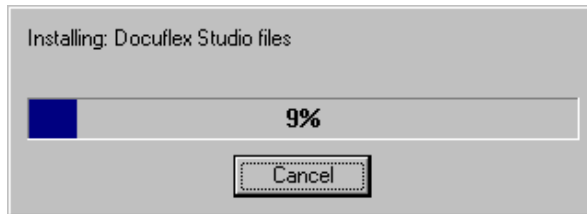
Selecting “Modify” at the beginning of the routine causes the dialog to display a check mark beside the programs that have already been installed. For any of the listed programs, two outcomes are possible:

- a “checked” program that is older than the one on the installation disc is updated to the latest version
- removing the check mark means the program will be removed

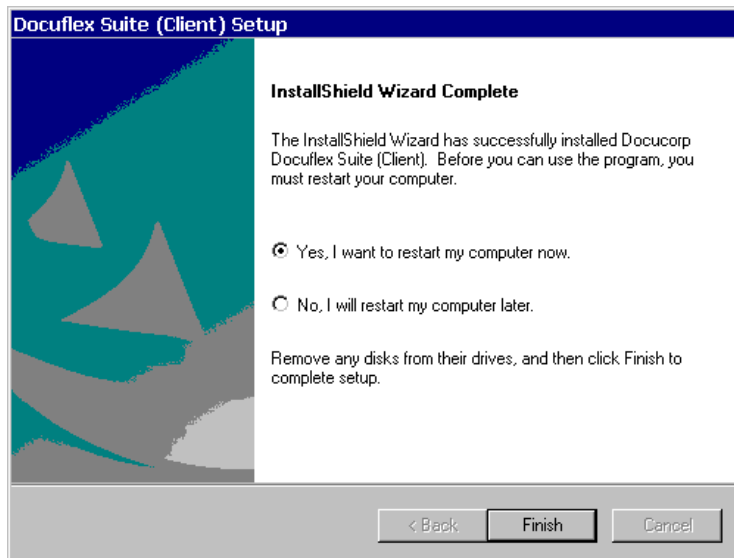
If you separately install one of the programs comprising the Docuflex Suite, and then install the Docuflex Suite, that program will thereafter be considered as part of the Docuflex Suite. The “Modify” option marks the program as being installed, indicated by a check, the same way as if you had installed it with the Docuflex Suite. If you choose to uninstall the program, it will be uninstalled even if you did not install it with the Docuflex Suite.

- 9 Click **Next>** to continue with the installation or **Cancel** to quit the program.

A dialog box indicating the setup program's progress displays until all the files have been copied to your PC.



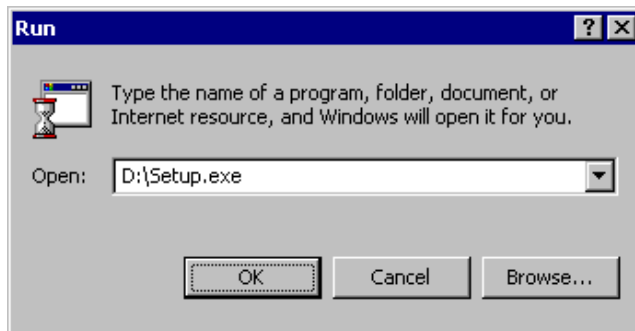
When the installation is 100% complete, the program displays the InstallShield Wizard Complete dialog box.



- 10 Click **Finish** to complete the installation program and reboot your workstation.

To Install Docuflex

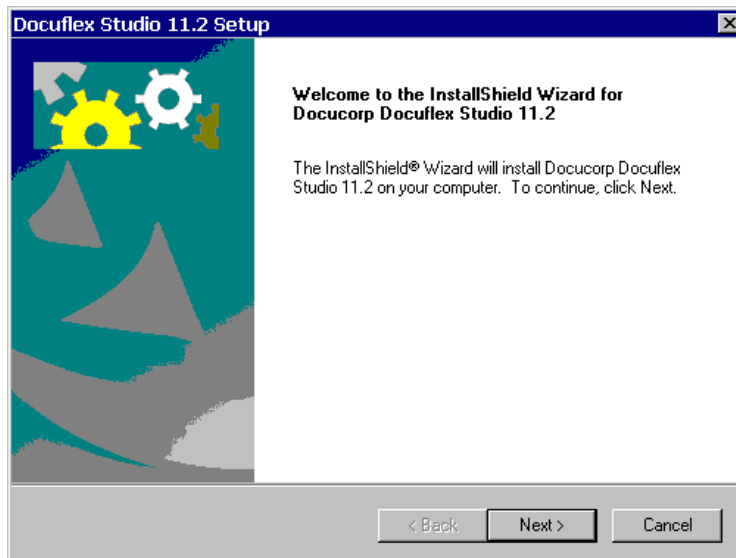
- 1 Insert the Docuflex Installation CD in the appropriate drive.
- 2 Select **Start>Run** and Windows displays the Run dialog box.



- 3 In the Open text box, type **D:\SETUP.EXE** and click **OK**.
-or-
Click **Browse** to locate the program.

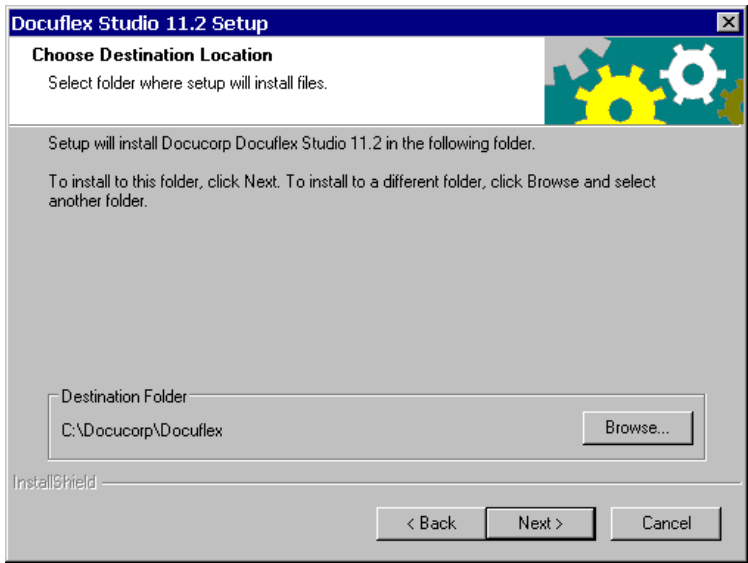
If the installation disc is in a drive other than D:, enter the appropriate drive letter specification.

The installation routine displays a dialog box indicating the InstallShield Wizard's progress, followed by the Welcome dialog box.



- 4 Click **Next>** to continue with the installation or **Cancel** to quit the program.

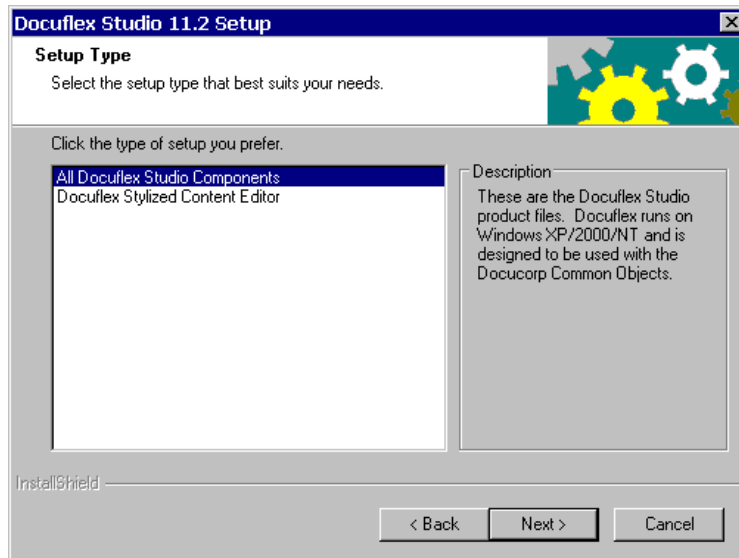
The routine then displays the Choose Destination Location dialog box, prompting you for the folder name/directory path into which you want to install the program.



- 5 Perform one of the following procedures:

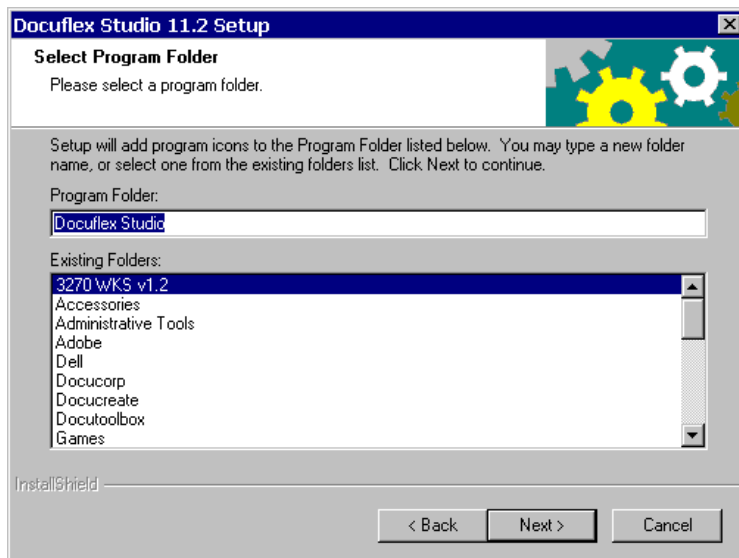
To	Perform this action
Accept the default path the installation routine proposes	Click Next> .
Enter another path for the installation	Click Browse , select a new path, and then click Next> . Note: The Destination Folder lists the last location to which the program was installed. If you're re-installing the program to a different location, you should Cancel the routine, un-install the program from its previous location, and then install the program to the desired location.

- 6 Click **Next>** to continue with the installation if you have not already done so. You can also click **<Back** to return to the previous screen or **Cancel** to abort the routine. You'll next see the Setup Type dialog box offering different setup options.



- 7 Select the Setup type you prefer, according to the Description on the right, and then click **Next>**.

The Select Program Folder dialog box displays the folder where you'll store the program files.

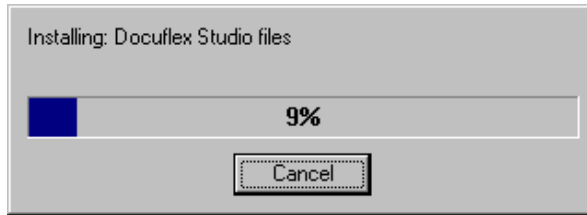


- 8 Perform one of the following procedures:

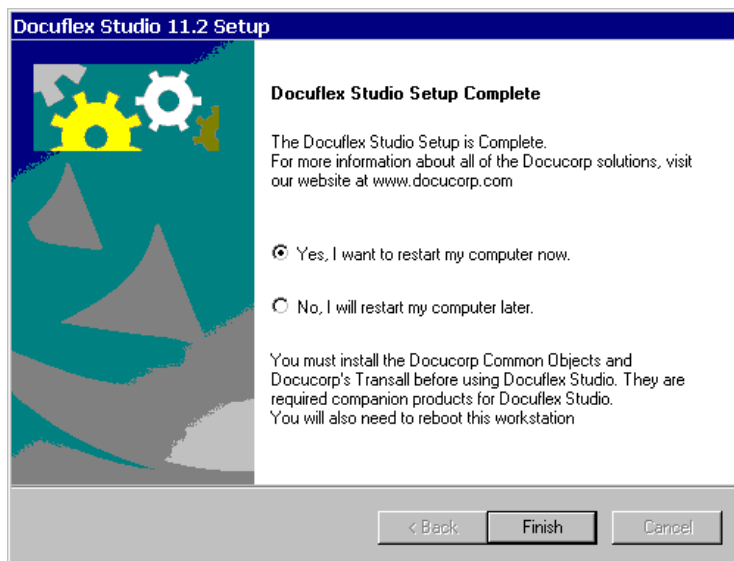
To	Perform this action
Accept the default program folder the installation routine proposes	Click Next> .
Select an existing folder for the installation	Use the scroll bar to click on an existing folder; then click Next> .

- 9 Click **Next>** to continue with the installation if you have not already done so. You can also click **<Back** to return to the previous screen or **Cancel** to abort the routine.

A dialog box indicating the setup program's progress displays until all the files have been copied to your PC.



When the installation is 100% complete, the program displays the Docuflex Studio Setup Complete dialog box.



- 10 Click **Finish** to complete the installation program and reboot your workstation.

NOTE

Prior to saving your first project, you should create path maps for storing your Docuflex projects and pre-composed members (see “[Environment Manager](#)” on page 480).

Setting Up Docuflex

Building Your Document

Docuflex is a very powerful document composition tool. With it, you can create a variety of business documents, for several audiences, with differing delivery requirements. As you go about the process of organizing your goals, you should keep the following questions in mind:

- “Who are the recipients of my document?”
- “How will they use my document?”
- “What will they be using to access my document?”
- “How will I print my document?”
- And, finally, “How will I access the variable data for my document?”

By basing your planning process on these thoughts, you'll greatly reduce the time necessary to create your document, versus changing it later to fit these requirements.

Before building the project, visualize the appearance of your document, particularly the section breaks. If you include an informative letter before the customer statement, for example, a section break divides the two parts, or sections.

Starting with Document Templates

When you use Docuflex to create a document project, you will choose from a variety of document templates. These templates are without document content, but they contain some basic components (e.g., formatting styles, text frames, page definitions, processing rules). By modifying these components to fit your individual situation, you can greatly reduce the time necessary to begin adding document components to your project.

The following steps present a broad overview of the order in which you'll build or modify your document. These steps are not complete, in that you'll end up repeating some of them as you build your project.

To Build a Document Project

- 1 Create a Page Definition. See [“To Add a Page Definition”](#) on page 353.
 - a Create a Page Layout. See [“To Add a Page Layout”](#) on page 354.
 - (1) Complete the Page properties.
 - (2) Create Frames for the Page. See [“To Add a Page Frame”](#) on page 358.
 - (a) Complete the Frame properties.
- 2 Create a Style (e.g., Character, Color, Field, Member, Paragraph, and Tab). See [“Using the Styles Bar and Views”](#) on page 189.
 - a Complete the Style properties.
- 3 Create a Section. See [“To Add a Section”](#) on page 368.
 - a Complete the Section properties.
 - b Create a Member. See [“To Add a Member”](#) on page 294.
 - (1) Complete the Member properties.
 - (2) Apply the Styles to the section Members and, if necessary, Overflow Definitions.
 - (3) Create a Field. See [“To Add a Variable Field”](#) on page 446.
- 4 Create Document Segments (for text that appears several times in the document). See [“To Add a Segment”](#) on page 372.
 - a Complete the Document Segment properties.
- 5 Create an Overflow Definition. See [“To Add an Overflow Definition”](#) on page 294.
 - a Complete the Overflow Definition properties (e.g., headers and footers).
 - b Apply the Overflow Definition to the section Members and, if necessary, Document Segments.
- 6 Create a Rule. See [“To Create a Rule”](#) on page 222.
 - a Complete the Rule code.
 - b Apply the Rule to the section Members and, if necessary, Document Segments and Overflow Definitions.
- 7 Create a Table Definition. See [“To Add a Table Definition”](#) on page 375.
 - a Complete the Table Definition properties.
 - b Add the Table to a Section as a Member. See [“To Assign a Member to a Table”](#) on page 304.
 - (1) Assign Members to a Table Cell.
 - (2) Add a Table Row, if necessary. See [“To Add a Row to the Table Definition”](#) on page 380.
 - (3) Add a Table Cell, if necessary. See [“To Add a Cell”](#) on page 381.

- 8 Create an Optional Contents Member. See [“To Add Optional Content”](#) on page 290.
 - a Complete the Member properties.
- 9 Establish an external Reference. See [“To Add an External Reference”](#) on page 363.
 - a Complete the Reference properties.
- 10 Create a Table of Contents placeholder. See [“To Add a TOC Entry”](#) on page 381.
 - a Complete the TOC properties.
 - b Assign an Overflow Definition.
- 11 Create a Channel. See [“To Display the Channels Dialog”](#) on page 391.
 - a Complete the Channel properties.
- 12 Create a Recipient. See [“To Display the Recipients Dialog”](#) on page 397.
 - a Complete the Recipient properties.

These steps are merely guidelines, however. You are free to create the components in any fashion you choose.

Using Docuflex

The section consists of the following topics:

- “Charts” on page 41
- “Overflow Processing” on page 48
- “Widow/Orphan Control” on page 53
- “Lists” on page 54
- “Formatting Content” on page 59
- “Overriding Output Destinations” on page 62
- “Building Tables” on page 64
- “Building a Table of Contents” on page 69
- “Docuflex Booklet Processing” on page 73
- “Check Box Fields” on page 74
- “DataList Choices for ComboBox Fields” on page 76
- “Integrating Docuflex with Documanager” on page 77
- “Using Footnotes” on page 111
- “Using Choice Fields” on page 116
- “Image Manipulation” on page 117
- “Running a Docuflex Project in Debug Mode” on page 120
- “Working With Docuflex to Produce PDF” on page 123
- “Docuflex Studio Sample Projects” on page 129

Charts

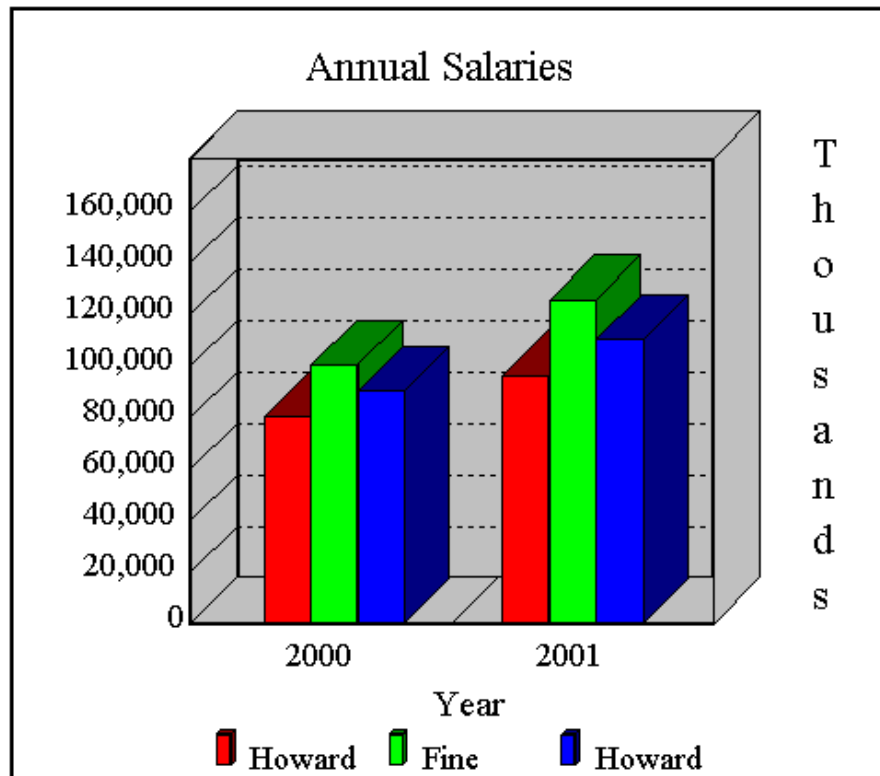
Charts are one of the most powerful presentation tools contained in Docuflex. With charts, you can present a clarified “picture” of a complicated concept. Docuflex contains three methods for creating charts—an internal chart engine and two third-party charting application:

To create a chart with	See:
Docuflex	“Creating Docuflex Charts” on page 42
Three D Graphics, Inc.	“Customizing Presentation Graphics Charts” on page 308

Creating Docuflex Charts

“**Chart Types**” on page 44 discusses the different types of charts that you can create, along with the structure of each.

Among the available charts, the following bar chart is the one of the most typical and easiest to explain.



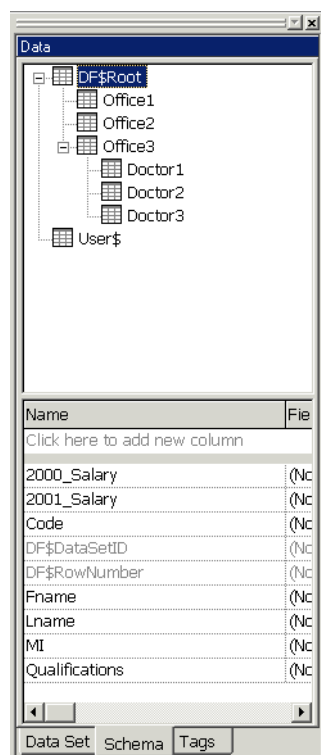
The two most important areas of the above chart are the *data groups* and the *data points* within those groups. The two years' worth of salaries represent the data groups, and the three salaries for the doctors represent the data points.

In a simple, two-dimensional table, the source data for the chart is as follows:

	2000_Salary	2001_Salary
Dr. Moe Howard	\$80,000	\$96,000
Dr. Larry Fine	\$100,000	\$125,000
Dr. Curly Howard	\$90,000	\$110,000

As you can see, the vertical columns of the table become the data groups and the horizontal rows become the data points.

You'll most likely see the data presented in a different format within Docuflex Studio, however. The Data Control Bar displays the source data for the project, as follows.



In this presentation, 2000_Salary is a column within the Doctor row, and Doctor is a row within the Office table. To resolve this presentation with the previous one, 2000_Salary is a data group and the *values* within the group are the data points.

TIP

You can arrange the groups (columns) in any order you want, but you must choose one of the groups to become the Legend for the chart (i.e., in the previous bar chart, Lname was selected as the Legend and supplied the doctors' last names).

While it's true that you can arrange the groups in any order, all the groups must reside in the same table, meaning that your data must be arranged in a specific format to yield the correct results for your chart.

To Create Charts

- See "Add Member" on page 294. This menu option invokes the Member Definition Wizard that provides the necessary steps for creating a Chart member.

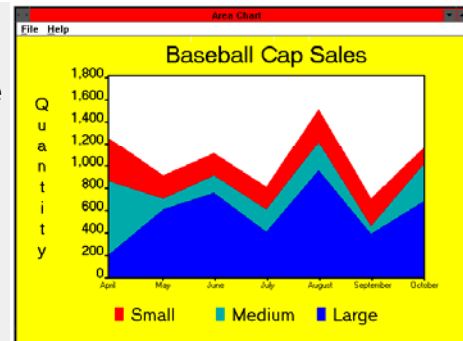
Chart Types

In Docuflex, you can employ illustrative charts and graphs (“charts”) to clarify and enhance your document. The charts can be as simple as pie charts or as complex as 3-D, perspective bar graphs. The following illustrations are examples of the many different kinds of charts you can include in your document.

Area

The area chart can be displayed in two or three dimensions and the data points must be positive.

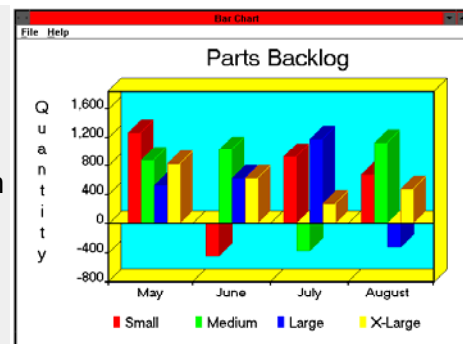
The area chart overpaints one data group with another. The data groups are painted in ascending order, beginning with the first data group up to a maximum of 12. To insure the desired visual result, the first data group should have the largest data point values.



Bar

The bar chart can be displayed in two or three dimensions and the data points can be positive or negative.

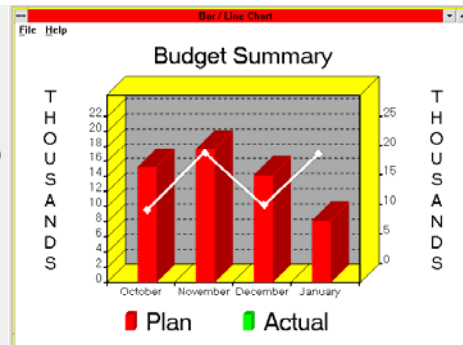
When the bar chart encounters negative data points, the points are drawn below the zero (0) point on the y-axis (vertical). For three-dimensional charts, a shaded side wall and top is provided for each bar. Also, a shadow box is drawn around the graphic area to add an additional sense of dimension.



Bar/Line

The bar/line chart is displayed in a combination of two and three dimensions and the data points must be positive.

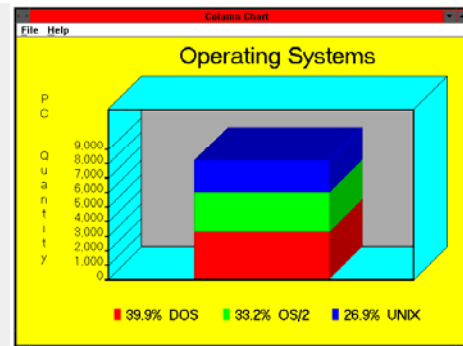
The bar portion of the chart is displayed in two or three dimensions. The line portion, however, is only displayed in two dimensions. The bar/line chart only supports the first two data groups.



Column

The column chart can be displayed in two or three dimensions and the data points can be positive or negative.

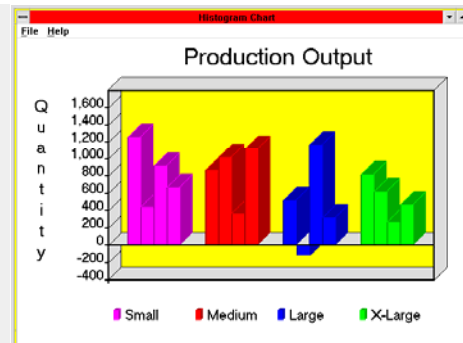
The column chart is an alternative to presenting data normally shown in a pie chart. All data points for each data group are automatically totaled and the group totals are stacked on top of each other in ascending order. The totals for each data group are presented in the data group legend area in percentage form.



Histogram

The histogram chart can be displayed in two or three dimensions and the data points can be positive or negative.

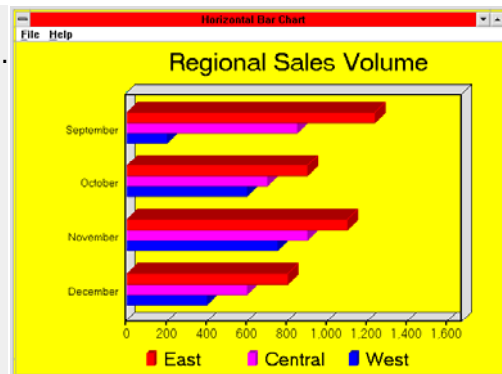
The histogram chart displays all the data points for a data group next to each other.



Horizontal Bar

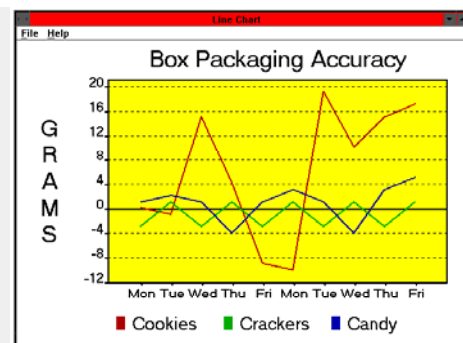
The horizontal bar chart can be displayed in two or three dimensions and the data points can be positive or negative.

The x-axis and y-axis presentation areas are switched (e.g., landscape vs. portrait).



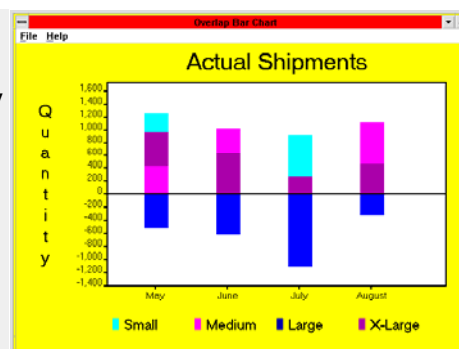
Line

The line chart can be displayed in two or three dimensions and the data points can be positive or negative.



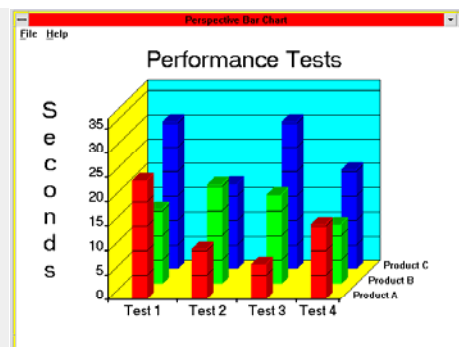
Overlap Bar

The overlap bar chart can be displayed in two or three dimensions and the data points can be positive or negative. The bars overlap each other rather than being placed side by side.



Perspective Bar

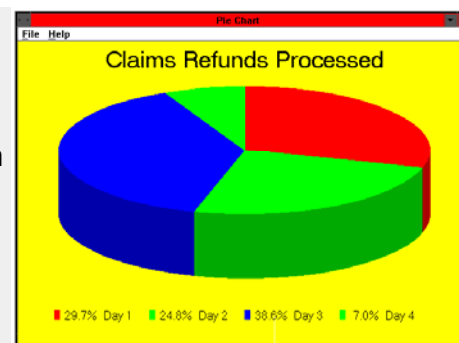
The perspective bar chart is only displayed in three dimensions and the data points can be positive or negative. When the perspective bar chart encounters negative data points, the points are drawn with a pattern Overlay. Data legends are displayed on the right side of the graph or, if space is limited, in the footing region.



Pie

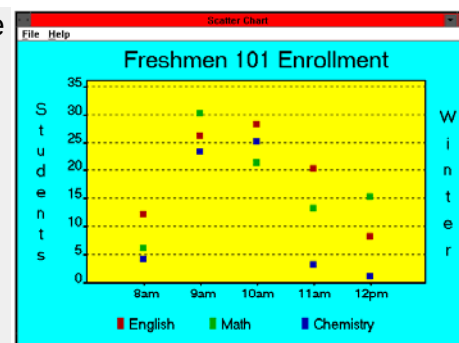
The pie chart can be displayed in two or three dimensions and the data points can be positive or negative.

The pie chart automatically adds all data points for each given data group. If the total for a data group is a negative number, the data group is not displayed. The totals for each data group are presented in the data group legend area of the chart in percentage form.



Scatter

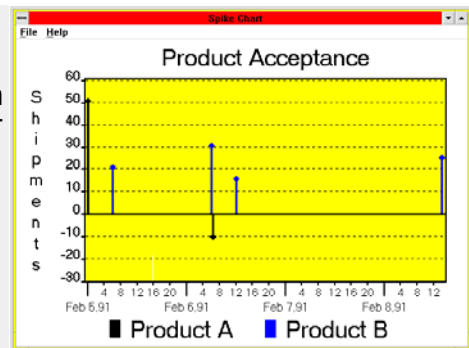
The scatter chart is only displayed in two dimensions and the data points can be positive or negative.



Spike

The spike chart is only displayed in two dimensions and the data points can be positive or negative.

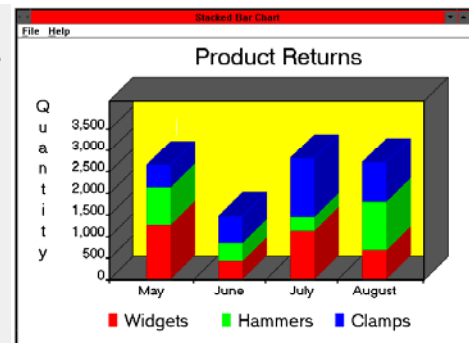
The spike chart is a minor deviation of the symbol chart. Each marker symbol displays a vertical line drawn from the marker symbol to the base value of the graphic chart.



Stacked Bar

The stacked bar chart can be displayed in two or three dimensions and the data points can be positive or negative.

The data points are stacked on top of each other in ascending order. The chart provides a good mechanism for representing visual graphical totals with a given x-axis time period.



Overflow Processing

Overflow processing is the strategy by which you decide what should occur when the composition engine attempts to place a member that “breaks” a boundary (e.g., the entire member will not fit within the remaining space in the column, frame, or page). This strategy can be very simple, from a “continued from” line to a more complex procedure that sub-totals an amount and continues it at the top of the next column or page. The following illustrations represent a before-and-after look at overflow processing.

In the first illustration, no overflow processing is employed, so the meter readings simply continue from one column to the next.

Meter 2	186	Meter 3	246	Meter 4	494
Meter 3	311	Meter 4	40	Meter 5	758
Meter 4	295	Meter 5	788	Meter 6	41
Meter 5	358	Meter 6	477	Meter 7	773
Meter 6	68	Meter 7	236	Meter 8	765
Total	1867	Meter 8	641	Meter 9	256
- Location 7		Total	3699	Meter 10	652
MeterConsumption		- Location 2		Total	4755
Meter 1	115	MeterConsumption		- Location 4	
Meter 2	254	Meter 1	460	MeterConsumption	
Meter 3	461	Meter 2	63	Meter 1	87
Meter 4	257	Meter 3	75	Meter 2	471
Meter 5	268	Meter 4	494	Meter 3	477
Total	1355	Meter 5	489	Meter 4	652
Service 3		Total	1581	Meter 5	644
- Location 1		- Location 3		Meter 6	564
MeterConsumption		MeterConsumption		Total	2895
Meter 1	727	Meter 1	557	- Location 5	
Meter 2	544	Meter 2	57	MeterConsumption	
		Meter 3	402	Meter 1	665

In the second illustration, a subtotal amount is computed if all the meter readings for a given location will not fit in the column. Then, a pair of “continued” lines are printed, the subtotal amount is forwarded, and the meter readings continue. The benefits of overflow processing are improved clarity and sophisticated reporting capabilities.

<i>Meters for Location 4 continued...</i>	<i>Meters for Location 6 continued...</i>	Service 3
MeterConsumption	MeterConsumption	- Location 1
Sub Fwd 1439	Sub Fwd 1146	Meter 1 727
Meter 6 724	Meter 4 295	Meter 2 544
Meter 7 762	Meter 5 358	Meter 3 246
Meter 8 370	Meter 6 68	Meter 4 40
Total 3295	Total 1867	Meter 5 788
- Location 5	- Location 7	Meter 6 477
MeterConsumption	MeterConsumption	Meter 7 236
Meter 1 393	Meter 1 115	Meter 8 641
Meter 2 358	Meter 2 254	Total 3699
Meter 3 610	Meter 3 461	- Location 2
Total 1361	Meter 4 257	MeterConsumption
- Location 6	Meter 5 268	Meter 1 460
MeterConsumption	Total 1355	Meter 2 63
Meter 1 649		Meter 3 75
Meter 2 186		Meter 4 494
Meter 3 311		Meter 5 489
Sub total 1146		Total 1581
<i>continued...</i>		

Using Overflow Definitions

Overflow processing is achieved by constructing Overflow Definitions in Docuflex Studio. You must specify at what boundary these definitions are invoked (e.g., the beginning or end of a column, the beginning or end of a page).

TIP

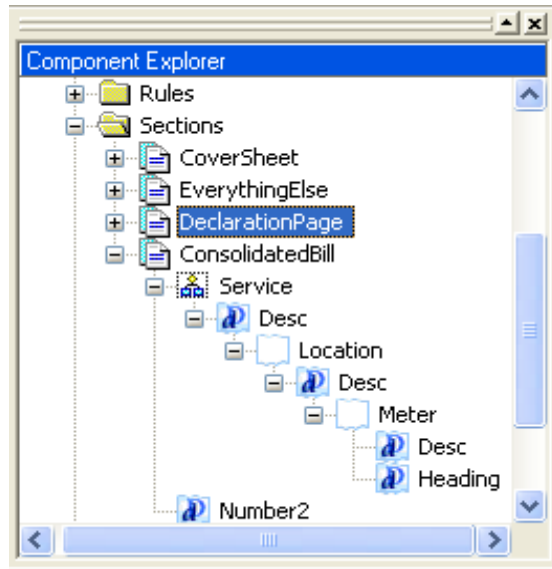
Some Overflow Definitions can only be computed at the end of a page, whereas others are computed at the end of a column. Even if you’re not using multiple columns in your document, you can still use the “column” settings, since every page must contain at least one frame, and every frame, by default, contains one column.

After creating the Overflow Definition, you must apply it to a member. The theory behind Overflow Definitions is that if this member, *or any of its children*, overflow or “break” a boundary, the composition engine should invoke overflow processing. You should choose the placement of the Overflow Definition very carefully, as it greatly affects your results.

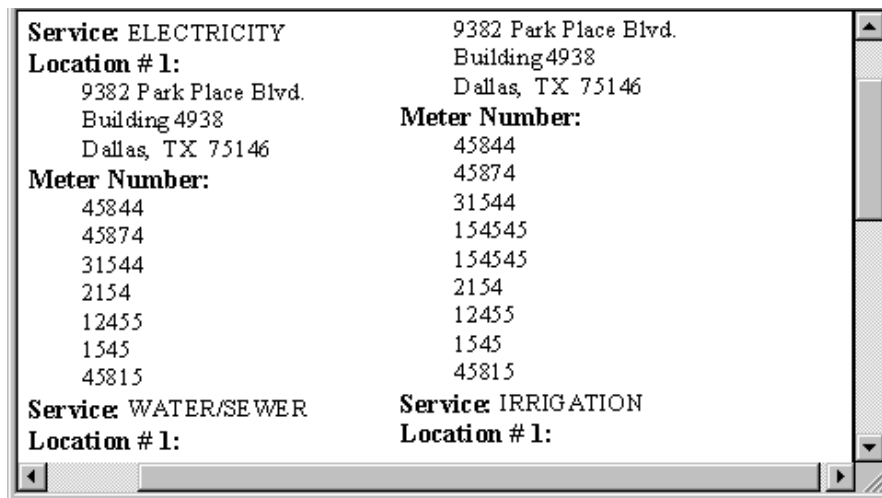
Step 1: Create the Sections and Members

The following illustrations depict a multiple-column document where a member will not completely fit within the column. The member continues at the top of the next column.

The Component Explorer displays the sections that result in the completed document.



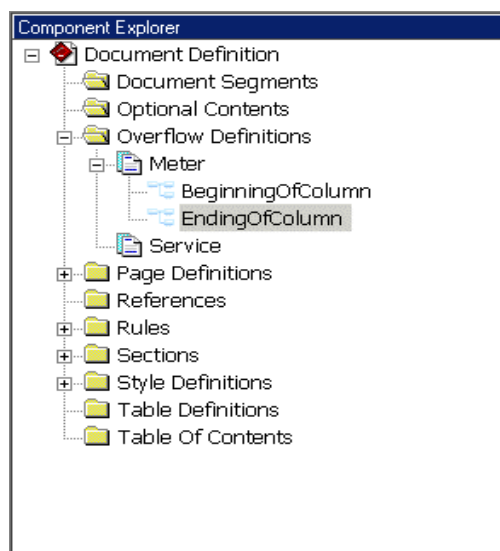
The Preview window displays the completed document.



Notice how the members “break” the column boundary, in that all the members will not fit in the column. The remaining members are continued at the top of the next column.

Step 2: Create an Overflow Definition

The Overflow Definition can be as simple or complex as necessary. For this example, we need at least two definitions; one for the bottom of one column, and another for the top of the adjacent column.

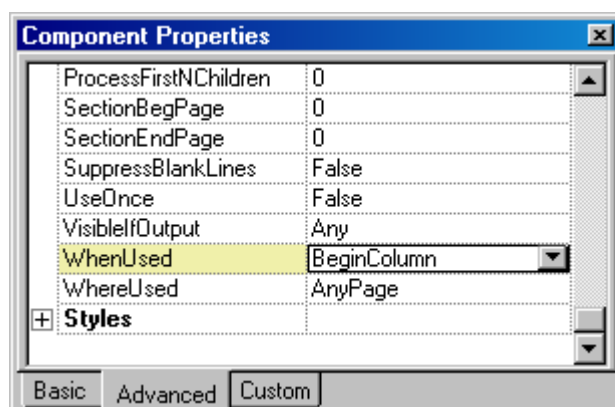


The names of the Overflow Definition members are arranged alphabetically. These names are simply labels and have no effect on the order in which it's processed.

For each Overflow Definition member, you must specify when it is to be invoked. You specify this value in the WhenUsed property.

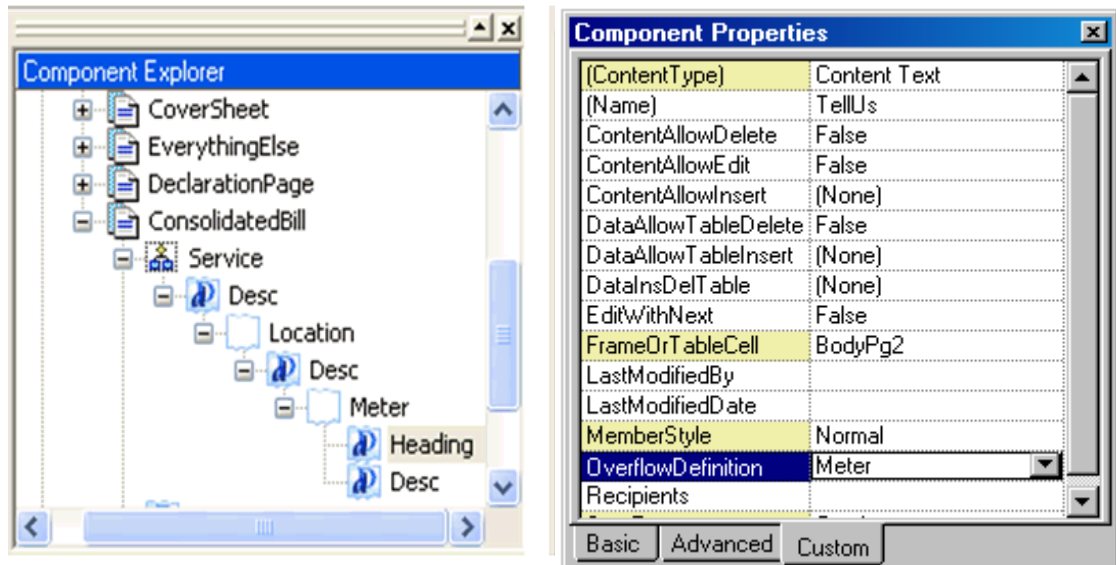
CAUTION!

If you do not specify a value for the WhenUsed property, the Overflow Definition member displays multiple times.

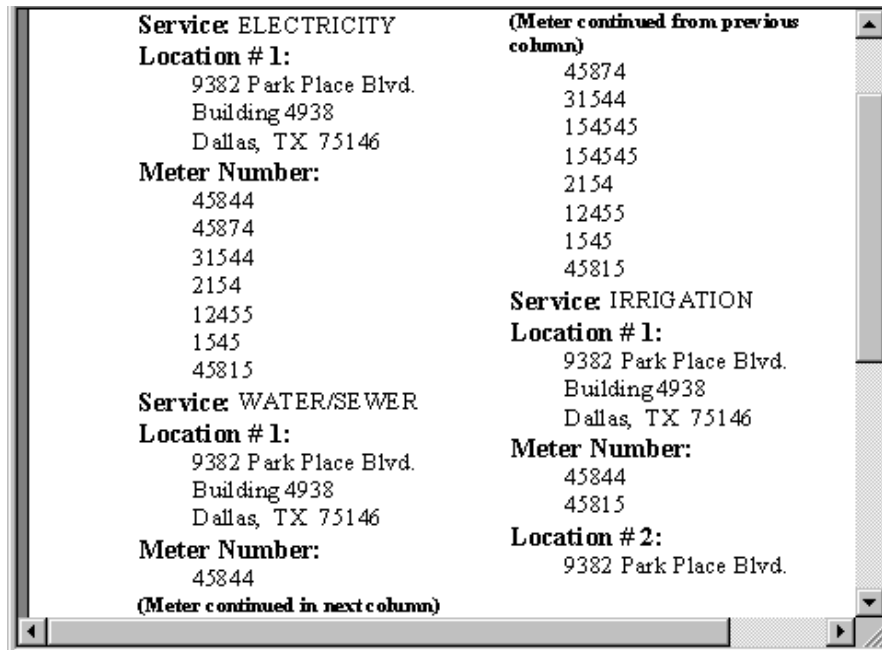


Step 3: Reference the Overflow Definition

You should choose the appropriate member, the one where you want to invoke overflow processing if the entire member will not fit in the specified area, and reference the Overflow Definition.



The Preview window displays the completed document with the overflow processing in effect.



When the composition engine cannot fit all the meters in the column, the overflow processing feature displays a pair of "continued" messages and resumes in the next column.

Widow/Orphan Control

Docuflex Studio offers a feature that you can use when you want to link certain document components to each other. This feature is called Widow/Orphan control and is necessary, for example, to keep similar items from being split at the end of a column or page.

NOTE

You can only use the KeepFirstNOccur and KeepLastNOccur on a member that has a data source assigned, where that member will loop on the rows of a table.

Docuflex Studio includes properties that address single- and multiple-occurrence items. The title for a table of items is an example of an item that occurs only once, whereas the items themselves occur several times.

A “widow” is the last line of a member, or the last multiple-occurrence item, printed by itself at the top of a column or page. An “orphan” is the first line of a member, or the first multiple-occurrence item, printed by itself at the bottom of a column or page.

The property KeepPrev controls single items by linking it to the previous member or section. The KeepFirstNOccur and KeepLastNOccur properties control multiple-occurrence items by only allowing a column or page split after a certain number of items have been displayed.

TIP

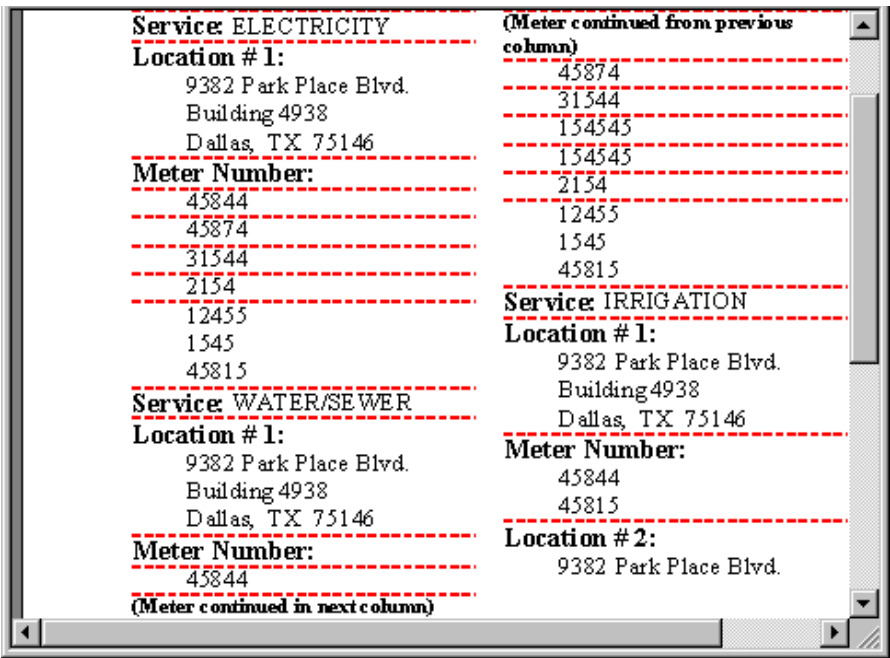
The easiest way to see the effect of the widow/orphan controls is to display break lines (see “Using the Display View” on page 406).

When deciding the number of occurrences to keep together, you should answer the question, “How many of these members do I want to link with the first/last one?” If you want to link two members to the last one, for example, you’re actually linking a total of three members, even though you enter KeepLastNOccur=2.

The following illustration displays an example of before-and-after application of the KeepLastNOccur property. Notice the break lines displayed after the various members.

Service: ELECTRICITY	(Meter continued from previous column)
Location # 1:	
9382 Park Place Blvd.	45874
Building 4938	31544
Dallas, TX 75146	154545
	154545
Meter Number:	2154
45844	12455
45874	1545
31544	45815
2154	
12455	Service: IRRIGATION
1545	Location # 1:
45815	9382 Park Place Blvd.
	Building 4938
Service: WATER/SEWER	Dallas, TX 75146
Location # 1:	
9382 Park Place Blvd.	Meter Number:
Building 4938	45844
Dallas, TX 75146	45815
Meter Number:	Location # 2:
45844	9382 Park Place Blvd.
(Meter continued in next column)	

Before you specify the Keep property, notice that every meter is proceeded by a break line. This means that a column or page break could occur at any place in the meter list.



After specifying the KeepLastNOccur=2 property, the last three meters must be grouped together. A column or page break could occur either before or after this 3-meter group, but not in the middle.

Lists

Docuflex is designed to be a full-featured document composition and creation application. to accomplish this goal, Docuflex Studio includes a very useful feature seen in popular, Windows-based, word-processing applications—lists. You can prepare two types of lists:

- bulleted (or numbered)
- ordered (or outline format)

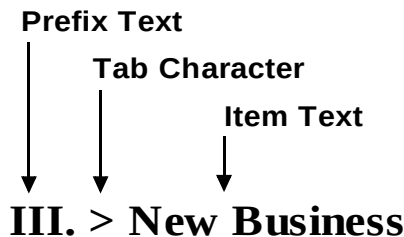
An example for each type of list is illustrated in the following table:

Bulleted (or Numbered) List	Ordered List
■ Purchase groceries at market ■ Pick up dry cleaning ■ Deposit paycheck -or- 1 Turn left onto Beltline Rd. 2 Pass through two traffic lights. 3 Get in right lane; merge to north-bound US 75.	I. Opening Remarks II. Old Business A. Previous Minutes B. Council Elections III. New Business A. Charity Auction i. Donations ii. Gifts B. Children’s Hospital Visit

To gain a better understanding about how to create a list, you need to be aware of the different parts of the structure of a list. A list comprises three parts:

- The “prefix” text or character identifier
 - For a bulleted list, the prefix is either a bullet character or a number with or without a period, depending on your requirements.
 - For an ordered list, the prefix can be a character of the alphabet or a roman numeral, in either upper or lower case and with or without a period.
- A Tab character
- The text of the list item

An example of the syntax of the list is illustrated in the following figure:



Creating Bulleted Lists

Creating bulleted lists is the easier of the two. Bulleted lists require two components, as follows:

- The content of the item
- An appropriate paragraph style
 - The prefix text (or character)
 - A prefix character style
 - A tab style

To Create Bulleted Lists

- 1 In the Component Explorer, add a new member via the Member Definition Wizard (see “[To Add a Member](#)” on page 294).

Now you need to perform the procedure to establish the character style of the bullet.

- 2 In the Component Explorer, choose the Style Definitions folder.
- 3 Add a character style (e.g., Bullet; see “[To Display the Character Styles](#)” on page 191).
- 4 In the Component Properties, select the font for the bullet (e.g., Wingdings; see “[To Select the Font](#)” on page 578).

Next, you'll add a tab style to format the paragraph appropriately.

- 5 Add a tab style (e.g., Bullet; see “[To Display the Tab Styles](#)” on page 206).

- 6 In the Component Properties, set the tab stops for the bulleted paragraph (e.g., 0.5", 1", and 1.5"; see "To Add a Tab Style" on page 207).
Finally, you'll create a paragraph style to tie all the components together.
- 7 Add a paragraph style (e.g., Bullet; see "To Display the Paragraph Styles" on page 205).
- 8 In the Component Properties, select the **PrefixText** field and enter the character you want to use for the bullet, followed by a tab (e.g., lower-case L (l) in the Wingdings font results in a round bullet character, or ●; see "To Build an Expression" on page 276).
- 9 In the **PrefixCharacterStyle** field, select the correct character style (e.g., Bullet).
- 10 Verify that the correct Tab style displays. If not, select the correct tab style (e.g., Bullet).
- 11 Click  in the Output Toolbar.
-or-
Select **View>Refresh**.

Creating Ordered Lists

Creating ordered lists is slightly more difficult than bulleted lists, in that you must use a formatting code to establish the level within the hierarchy of each member. This concept is most easily illustrated by thinking of a roman numeral outline:

- I. Opening Remarks
- II. Old Business
 - A. Previous Minutes
 - B. Council Elections
- III. New Business
 - A. Charity Auction
 - i. Donations
 - ii. Gifts
 - B. Children's Hospital Visit

The first level of the hierarchy consists of numbers **I**, **II**, and **III**; the second consists of letters **A** and **B**; and the third level consists of letters **i** and **ii**.

NOTE

The composition engine contains logic that automatically increments the number for additional members on the same level (e.g., "Opening Remarks," "Old Business," and "New Business.")

Docuflex Studio requires a special control variable in the PrefixText field to generate correctly the prefix for an ordered list:

<<DCP.LL.*nn*>> or **<<DCP.HL.*nn*>>**

where:

DCP.LL.*nn* a List Level placed at a specific level within the hierarchy (e.g., *nn* must be between 1 and 16).

-or-

DCP.HL.*nn* A Header Level placed at a specific level within the hierarchy (e.g., *nn* must be between 1 and 16).

You can then apply a formatting mask to convert the level number into one of four formats:

Alphabetic Uppercase	convert to an upper-case letter of the alphabet (e.g., 1-26 = A-Z, 27-52 = AA-ZZ, and so on).
Alphabetic Lowercase	convert to a lower-case letter of the alphabet, as above.
Roman Uppercase	convert to an upper-case roman numeral (e.g., 1 = I, 2 = II, and so on).
Roman Lowercase	convert to a lower-case roman numeral, as above.

Our ordered list, when constructed with the PrefixText fields, looks like this:

I. Opening Remarks	<<DCP.HL.01, * ROMAN >>
II. Old Business	<<DCP.HL.01, * ROMAN >>
A. Previous Minutes	<<DCP.LL.02, * ALPHABETIC>>
B. Council Elections	<<DCP.LL.02, * ALPHABETIC>>
III. New Business	<<DCP.HL.01, * ROMAN >>
A. Charity Auction	<<DCP.LL.02, * ALPHABETIC>>
i. Donations	<<DCP.LL.03, * roman>>
ii. Gifts	<<DCP.LL.03, * roman>>
B. Children's Hospital Visit	<<DCP.LL.02, * ALPHABETIC>>

So as you can see, ordered lists require three components, as follows:

- The content of the item
- The ordered list controls
 - the level of the item within the hierarchy of the list
 - the number with which to start the ordering sequence
- An appropriate paragraph style
 - The prefix text
 - A tab style

To Create Ordered Lists

- 1 In the Component Explorer, add a new member via the Member Definition Wizard (see “[To Add a Member](#)” on page 294).
- 2 In the Component Properties, select the OrderListLevel field and type the numeric level for the member (e.g., 1; see “[OrderListLevel](#)” on page 589).
- 3 Select the StartAt field and type the starting number of the sequence (e.g., 1; see “[StartAt](#)” on page 597).

Now you need to perform the procedure to establish the tab style for the paragraph.

- 4 In the Component Explorer, choose the Style Definitions folder.
- 5 Add a tab style (e.g., List; see “[To Display the Tab Styles](#)” on page 206).
- 6 In the Component Properties, set the tab stops for the list (e.g., 0.5”, 1”, and 1.5”; see “[To Add a Tab Style](#)” on page 207).

Finally, you’ll create a paragraph style to tie all the components together.

- 7 Add a paragraph style (e.g., List1; see “[To Display the Paragraph Styles](#)” on page 205).
- 8 In the Component Properties, select the PrefixText field and type the special control variable for this member (e.g., DCP.LL.01, * ROMAN). If this member is not on the first level, you might need to insert a tab character before the code (see “[To Build an Expression](#)” on page 276).
- 9 Select the TabStyle field and choose the appropriate tab style (e.g., List).
- 10 Click  in the Output Toolbar.
-or-
Select **View>Refresh**.

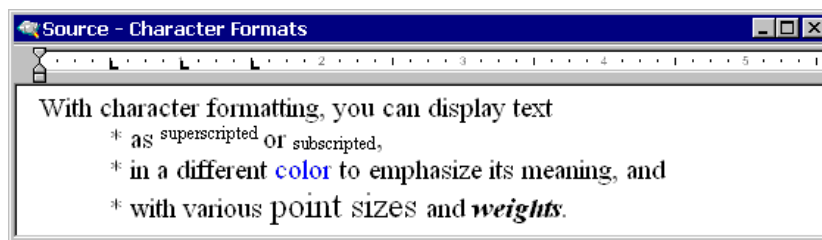
Formatting Content

Docuflex Studio makes extensive use of formatting styles for characters (text), paragraphs, and members. Formatting styles are extremely beneficial as they enforce uniformity within the document. Styles also minimize the effort needed to make modifications to the document content. Styles, however, only enforce a basic structure to the content being formatted. There are other properties that affect the document content.

In this section, we'll discuss some of the other Component Properties that have an effect on the document content.

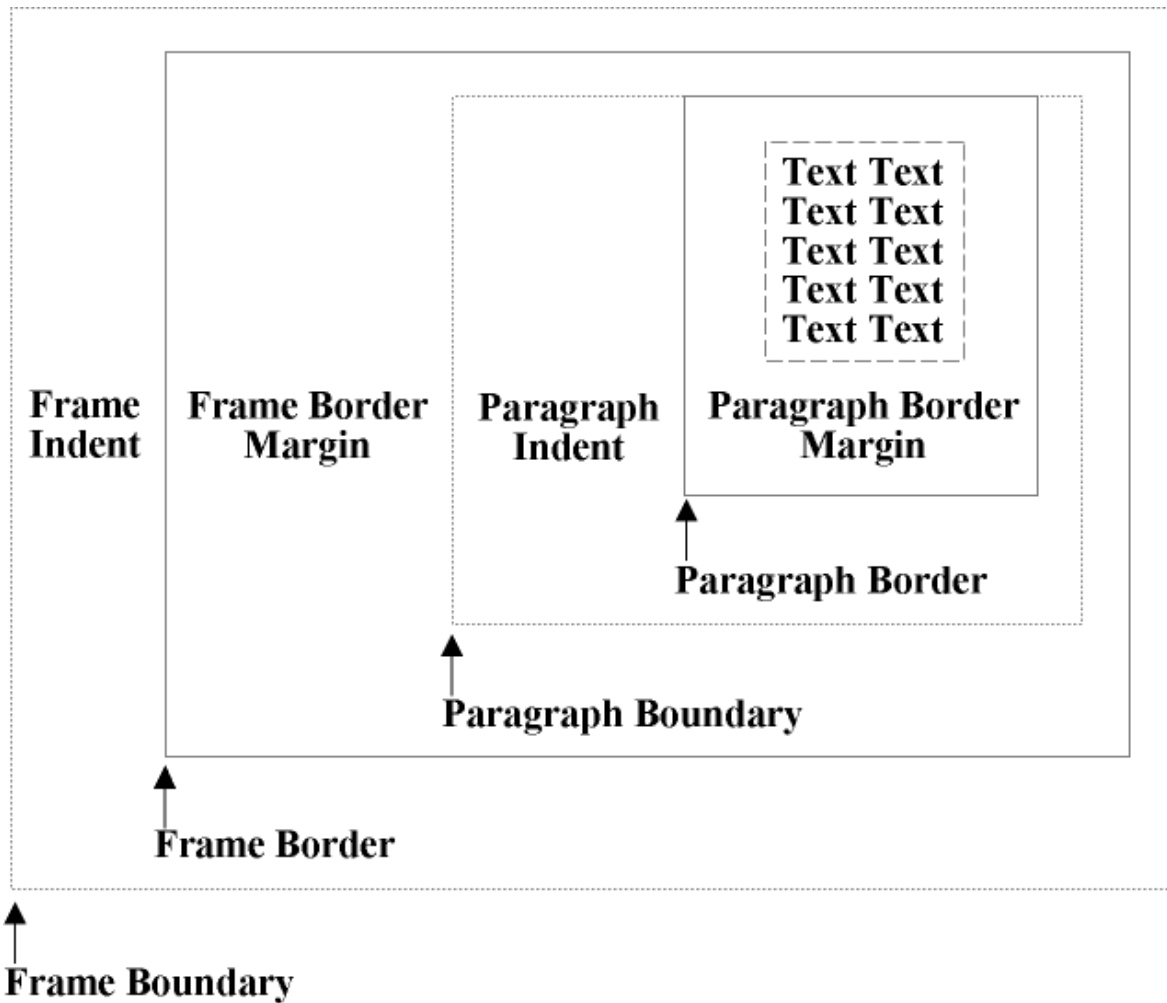
Character Formatting

Character styles certainly control the look-and-feel of the characters themselves, but no properties outside of the style have any effect on the character.



Paragraph Formatting

Paragraphs are also subject to the properties you specify in the paragraph style itself, including borders, indentations, and character and tab styles.



In the above illustration, the paragraph includes a BorderMargin. You can also add an Indentation between the border and the frame. You should remember that each paragraph can include its own border and indentation areas (see “Using the Paragraph Styles View” on page 202).

NOTE

Notice that the top paragraph border is aligned with the paragraph boundary. The composition engine ignores the top indentation value for the first paragraph in a frame.

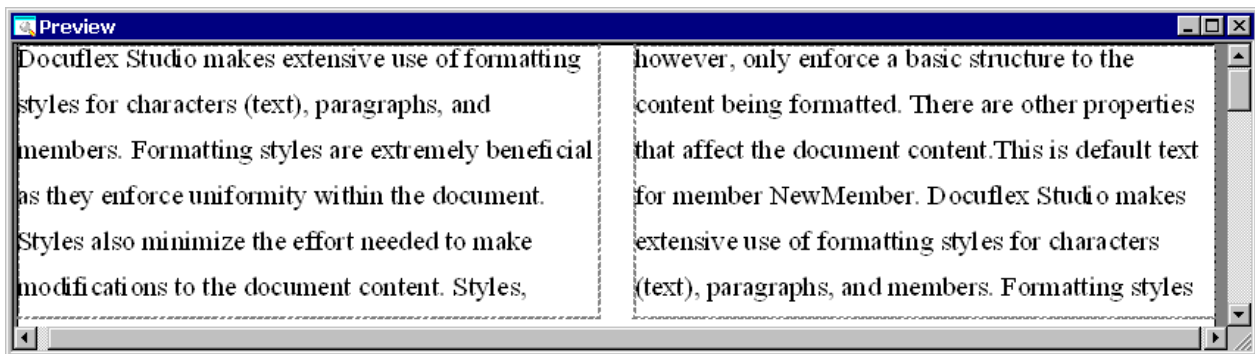
When viewing a paragraph, however, many properties other than those specified in the paragraph style have an effect on the display of the paragraph.

- Character style—Since a paragraph style can reference a character style, any changes to a character style directly affect the paragraph style and the paragraph.
- Tab style—The tab style has the same ramifications on a paragraph as does the character style.

TIP

When using tab stops in a member's Source window, you should be aware that tabs are treated as valid content, even though they do not produce any visible output. If you wanted to suppress the printing of a member that contains an "empty" variable data field, for example, by specifying `SuppressBlankLines=True` (but the placement of the tag is governed by a tab stop), then the member is no longer blank and is included in your composed document.

- Frame—The paragraph automatically flows between the boundaries of the frame. You can tailor the paragraph to be narrower than the column or frame. However, the paragraph cannot be any wider than the column or frame, even if you specify a Width setting.
- Columns and Gutters—If the paragraph is lengthy enough, and you place it into a frame with more than one column, a paragraph can span columns within a frame.



- Width—You can specify a width setting for a paragraph and, in doing so, make it narrower than the column or frame. Even if the Width setting is wider than the boundary, the boundary settings are honored.
- Height—The Height of the frame can cause the content to overflow into another frame.
- Left—The Left setting is applied before any other Border or Indentation setting, so it's possible that the Left plus the Width setting is wider than the frame boundary.
- SpaceAfter / SpaceBefore—If one paragraph has SpaceAfter, and the following paragraph has SpaceBefore, these two values are added together and displayed.
- Rules—User rules can effect the paragraph by placing formatting masks on the content. Inclusion rules can exclude entire paragraphs, depending on their qualifications.

Precomposed Document Formatting

Docuflex Studio imports precomposed documents from other sources, the most common being Rich-Text Format (.RTF) from various word processing applications.

If the imported document contains tab stops for aligning text, Docuflex Studio recognizes the origin of the file and treats the tab stops accordingly. If the text, aligned with the final tab stop on a line, “wraps” to the next line in a document imported from Docuword, the subsequent text is aligned with the left margin of the following line. With an RTF, however, the text is aligned with the first tab of the following line.

EXAMPLE

Precomposed RTF

```
X   This is a test
    of the behavior of tab stops
```

Overriding Output Destinations

Docuflex lets you override, if necessary, the standard output destination tag via processing rule or Transall script. This tag, DCP.CURRENT.DESTINATION, contains the value of the current output destination, or channel (see “Channels” on page 391).

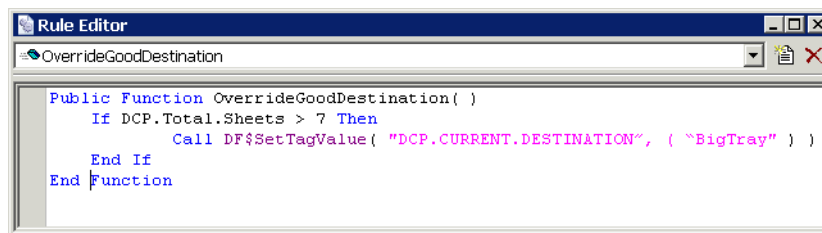
The value of this “reserved” tag, and all reserved tags, is normally maintained internally by Docuflex.

Syntax

To override the standard output destination, open the Rule Editor and add a statement such as:

Call DF\$SetTagValue(“DCP.CURRENT.DESTINATION”, (“BigTray”))

where “BigTray”, including the quotation marks, is a valid channel name. Usually, this need arises based upon some condition, such as when the number of sheets in your document reaches a critical number:



TIP

In the example, the DCP.TOTAL.SHEETS tag determines when to override the current destination tag, so the timing of when to effect the rule is very important. If you place the rule on a member during Pass 1 of Docuflex processing (the Pre- or PostInclusion pass), the DCP.TOTAL.SHEETS only indicates a value of 1 since it is not updated until Pass 2 (the Pre- or PostComposition pass). Even if the resulting document is 10 pages, the value of the tag at this point does not satisfy the stated condition and “BigTray” is not used.

One way to avoid the timing problem above is to add an empty member to the end of the Section and assign the rule you want to use as a PostComposition rule in the Component Properties. This way, all members have been composed and, after composition, DCP.TOTAL.SHEETS has the desired value. As an alternative, you could apply the rule as a PostComposition rule for the Sections *folder*.

Considerations

You should be aware of the following characteristics when overriding the standard output destination:

- Overriding the standard output destination is ignored if Docuflex encounters an error that normally triggers the ERROR destination.
- Any references in a member document to the DCP.CURRENT.DESTINATION tag will not be updated with the new value (the original, non-overridden value will be used.)
- Reserved tags (tags with the “DCP.” prefix) that are not recognized as valid reserved tags will generate warning messages in the log file and not be added to the tag list.

Tag names are not error checked when entered into the rules script file so the user is responsible for spelling the name correctly or the tag will not be used.

Overriding Channel Filenames

Docuflex lets you override, if necessary, the filename associated with a channel. You can perform this procedure via processing rule or Transall script. This tag, DCP.OUT.FILE.NAME, contains the current channel's output filename (see “Channels” on page 391).

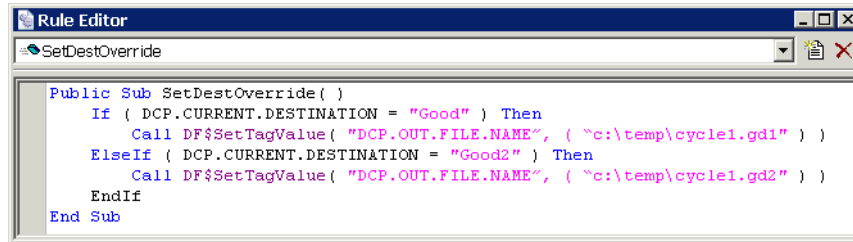
The value of this “reserved” tag, and all reserved tags, is normally maintained internally by Docuflex.

Syntax

To override the channel's output filename, open the Rule Editor and add a statement such as:

Call DF\$SetTagValue("DCP.OUT.FILE.NAME", ("c:\temp\Cycle1.gd1"))

where "c:\temp\Cycle1.gd1", including the quotation marks, is a valid filename:



Considerations

You should be aware of the following characteristics when overriding the output filename:

- If you want each transaction written to a separate file, make sure the channel's Write Mode is set to 'New File for Each Document.'
- Overriding the output filename is ignored if Docuflex encounters an error that normally triggers the ERROR destination.
- Reserved tags (tags with the "DCP." prefix) that are not recognized as valid reserved tags will generate warning messages in the log file and not be added to the tag list.

Tag names are not error checked when entered into the rules script file, so you're responsible for spelling the name correctly or the tag will not be used.

Building Tables

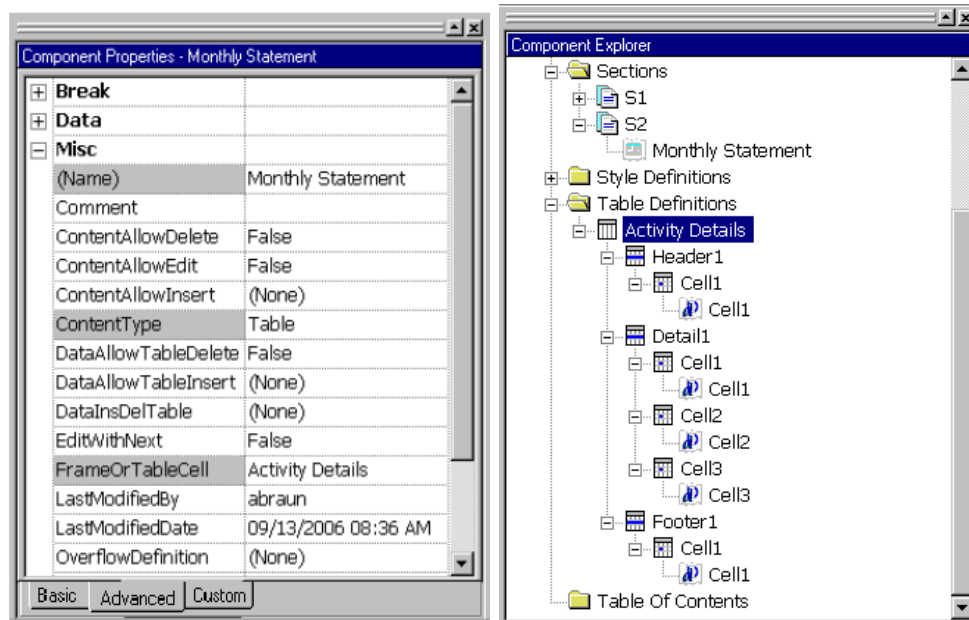
Building a table for your document is a process comprising multiple steps:

- 1 Create the table as part of creating members to assign to the table (e.g., **Document>Add Member**).
- 2 (Alternate method) Create the structure of the table using the Table Definition Wizard (e.g., **Document>Add Table Definition**).
- 3 Adjust the widths of the cells, if necessary.
- 4 Apply table, row, and cell borders.
- 5 Balance contents across cells, if desired.

Step 1: Insert the Table Members

- a Create the table members (see “Add Member” on page 294).

Be sure to choose a member type of “Table.” The second part of the wizard prompts you to choose a table to assign to the member or create a table. After completing the wizard, your Component Explorer and Component Properties bars should resemble the following:



In the Component Properties bar (shown on the left), the member “Monthly Statement” is of ContentType “Table” and is assigned to a FrameOrTableCell of “Activity Details.” On the right, you can see that this table is located under the Table Definitions folder.

You should also be aware that each table cell contains a child member of the same name. Within these child members is where you’ll create the content for your Table member.

NOTE

The Table member you created, in the Sections folder, marks the place in the project where you want to use this table; however, you edit all of the contents of the table in the table structure itself, which is listed under the Table Definitions folder.

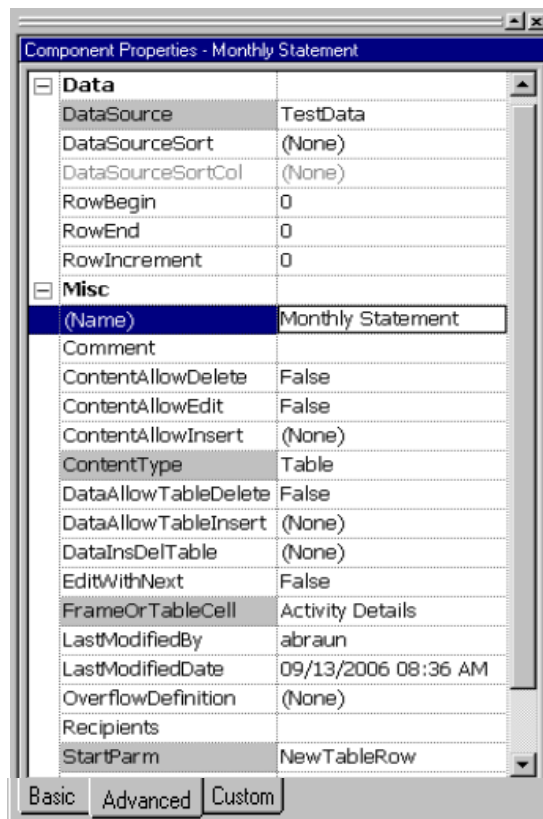
- b Double-click each cell member to display the Source window, then create the contents.

The contents most likely includes either text (for column headers) or one or more reserved tag fields (for data). See “Add Optional Content” on page 290.

WARNING!

The height of a single row within a table cannot exceed the size of the frame, meaning that you cannot put so much content into a single row that it needs to flow to the next page.

- c In the Component Properties, specify values for the necessary properties pertaining to data variables and tables; specifically **DataSource** and **StartParm**.



Your particular implementation might not require these properties on every member, depending on how you access your data file.

WARNING!

If, during table processing, you assign an “Empty” member (e.g., `ContentType=(None)`) to a frame containing a table, that table will be terminated. In the following example, both `EmptyMember` and the table to which its children belong are assigned to the **Body** frame.

EmptyMember—“Empty” parent member, `DataSource=Customers`

Odd—child member, `ContentType=Content Text`, `IncludeIfRow=Odd`

Even—child member, `ContentType=Content Text`, `IncludeIfRow=Even`

This hierarchy results in the following table structure.

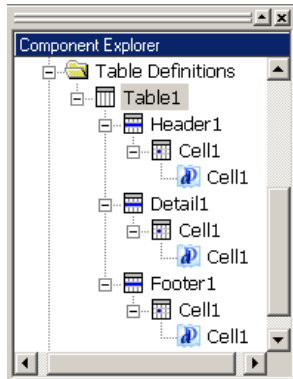
We're Number One Sporting Goods 11111111	
	Two For the Show Tickets 22222222
Three's a Crowd 3333333333	
	Be 4 You Go 4444444444
Five States Distributing 5555555555	
	Six Flags Over Texas 6666666666
Boeing 777 Repair Depot 7777777777	
	I Ate The Whole Thing Deli 8888888888

If you instead place the parent into **FrameOrTableCell=(None)**, everything is resolved.

We're Number One Sporting Goods 11111111	Two For the Show Tickets 22222222
Three's a Crowd 3333333333	Be 4 You Go 4444444444
Five States Distributing 5555555555	Six Flags Over Texas 6666666666
Boeing 777 Repair Depot 7777777777	I Ate The Whole Thing Deli 8888888888

Step 2: (Alternate method) Create the Table Definition

- a Use the Table Definition Wizard to create the structure of the table (see “Add Table Definition” on page 375).



- b Assign members of type “Table” to the table definition (see “Add Member” on page 294).

Step 3: Adjust the Cell Widths

- In the Component Properties of each cell member, use the Position category to adjust the Widths, if necessary.

The Width property is only available for cells. The last cell in a row has a width equal to zero and Docuflex calculates the width to occupy the remaining space in the frame.

NOTE

If you don't explicitly define the width of each cell in a table row, the Width property displays a value of 0 which causes Docuflex to calculate the width of each cell by dividing the width of the table by the number of cells.

-or-

- In the Component Properties of each cell definition, use the Position category to adjust the WidthPercent, if necessary.

The WidthPercent property is only available for cells within the Table Definitions folder. You must specify this dynamic width property, for individual cells, as a percentage of the remaining table width after all fixed-length cell widths are subtracted. If the overall width of a table changes, the widths of individual cells also change based on this percentage.

Step 4: Apply Border Lines

- In the Component Properties for each row and cell within the table, use the Borders category to apply border lines and line styles.

TIP

You should apply border lines and line styles to the rows and cells in the Table Definitions folder, not to the members that supply data to the table.

The borders also follow a table-row-cell hierarchy: Borders for Tables override the borders for Rows where a common side is shared. Likewise, borders for Rows override the borders for Cells where a common side is shared.

Step 5: Balance Content in Cells

You can use the BalanceMembers property to balance content across cells in a table.

- a Set BalanceMembers equal to True on the applicable Row.
- b Define two or more Cells under the Row; typically, the cells are of equal width.

NOTE

You can apply individual borders to table cells and define other rows containing table headers and footers.

- c Define a Member whose FrameOrTableCell property references the first Cell defined under the Row.

This member typically represents repeating data based on a database table.

During composition, members are composed into the first cell until a page overflow would have been generated. That member and all following repetitions are re-directed into the second cell until it is filled.

Table Header row					
1	7035	6	7061	11	7066
2	7057	7	7062	12	7067
3	7058	8	7063	13	7068
4	7059	9	7064	14	7069
5	7060	10	7065		
Table Footer row					

If all cells are filled, no balancing is needed and a normal page break is generated. If all cells aren't filled, balancing is engaged by moving output from one cell to another until all cells are the same height. The overall height of the row is adjusted to fall below the lowest cell. You can add more rows to the table below this row. The overall table height is then set below the lowest composed row. Borders on cells, rows and the table are also accommodated.

Some advantages of balancing cells in a table versus balancing columns in a frame are:

- drawing borders around cells, rows, and tables
- specifying headers and footers
- “floating” content following the table due to a variable vertical table height
- unlimited vertical interspersing of tabular and non-tabular content

Building a Table of Contents

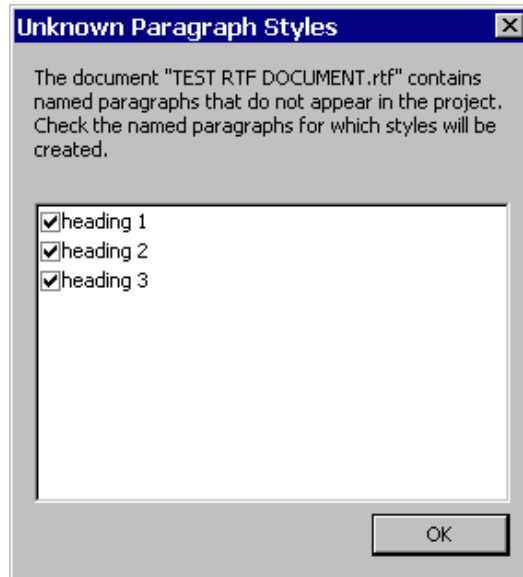
Docuflex supports Table of Contents entries generated from **members** and from **paragraphs that are formatted with a paragraph style**. The **TOCReference** property generates an entry based on the entire member but, when specified in a paragraph style, it generates TOC entries on individual paragraphs contained in “rich content”—either internal or external:

- Internal rich content—Content Text members
- External rich content—Pre-Composed Document members referencing rich text files (RTF)

Docuflex can easily determine the paragraph style of paragraphs contained in Content Text members; however, the process is more difficult for paragraphs composed outside of Docuflex Studio or Content Editor (e.g., RTF files from Microsoft Word).

When you add a Pre-Composed Document member and choose an RTF file, Docuflex prompts you to add any “missing” paragraph styles. Since you can generate Table of Contents entries from paragraphs, and since every paragraph must use a style, all incoming paragraphs must be matched to a Docuflex Studio paragraph style.

As the RTF is loaded, Docuflex searches the “Paragraph Styles” folder. If any incoming paragraphs use styles that are not listed in this folder, you’re prompted to add a style. New paragraph styles are based on the Normal style.



After you add all necessary styles, you can edit the styles to adjust the **TOCReference** property.

Any paragraph using a paragraph style that includes a TOCReference value generates an entry in the Table Of Contents. The text of the paragraph and its page number is available via the following Reserved tags:

- DCP.PARA.TEXT
- DCP.PARA.BEG.PAGE.NUMBER
- DCP.PARA.SECT.BEG.PAGE.NUMBER reserved tags.

Building a table of contents for your document is a process comprising, among others, these steps:

- 1 Create the TOC entry using the TOC Entry Definition Wizard.
- 2 Add members to contain the format and contents of each type of TOC entry.
- 3 Create a member to hold the Table of Contents title.
- 4 Go to each member or paragraph style that you want to include in the TOC and reference the appropriate TOC entry.

Step 1: Create the TOC Entry

- Use the TOC Entry Definition Wizard to create the placeholder for the entry (see “[Add TOC Entry](#)” on page 381).

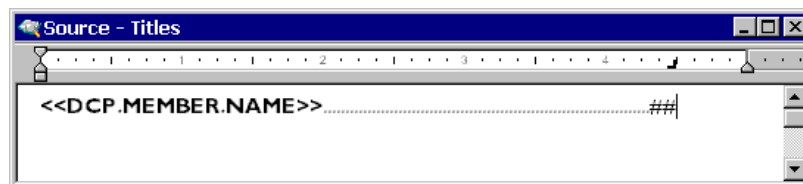
Step 2: Add a Member and Specify the Format of the TOC Entry

- a Use the Add Member dialog to add a member of type Content Text as a child of the placeholder (see “Add Member” on page 294).
- b Double-click the member to display the Source window, then create the layout for the TOC entry. The layout includes one or more reserved tags, character styles, tab styles, and paragraph styles.



Some important Reserved Tag fields for use in a TOC are **DCP.BEG.PAGE.NUMBER**, **DCP.SECTION.BEG.PAGE.NUMBER**, **DCP.PARA.BEG.PAGE.NUMBER**, and **DCP.PARA.SECT.BEG.PAGE.NUMBER**. These fields contain the page number on which a member or paragraph starts, as this is the number you want in your TOC.

You can substitute Sample Text for the field, which ensures a WYSIWYG display (see “Step 2” on page 455)



TIP

Docuflex reserves space for the Table of Contents entries as it composes the document, even though the actual contents of each entry is not yet known. If the resulting contents is larger than the pre-composition reserved space, the program displays an error message. To minimize this situation, you should use Sample Text to represent the contents as accurately as possible.

Step 3: Create the TOC Member

- a Use the Add Member dialog to add a member of type Content Text (see “**Add Member**” on page 294). Be sure to put the member where you want the TOC to display.
- b Double-click the member to display the Source window, then type the appropriate title (e.g., **Table of Contents**).
- c In the Component Properties, set the value of **TOCInsertionPoint** to True.

Step 4: Reference the TOC Entry

- In the Component Properties of each member or paragraph style that you want to include in the TOC, select the correct TOC entry for the TOCReference.

NOTE

TOC entries must be derived from “normal” processing (e.g., Pass 1–Inclusion). You cannot, for example, designate an overflow processing member as a TOC entry.

Docuflex Booklet Processing

Docuflex provides “booklet” processing for documents where the printed pages will be folded, and possibly bound, in booklet form. Booklet processing essentially means

- restricting composition to half the size of a piece of paper so the paper can be folded.
- reordering the pages so they are still in increasing page number order once the pages are folded.

You enable booklet processing by specifying property values in the Booklet category of Page Definition properties. BookletEnabled=True enables booklet processing and forces any Page Layouts under the Page Definition to become half the width of the Page Definition, thus ensuring that any composed document pages fit in the space afforded by a folded piece of paper.

Docuflex disables the Height and Width properties of the Page Layouts under the Page Definition. You should review all Frames on the Page Layouts to verify the frames fit within the Page Layouts.

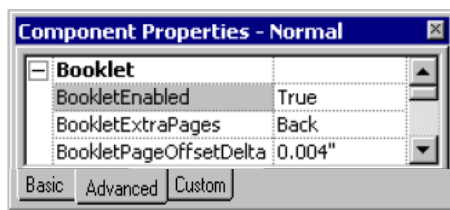
TIP

Most existing Page Definitions have a Width and Height of 0”. When BookletEnabled=True, any Page Definitions with Widths and Heights of 0” are converted to 11” x 8½” (landscape orientation).

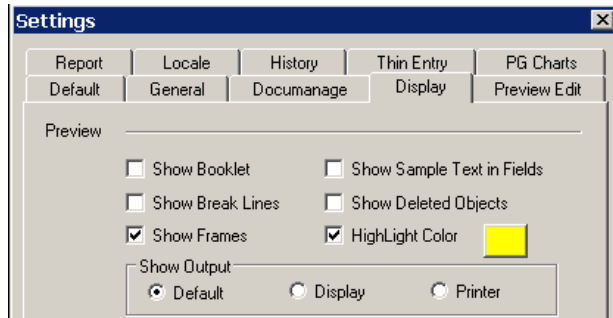
The booklets are bound on the left, with two document pages per booklet page and two booklet pages per sheet of paper. As such, there are four document pages per sheet of paper. Booklet page ordering is applied once document composition is complete and the total number of document pages is known.

Docuflex adds blank pages to the document, as necessary, to achieve a page count that is a multiple of four. The BookletExtraPages property determines whether to insert the blank pages at the Front, Back, or both front and back in Balanced proportions. The default setting for BookletExtraPages is Back.

To accommodate the natural “creep” of the printed document on the inner folded pages, the BookletPageOffsetDelta property specifies the increasing amount, or “delta,” by which each inner page should be adjusted to counter the creep. The default BookletPageOffsetDelta value of 0.004” accommodates a ream of 500 sheets of paper measuring two inches thick.



By default, the pages of a document being designed in Docuflex Studio and viewed in the Preview window *are not* ordered for booklet printing. Booklet page ordering is confusing when you normally expect to see pages with increasing page number order (e.g., the booklet page order for a 20 page document is 20, 1, 19, 2, 18, 3, 17, 4, 16, 5, 15, 6, 14, 7, 13, 8, 12, 9, 11, 10). Docuflex Studio offers a Show Booklet check box option on the **Document>Settings>Display** dialog. When you enable Show Booklet, the Preview window reflects booklet page ordering and offers booklet printing in the proper page order via **File>Print**.



NOTE

Docuflex only looks at the Page Definition assigned to the *first* composed document page to decide whether to enable booklet processing for the entire composed document. You cannot mix booklet requirements within a document (e.g., a project containing multiple Page Definitions, some with booklet processing enabled and some without; the resulting composed document comprising portions needing booklet folding).

Check Box Fields

TIP

The following discussion concerns creating a Check Box field using a Field Style. The same concept is applicable to existing fields in your document.

You can define Field Styles with a ControlType of Check Box and apply them to Docuflex variable data fields. These data fields will then be presented as “clickable” checkbox controls in both the Preview Edit window of Docuflex Studio and Docuflex Data Entry in Internet Explorer. A data value of “1” is treated as a “checked” checkbox, while a data value of “0” is treated as an “unchecked” checkbox.

NOTE

Any data value other than “1” is treated as an “unchecked” checkbox.

Docuflex provides special processing in preview and batch composition modes for data fields with a ControlType of Check Box; these are types of composition that are not related to Data Entry. Rather than publishing just the raw value of “1” or “0”, Docuflex publishes a representation of a checkbox. The checkbox can be displayed as a character in a font or “drawn” with vector drawing commands.

When `CheckBoxWithFont` is `False`, a data value of “1” causes Docuflex to create a vector-based drawing of a box with a check mark, while a data value of “0” results in a vector-based drawing of a box without a checkmark.

NOTE

Using a `CheckBoxWithFont` value of `False` is simpler to implement, since it is not necessary to create a Character Style; however, printing for devices such as a Xerox Metacode printer becomes more inefficient when many vector items must be converted to bitmap image data.

Wingdings:  Vector-based : 

To Create a Checkbox Field

- 1 Create a Character style, using the desired font (see “Using the Character Styles View” on page 190).
- 2 Create a Field style. Along with other necessary property settings, assign the Character style defining the desired font (see “Using the Field Styles View” on page 193).
- 3 Open the Data bar and assign the Field style to a data field in the schema (see “Modifying Columns in the Schema Tables” on page 181).
- 4 Create a member containing the data field to which you applied the Field style (see “Add Optional Content” on page 290).

DataList Choices for ComboBox Fields

For Docuflex variable data fields designated as ComboBoxes, you can use the `DataList` property to reference a schema data table that supplies the “choices.” For certain documents taking advantage of Docuflex Data Entry, you want the value selected in one ComboBox to determine the choices available in another. You need to “nest” the data tables within the schema to establish this dependency; the row currency of the “parent” data table determines which values of the “child” data table are presented.

EXAMPLE

If you have two ComboBoxes, one providing state choices and another providing county choices, you must organize the schema with a State table containing a County table as a child.

The State table contains 50 rows; each State row contains, as children, County table rows appropriate to each state. As you make a selection in the State ComboBox (and Docuflex is permitted to refresh automatically), the values available in the County ComboBox change to match the selected state.

When composing your document, the Docuflex composition engine sets the row currency of the parent table, as defined in a field's `DataList` property, to match the value of the field. Normally, you do not use tables both to provide a list of choices *and* to serve as a `DataSource` for document publishing. Be aware that “Pass 2” composition processing manipulates the row currency of `DataSource` tables and, if a given table is both a `DataSource` for a member and a `DataList` for a field, there may be a conflict in row currency; the result of which is that the ComboBox associated with the child data table may contain incorrect choices. If there is a conflict, you can restructure the Docuflex project to avoid the conflict, or you can change the schema to provide a separate table for providing choices in a ComboBox.

Integrating Docuflex with Documanager

The power of Docuflex as a composition system is multiplied through integration with the Documanager content management system.

Documanager offers integrated support for Docuflex, enabling authors to compose a document on screen and utilize built-in intelligence to dynamically select the best representation of content for the output conditions at hand. This capability, to automatically choose the best representation for the output device, is called **rendition support**.

Documanager **version control** tracks changes to a document through its lifecycle; capturing who made changes, when, and why; and reflects the approval status of various document components, such as a company logo. Documanager **dynamic workflow** provides automated routing through a pre-established process. Finally, Documanager provides a long-term **secure archive** for a historical record of documents.

After enabling Documanager integration, Docuflex:

- provides additional Documanager queries from Docuflex Studio
- provides version control support
- supports “Renditions” of content
- supports Tokenized DCD (Docucorp Compound Document) which reduces memory requirements for large datasets (when performing batch processing)
- provides content approval process via Docuflex query method for Documanager State (Content Management flags)
- provides a common repository for projects and content shared by multiple users (i.e. provides a **collaborative** forms development environment)

When integrating Documanager with Docuflex Studio, you'll need to be aware of some terms and their definitions:

- **Cabinet**—a collection of related Documanager folders.
- **Folder**—a collection of Documanager documents and/or sub-folders in a Documanager Cabinet.
- **Content Status**—a user-defined Documanager category that tracks the workflow stages of a document (e.g., Draft, Accepted, Complete).
- **Content Management State**—a Documanager property that reflects the current approval state of a document—**Approved**, **Released**, and **Obsolete**

TIP

The content **Status** of a Documanager document is more of an informational description that helps to define the degree to which the document is completed, whereas the content management **State** determines whether the document is eligible for use.

- **Version**—a series of related documents tracking the change history of a document.
- **Rendition**—an equivalent representation of an image in another format (e.g., a 3” x 4” JPG image mirrors a 3” x 4” image in BMP image.)
- **RenditionKey**—a named label to associate a rendition to an output device.

- **Historical Rendition**—a feature of tokenized DCD where you can reprint a version of a document at a later date, using renditions that were available at the time of original composition.
- **“Tokenized” DCD**—a DCD file containing tokens that reference pre-composed content stored in Documanager (e.g., JPG, PNG, BMP, EMF, EPS, TIF, and DCD). See [“Processing Tokenized DCD”](#) on page 108.

NOTE

The RTF file format, as well as any “cropped” images, are embedded in the DCD format (i.e., it is not referenced), since these items require formatting.

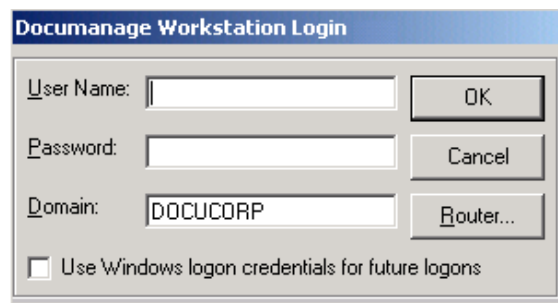
Getting Started

Integrating Documanager with Docuflex involves a process of installing some additional Skywire Software software, configuring your system environment to recognize the integration, and customizing settings of both Docuflex and Documanager.

Step 1

- 1 Verify that you’ve installed the following products on your workstation:
 - **Docucorp Common Objects 11.3** (or greater)
 - **Docuflex 11.3** (or greater)
 - **Documanager 6.4 SR5** (or greater)
- 2 Verify that you can log on to the Documanager Server. Launch **Documanager Client** using your Windows User Name and Password.

If you want to use Windows authentication, enable the check box at the bottom of the dialog to suppress the dialog box for future sessions.



NOTE

New users may need to be defined on the Documanager Server. Check with your network administrator if you’re having problems connecting to the Server.

Step 2

- At a command prompt, start *dmgprofile.exe*, which builds a profile for accessing Documanager (see [“Profile Generator Utility”](#) on page 79).

NOTE

Make note of the profile name because you’ll need to provide this name when updating the Docuflex Environment Manager in Step 3.

Profile Generator Utility

The Profile Generator Utility uses the following syntax to create a profile for the Docuflex Environment Manager and Documanager:

```
dmgprofile [-? |
            -v |
            -c |
            -m ProfileName |
            -p ProfileName |
            -d ProfileName [-f] |
            -l |
            -i [FileName] |
            -x ProfileName [FileName]]
```

where:

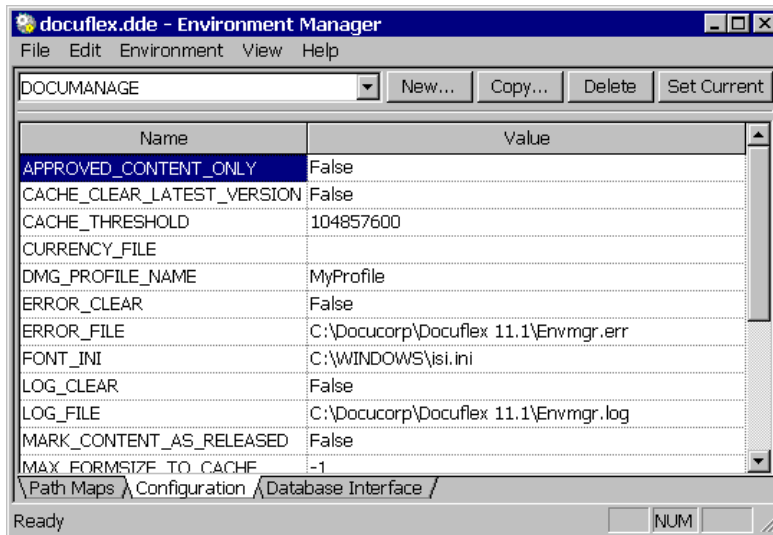
Option/Parameter	Meaning	
-?	Display the usage	
-v	Display the version of this utility	
-c	Create and save a new profile	
-m	Modify/Set the properties of an existing profile	
-p	Display the properties of an existing profile	
-d	Delete an existing profile	
-f	Force delete an existing profile without any confirmation	
-l	Display the list of existing profile names	
-i	Import (create and save) a new profile using input given in the following format (the supplied values are case-sensitive):	
	version=	The version of the dmgprofile utility. Use the -v parameter to obtain this information.
	name=	The user-defined profile name
	rpchostname=	The Host IP address of the Documanager Server
	profileusername=	The user's Windows logon name*
	profiledomain=	The domain in which the Documanager Server resides
	profilepassword=	The user's Windows password*
-x	Export (print the properties of) an existing profile to a text file. Note: The utility does <i>not</i> export the password to the newly-created file. If you want to import the file at a later date, you must edit the file and retype a password.	
ProfileName	Name of an existing profile	
FileName	Name of input or output file	

TIP

*—If your Documange Server is using Windows authentication, then you do not need to provide a Username and Password during the creation process.

Step 3

- 1 Launch the Docuflex Environment Manager (*EnvMgr.exe*) to add path maps and update the configuration values.
- 2 Click the **Configuration** tab to display the Configuration panel.



- For **APPROVED_CONTENT_ONLY**, select **True** to confirm that a Documange file has its Content Management State set to “Approved” (i.e., the document’s ready for a “production run”).

This parameter is initially set to **False** and should remain so during project development, when the contents of your document are likely to change. As you complete the development stage and you’re ready to approve the contents, set this value to **True**—Docuflex generates an error message in the error file during the composition pass for any non-Approved or Obsolete content.

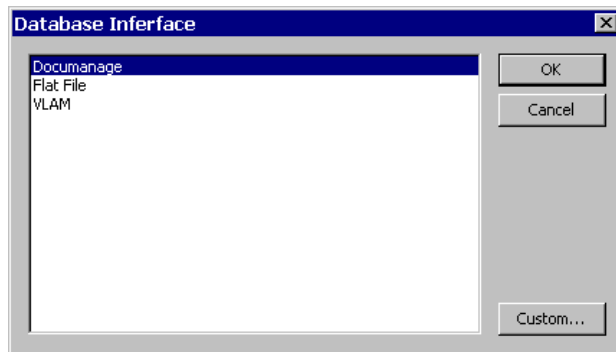
- For **CACHE_CLEAR_LATEST_VERSION**, select **True** to clear the latest version of documents held in the Forms Manager cache and query Documange for newer content. This setting is intended for use with Skywire Software’s Internet Document Server (IDS).
- For **DMG_PROFILE_NAME**, type the name of the profile you created during “Step 2” on page 78.
- (Batch processing only) For **MARK_CONTENT_AS_RELEASED**, select **True** to update the Documange file’s Content Management State to “Released” during the composition pass. To use this feature, you must have Write access on the Documange Server.

NOTE

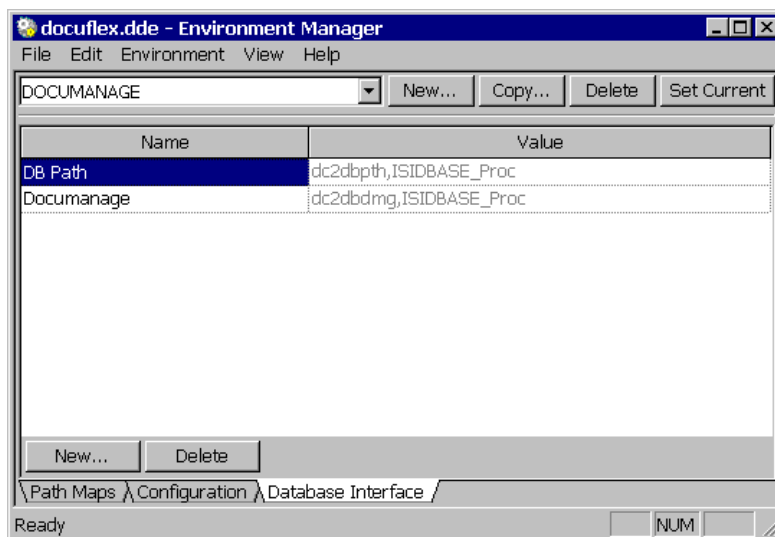
In order for content to be marked as “Released,” it must already be marked as “Approved.”

- 3 Click the **Database Interface** tab to display the Database Interface panel.

- Click **New**, located toward the bottom of the dialog and just above the tab names. The Database Interface dialog displays.



- Select **Documange** and click **OK**. The Database Configuration panel redisplay.



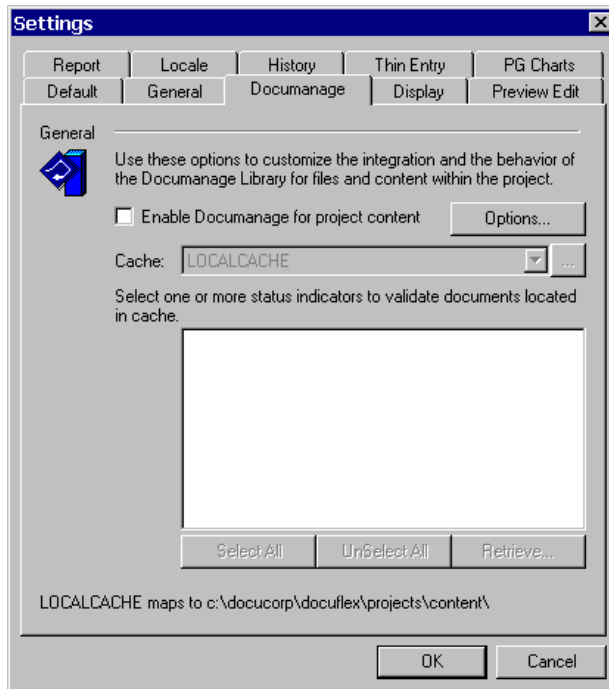
TIP

For optimal performance, you should display *DB Path* as your first Interface.

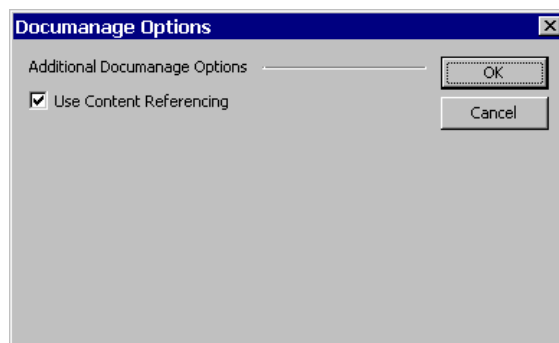
- Save your environment and close the Environment Manager.

Step 4

- 1 Launch Docuflex Studio.
- 2 Select **Document>Settings** and click on the **Documanager** tab.

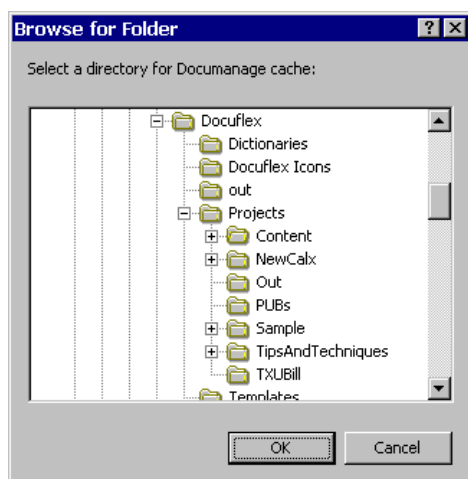


- 3 If a check mark is not already displayed in the Enable Documanager check box, click **Enable Documanager** to integrate Documanager into the Docuflex Studio.
- 4 Click **Options** to display additional Documanager options.



- 5 Enable the **Use Content Referencing** check box so the Docuflex composition engine will write tokenized DCD that *references* pre-composed members selected from Documanager instead of saving entire members in the DCD output file.
- 6 Click **OK** to return to the Documanager view.
- 7 In the Cache drop-down list box, select from a list of path maps from your environment file. The corresponding data path displays at the bottom of the dialog.
-or-
Click **...** to specify the location where Docuflex Studio permanently stores a copy of a particular version of a Documanager document on your workstation.

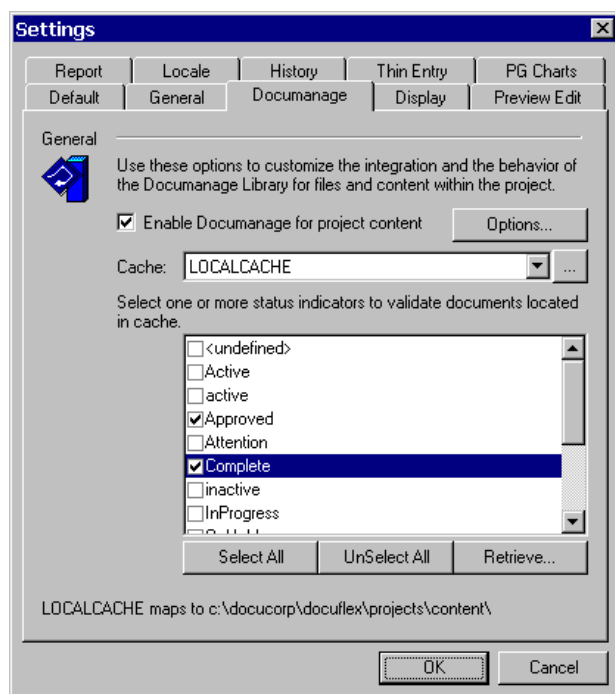
The Browse for Folder dialog displays.



- 8 Navigate the tree listing to locate the directory where you want Docuflex Studio to search for the files, and then click **OK**.

If you select a folder for which no corresponding path map exists, you'll be prompted to create a path map.

- 9 Click **Retrieve** beneath the Status Indicators list box to display a list of status indicators in the Documange Cabinet and Folder you're using.



NOTE

A Status Indicator of **<undefined>** refers to Documange content that has not been assigned a status value.

- 10 In the Status Indicators list box, do one of the following:

To select	Do this:
One or more specific indicators	Click the appropriate check boxes.
All of the status indicators	Click Select All .
None of the status indicators	Click UnSelect All .

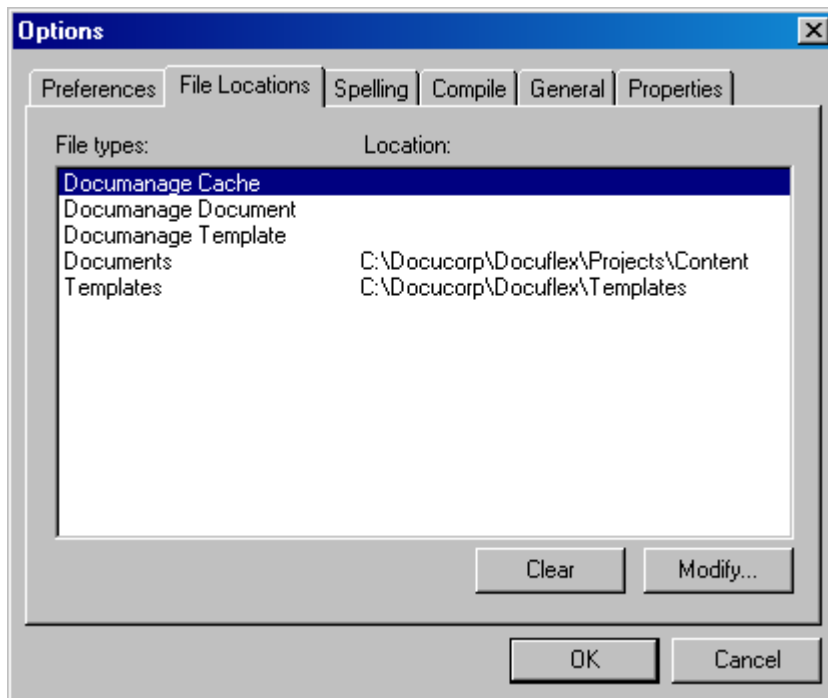
These status indicators indicate which documents you want to use when

- validating and checking the currency of your Documanager content (e.g., selecting **Document>Documanager>Check for Updated Documents**)
- retrieving the latest version of a document from Documanager with the **ContentRetrievalType** property set to **LatestVersion**.

This process helps you to make sure that you've selected only those Documanager documents that match these indicators.

Step 5

- Select **Tools>Options** and click on the **File Locations** tab to establish locations for Documanager Project Cache, Documents, and Templates.



For instructions on modifying the file locations, see “To Specify File Locations” on page 497.

Selecting Docuflex Files from Documanage

NOTE

Using Renditions or producing tokenized DCD requires that you always use the same Documanage Server.

Now that you've completed the integration of Documanage with Docuflex, you can add various Docuflex files to your project that are stored in Documanage:

- Docuflex Projects
- Docuflex Templates
- Members can contain
 - Pre-Composed Documents
 - Docuflex Stylized Content files
 - Plain text documents
 - Document Name from Table
 - Member Styles icons
- References can contain
 - Data files
 - Schema files
 - a Transall post-processing library
 - Docuflex projects

TIP

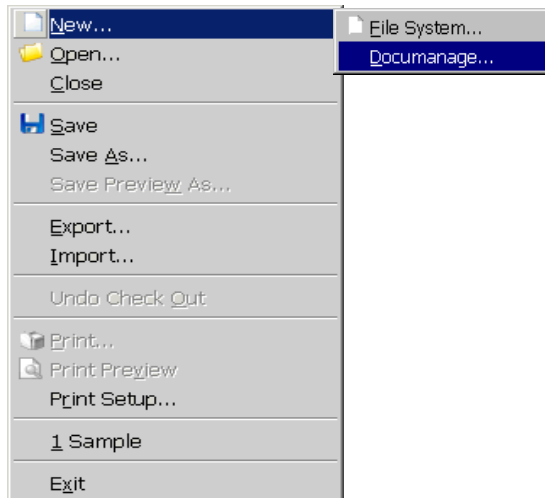
Any time you request a “project level” file operation, such as New, Open, Save, or Save As, you'll receive a Documanage dialog, not a Windows one.

- Do one of the following:

If you want to	Do this:
Create a project from a template	“To Select a Docuflex Template” on page 86
Open a project	“To Open a Docuflex Project” on page 87
Use a Documanage file in your project	“To Select Files from Documanage for Use in Your Project” on page 92
Access a document stored in a data file	“To Select a Document Name From Table” on page 95
Create a Stylized Content Editor document	“To Create a Stylized Content Editor Form” on page 96
Open a Stylized Content Editor (.DSC) document	The process is very similar to opening a Docuflex project, except that you'll be choosing a Docucorp Stylized Content (*.DSC) form (see “To Open a Docuflex Project” on page 87).

To Select a Docuflex Template

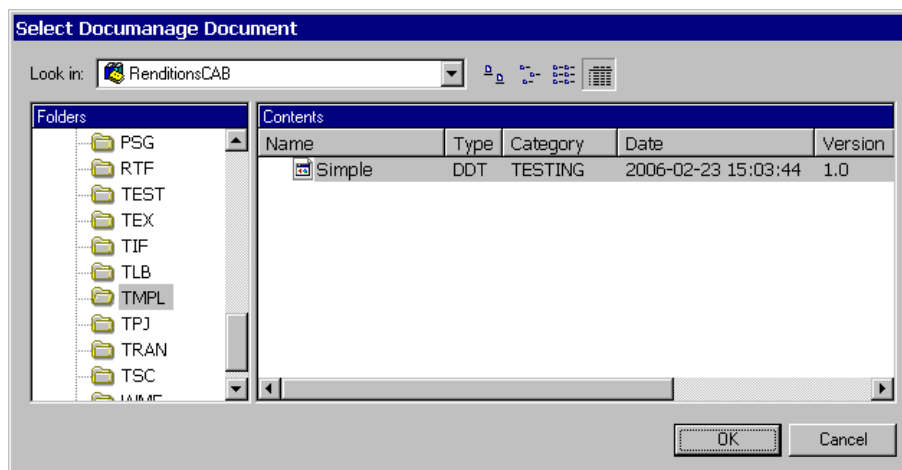
- 1 Select **File>New>Documanage**.



NOTE

If you click the New icon, even if you have Documanage enabled, you'll see the New Document dialog.

The Select Documanage Document dialog displays.



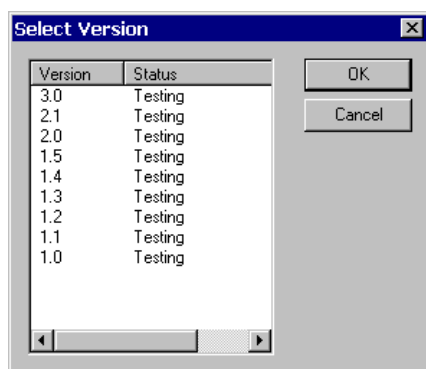
The Cabinet and Folder specified in the **Tools>Options>File Locations** dialog is initially displayed (see [“To Display the File Locations View”](#) on page 496). You can easily change either the Folder or the Cabinet.

- 2 Highlight the desired Docuflex Template file (e.g., *.DDT), and then click **OK**.

NOTE

When choosing a template from Documanage, any template with a version number greater than 1.0 is displayed in the list; however, none of the versions may actually match the current Status Indicator settings. If you choose a template that does not match one of the status setting, you'll be advised and returned to this dialog box.

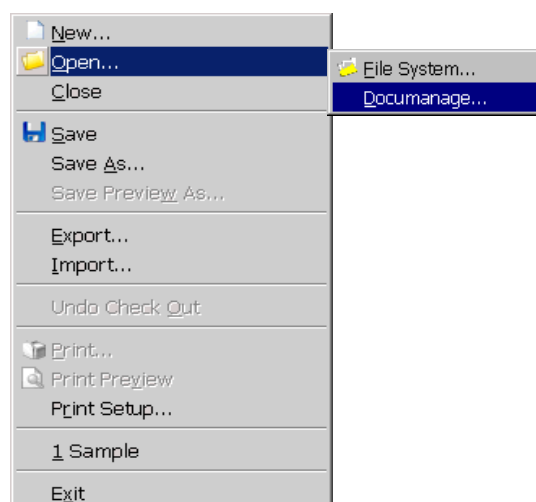
If you chose a template with a Version number greater than 1.0, you'll be prompted for the version you want to use.



- 3 Select the version you want and click **OK**.

To Open a Docuflex Project

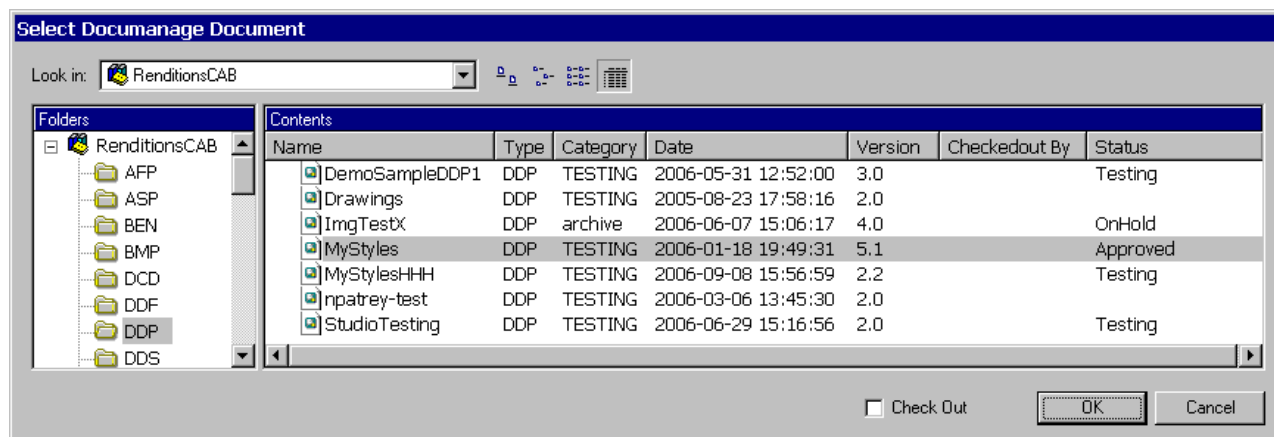
- 1 Select **File>Open>Documange**.



NOTE

If you click the Open icon, even if you have Documange enabled, you'll see the Open dialog.

The Select Documange Document dialog displays.



The Cabinet and Folder specified in the **Tools>Options>File Locations** dialog is initially displayed (see “[To Display the File Locations View](#)” on page 496). You can easily change either the Folder or the Cabinet.

The **Version** column lists the latest version of the particular project. If the version number is greater than 1.0, then all previous Minor and Major versions are available for use.

The **Checkedout By** column lists the user name of the person currently editing the file. One of three icons indicate the “check out” status of the file:

-  (unlocked) The content is checked out by the current user (i.e., you). It is NOT available for editing.
-  (key) The content is checked out by the current user (i.e., you). It is available for editing by you.
-  (locked) The content is checked out by somebody else and it's not available for editing.

2 Highlight the desired Docuflex Project file (e.g., *.DDP).

3 Do one of the following:

If you want to	See:
Edit a project without checking it out	“To Use a Project without Version Control” on page 89
Check out a project for exclusive use	“To Use a Project with Version Control” on page 89
Check a project back in	“To Check a Project In” on page 90
Undo the check out and release the project for use by others	“Undo Check Out” on page 262
Save the project as a new project	“To Save a Project as a New Project” on page 91

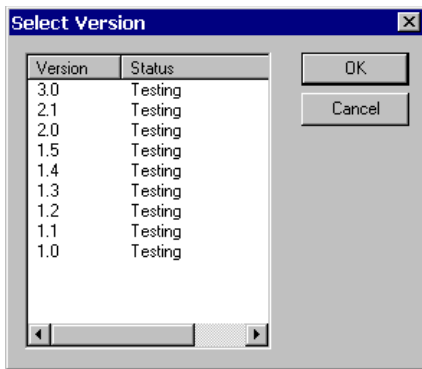
To Use a Project without Version Control

- 1 Click **OK**.

NOTE

When choosing a project from Documanage, any project with a version number greater than 1.0 is displayed in the list; however, none of the versions may actually match the current Status Indicator settings. If you choose a project that does not match one of the status setting, you'll be advised and returned to the main dialog box.

- 2 If you chose a project with a Version number greater than 1.0, you'll be prompted for the version you want to use.



- 3 Select the version you want and click **OK**.

The Project is displayed with a special notation in the Title Bar; namely, that this project is stored in Documanage but it was not “checked out” and, therefore, is not subject to version control (e.g., **Docuflex Studio - Monthly Statements.DDP - [Documanage]**).

NOTE

Since you did not “check out” the project, you cannot save your changes as a newer version of this project; however, you can save this project as a new project in Documanage and have it be the “first version” (see “[To Save a Project as a New Project](#)” on page 91).

To Use a Project with Version Control

- 1 Enable the **Check Out** check box.
- 2 Click **OK**.

The Project is displayed with a special notation in the Title Bar; namely, that this project was “checked out” from Documanage and is subject to version control (e.g., **Docuflex Studio - Monthly Statements.DDP - [Checked Out]**).

NOTE

When you “check out” a document, you and only you have exclusive editing rights, and any changes you make are saved when you check the project back in to Documanage.

3 Do one of the following:

If you want to	See
Check a project back in and update the version number	“To Check a Project In” on page 90
Save a “backup” copy of the project	“To Save a Backup Copy of a Project” on page 91
Undo the check out and save the project as a new project	1 “Undo Check Out” on page 262 2 “To Save a Project as a New Project” on page 91
Undo the check out, lose all changes, and release the project for use by others	“Undo Check Out” on page 262

To Check a Project In

1 Select **File>Save>Documanager**.

The Documanager CheckIn dialog displays.

Documanager CheckIn

Location
Cabinet: RenditionsCAB
Folder: DEMO

☒ Check In CM State

Name: DemoSample

Category: TESTING

Status: Testing

File Type: DDP

Description: Saving changes to major version

Added By: ABRAUN

Version: 1.1
Increment: ☐ Minor ☒ Major

OK Cancel

2 Enable the Check In check box.

3 Select the option button that signifies whether this is a Minor or Major version.

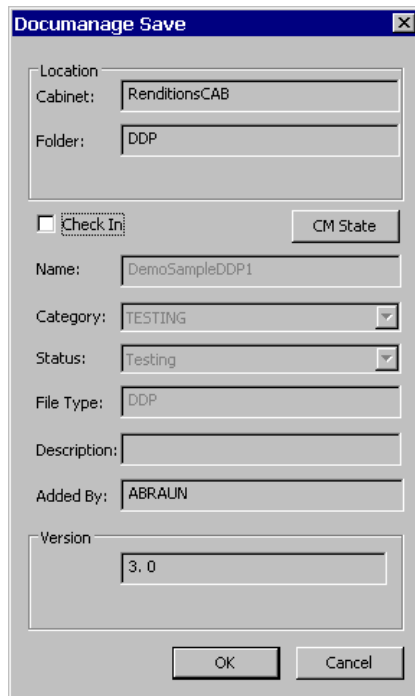
WARNING!

If you’re using Documanager Workstation to manage your Docuflex content, avoid checking in changes to your documents using the “same version” number. Many administrators disallow this practice because it does not provide change history and it invalidates locally-cached copies. Your Documanager administrator can disable this setting at the Cabinet level. If you want to incorporate non-versioned changes into your publishing projects, be sure to clear the Docuflex cache after any “same version” content is checked in.

4 Click **OK**.

To Save a Backup Copy of a Project

- 1 Select **File>Save>Documanager**.



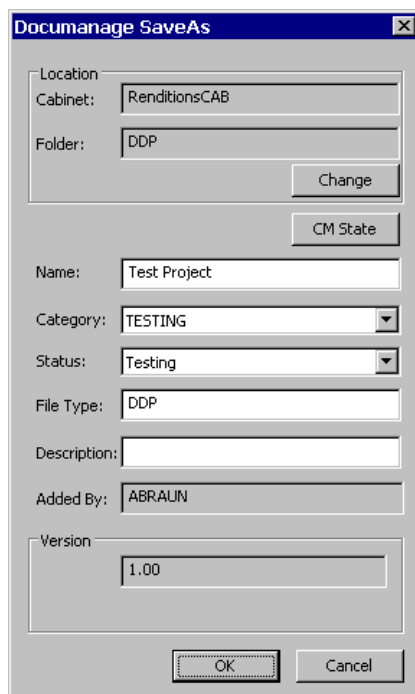
The 'Documanager Save' dialog box is shown. It has a title bar with a close button. The 'Location' section contains 'Cabinet: RenditionsCAB' and 'Folder: DDP'. Below this is a 'Check In' checkbox (unchecked) and a 'CM State' button. The 'Name' field contains 'DemoSampleDDP1'. The 'Category' dropdown is set to 'TESTING'. The 'Status' dropdown is set to 'Testing'. The 'File Type' field contains 'DDP'. The 'Description' field is empty. The 'Added By' field contains 'ABRAUN'. The 'Version' section contains a text field with '3.0'. At the bottom are 'OK' and 'Cancel' buttons.

- 2 Click **OK**.

To Save a Project as a New Project

- 1 Select **File>Save As>Documanager**.

The Documanager SaveAs dialog displays.



The 'Documanager SaveAs' dialog box is shown. It has a title bar with a close button. The 'Location' section contains 'Cabinet: RenditionsCAB' and 'Folder: DDP', with a 'Change' button to the right. Below this is a 'CM State' button. The 'Name' field contains 'Test Project'. The 'Category' dropdown is set to 'TESTING'. The 'Status' dropdown is set to 'Testing'. The 'File Type' field contains 'DDP'. The 'Description' field is empty. The 'Added By' field contains 'ABRAUN'. The 'Version' section contains a text field with '1.00'. At the bottom are 'OK' and 'Cancel' buttons.

- 2 Type a Name for the project.
- 3 Make any other necessary changes, and then click **OK**.

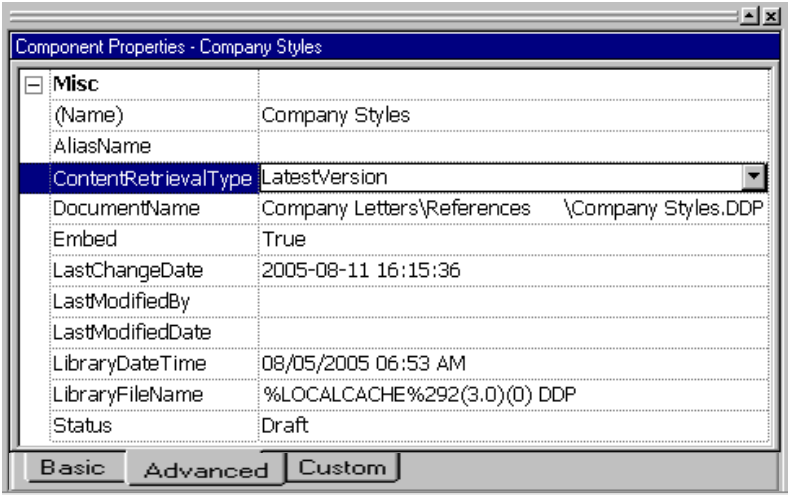
To Select Files from Documanage for Use in Your Project

► Select a document to use as a Member.

-or-

Select a file to use as a Reference.

The Component Properties displays a new property—**ContentRetrievalType**.



ContentRetrievalType determines which action the composition engine performs to retrieve content at composition time:

SelectedVersion	uses the selected version during composition <i>unless you're using Renditions</i> . This option provides the best performance when operating in the batch processing mode.
LatestVersion	retrieves the latest version of the document from Documanage. <i>For Docuflex Members, the automatic refresh occurs during composition. For Docuflex References, the automatic refresh occurs during the loading of the project.</i>

After you've created a member containing a Documanage document, you can use the **Document>Documanage** sub-menu to perform a variety of operations on a Documanage member, including:

To	See:
Verify your Documanage content against the current statuses	"To Check for Updated Documents" on page 93
Update the cache on your workstation containing copies of particular versions of Documanage documents	"To Update Selected Document(s)" on page 93
Indicate the Documanage content management states you want to compare against the state of the selected member(s)	"To Query the Content Management State(s)" on page 93
Set the content management settings	"Setting the Content Management State" on page 94

To Check for Updated Documents

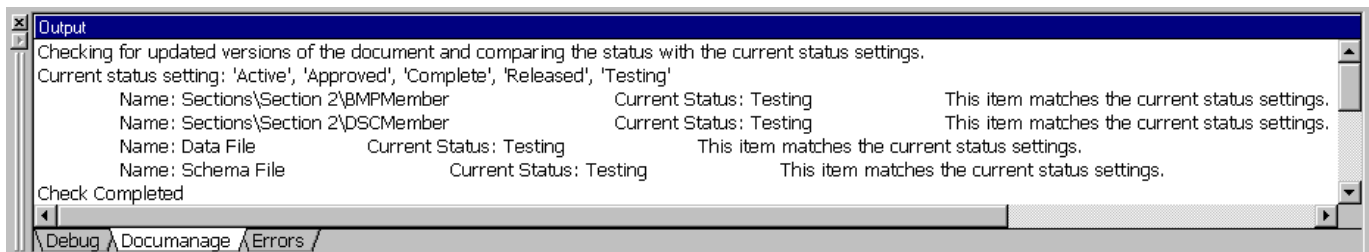
TIP

The status of a Documange document is more of an informational description that helps to define the degree to which the document is completed, whereas the Content Management State determines whether the document is eligible for use.

- ▶ Select **Document>Documange>Check for Updated Documents**.

Docuflex Studio searches your project for Documange documents and verifies their status indicators against the current statuses (i.e., the ones you specified on the Documange view of the Settings dialog). The search also checks to see if there are any newer versions of your documents within the current status(es).

Docuflex Studio displays the output with the Documange view displayed.



If newer versions are reported, you can then use “[To Update Selected Document\(s\)](#)” on page 93 to retrieve the updated versions.

To Update Selected Document(s)

- 1 In the Component Explorer, select the member(s) containing Documange source (see “[Component Explorer](#)” on page 169).
- 2 Select **Document>Documange>Update Selected Document(s)**.

Docuflex Studio displays the output with the Documange view displayed.

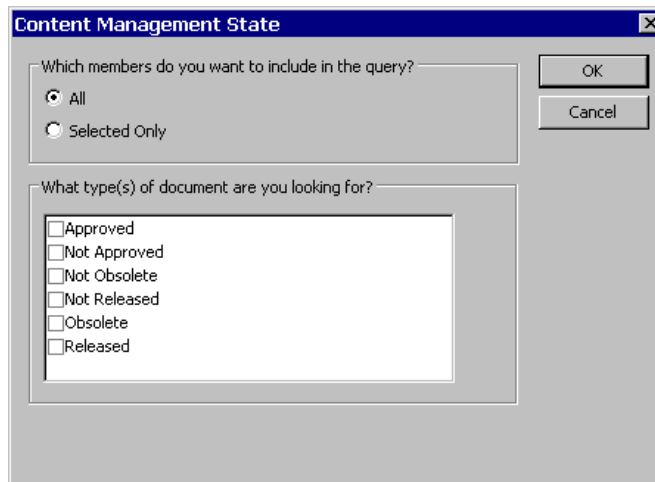


If a later version of a document is found in the Documange Cabinet, Docuflex Studio updates the member(s) to ensure that you’re using the latest version.

To Query the Content Management State(s)

- 1 In the Component Explorer, select the member(s) using Documange documents (see “[Component Explorer](#)” on page 169).
- 2 Select **Document>Documange>Query Content Management State(s)**.

Docuflex Studio displays the Content Management dialog box.



- 3 In the top group box, click the appropriate option button, depending on whether you want to query **All** or just the **Selected** Documange documents referenced by members.
- 4 In the bottom group box, enable the check boxes beside the categories of documents you want to query (e.g., Approved and Released).
- 5 Click **OK**.

Docuflex Studio displays output with the results of the query.



Setting the Content Management State

While working in Docuflex Studio, you can set the Content Management State for a Docuflex member containing Documange content. This capability is only available if you have "write" permissions to the Documange Server.

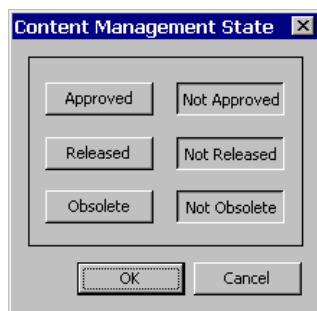
When the presentation of content yields satisfactory results, you should then update the content management state for the selected member to reflect that the content is Approved. If the content is not acceptable, you can mark it as Obsolete.

Once you select the Docuflex member containing a Documange document, the Set Content Management State dialogue contains options for updating the content state.

To Set the Content Management State

- 1 In the Component Explorer, select the member(s) containing Documange source (see "[Component Explorer](#)" on page 169).
- 2 Select **Document>Documange>Set Content Management State**.

Docuflex Studio displays the Content Management State dialog box.

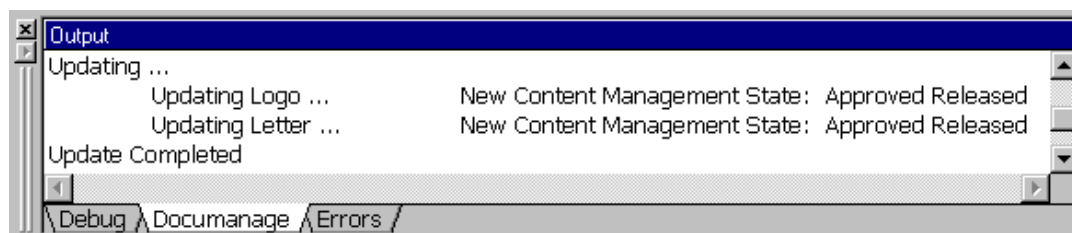


- 3 Click the button representing the correct state, and then click **OK**. You may choose as many categories as necessary.

WARNING!

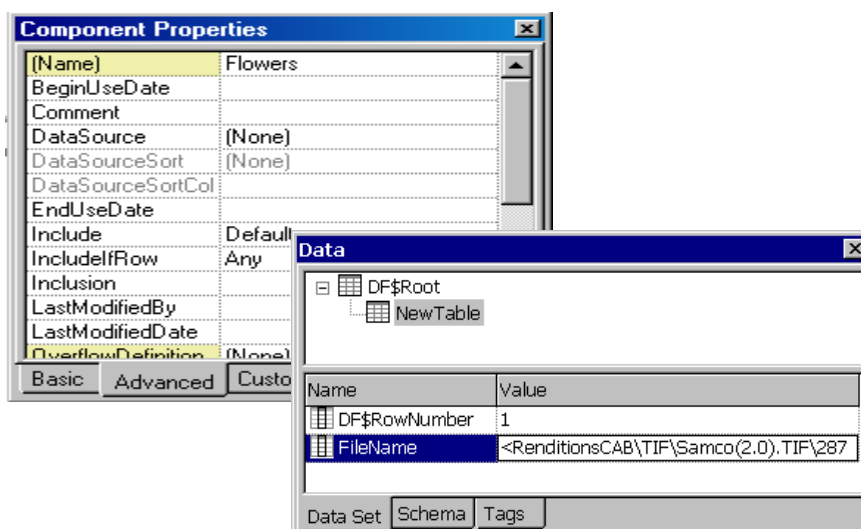
Once you change the Content Management State, you cannot reverse the setting.

Docuflex Studio displays the output with the Content Management State.



To Select a Document Name From Table

The Value field of the *table.column* must contain the name of the Documange document and other necessary parameters to ensure proper retrieval.



- Type the required syntax into the Value field:

<cabinet\folder\document name(major.minor).extension\document id>

-or-

<cabinet\folder\document name(major.minor).extension\document id,path>

-or-

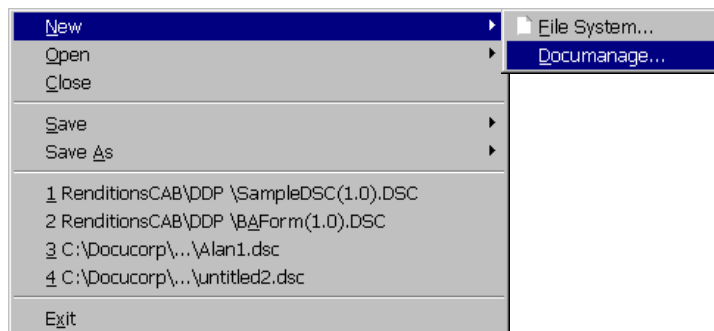
<cabinet\key1;key2;key3...\>

where:

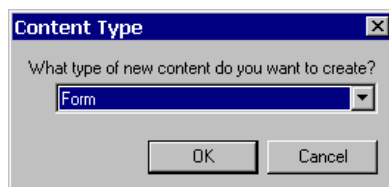
Parameter	Meaning
<>	indicates that the expressed form is under Documanage control
cabinet	the name of the Documanage Cabinet where the form resides
folder	the name of the Documanage Folder where the form resides. The folder display name corresponds to the associated Documanage table key. If the folder name contains multiple keys, use a semicolon as a delimiter between each key of the name. Here is an example: \key1;key2;key3 . . . Note: The key name must exactly match what is in your Documanage database, including any trailing blanks. If, however, you use semicolons to delimit a multiple key folder name, you can omit the trailing blanks.
document name	the name of the form
(major.minor)	(optional) the major and minor version numbers of the document under Documanage control
extension	the file type of the form
document id	the unique identification number of the document under Documanage control
, (comma)	the separator between the parameters and the optional path map information
path	(optional) the file path name where the retrieved Documanage document is written (e.g., c:\node1\node2\node3...). Note: If the path is not specified, the Documanage document will be written to the current directory. Also, the path name may be expressed as %path%. The path name must be defined in the current environment to use this method.

To Create a Stylized Content Editor Form

- 1 Launch the Stylized Content Editor.
- 2 Select **File>New>Documanage**.



The Content Type dialog displays.

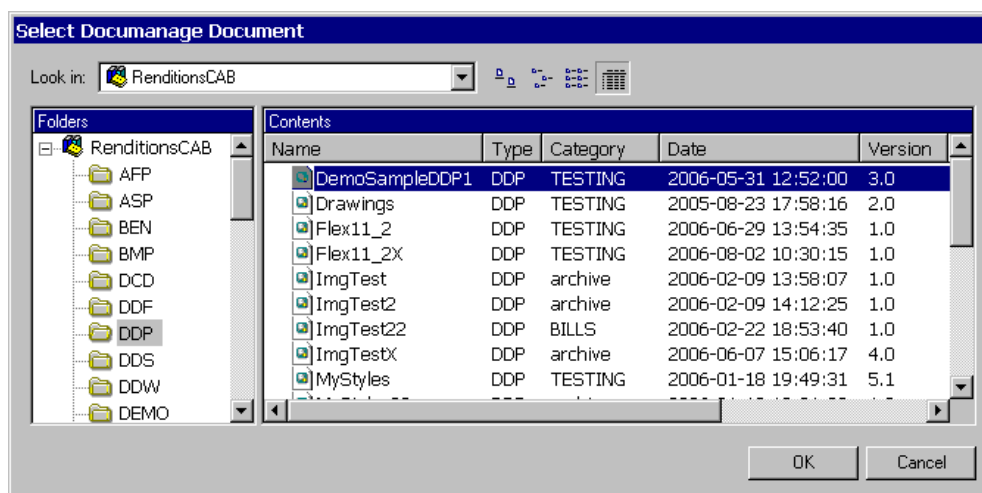


- 3 Select the type of document you want to create, and then click **OK**.

NOTE

If you clicked the New icon, even if you have Documanager enabled, you'll next see the Add Reference dialog.

The Select Documanager Document dialog displays.



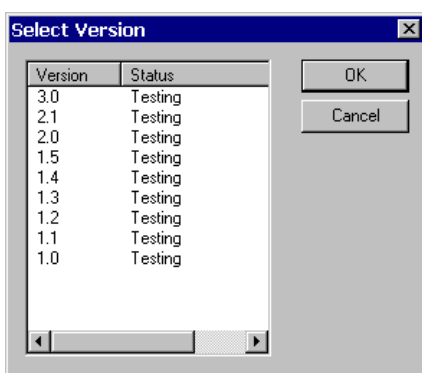
The Cabinet and Folder specified in the **Tools>Options>File Locations** dialog is initially displayed (see “[To Display the File Locations View](#)” on page 496). You can easily change either the Folder or the Cabinet.

- 4 Highlight the desired Docuflex project file (e.g., *.DDP) that you want to use as the basis for the formatting styles, and then click **OK**.

NOTE

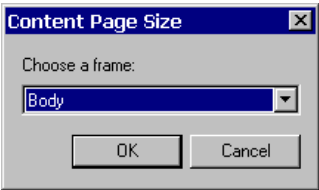
When choosing a project from Documanager, any project with a version number greater than 1.0 is displayed in the list; however, none of the versions may actually match the current Status Indicator settings. If you choose a project that does not match one of the status setting, you'll be advised and returned to the main dialog box.

If you chose a project with a Version number greater than 1.0, you'll be prompted for the version you want to use.



- 5 Select the version you want and click **OK**.

The Content Page Size dialog displays.



- 6 From the Choose a frame drop-down list box, select the Page Frame into which this content will be placed.
- 7 Click **OK** to select the frame.

DMGEXPORT

The purpose of DMGEXPORT is to provide the capability to connect to a Documange server, using a pre-existing login profile, and export one or more documents to your hard drive.

NOTE

If the path name contains spaces, quotes are required around the entire path and file name (e.g., "RenditionsCAB\Docs \sample(2.5).ddp\143").

The command-line syntax is similar to the following:

```
DMGEXPORT [-at] docspec target profile [dmgstat= err= log= trc=]
-or-
DMGEXPORT [-at] -f ctl_file profile [dmgstat= err= log= trc=]
```

where:

Flag / Argument	Meaning
-a	Only include Approved content.
-f	Read the source or target from the records in a control file (e.g., <code>ctl_file</code>). Control records are in the following comma-delimited format, with or without encapsulation in quotes: <pre>cabinet\folder\docname(x.x).ext\docid,c:\path\targetfile.ext</pre> Note: If you're using multiple Documange table keys, see "To Select a Document Name From Table" on page 95 for more information about the syntax of the folder specification. One of the advantages of using the control file to specify the source document specifier and destination file is that you can export multiple documents using one connection to the Documange server. You can achieve the same result by executing DMGEXPORT multiple times from within a batch file, for instance, but it's much slower because DMGEXPORT is connecting to and disconnecting from the Documange server <i>for each document</i>.
-t	Enable Common Objects tracing.
docspec	The Documange document specification: <pre>cabinet\folder\docname(x.x).ext\docid</pre> Of these, only cabinet, folder, and docname are required. For an explanation of the parameters, see "To Select a Document Name From Table" on page 95. If the extension is not provided as part of the docname, the document type will be set to "DDP" or "DDF" when DMGDDP= or DMGDDF=, respectively, is passed from the command line.
target	The target file, or, the complete path and file name into which the document should be exported. (You should only include this argument if the "-f" flag is not set).
profile	The Documange login profile file name.

Flag / Argument	Meaning
dmgstat=	The Documanager status indicators string (see “ Status Indicators ” on page 101).
err=	The file name of the error file.
log=	The file name of the log file.
trc=	The file name of the trace file.

DFLXCOMP Changes

Three new command-line parameters have been added:

NOTE

If the path name contains spaces, quotes are required around the entire path and file name (e.g., “dmgddp=RenditionsCAB\Docs \sample(2.5).ddp\143”).

Parameter	Usage
DMGDDP=	Use this optional parameter to pass a file specification describing a Docuflex project file that you want to export from Documanager to your workstation for batch processing. For more information, see “ File Specification Format ” on page 101.
DMGDDF=	Use this optional parameter to pass a file specification describing a Docuflex data file that you want to export from Documanager to your workstation for batch processing. For more information, see “ File Specification Format ” on page 101.
DMGSTAT=	Use this optional parameter to pass a Status Indicators string to the Documanager database interface module to determine which versions of DDP or DDF files should be exported when a combination of the DMGDDP= and DMGDDF= parameters are coded. For more information, see “ Status Indicators ” on page 101.

NOTE

You can specify the folder name for the DMGDDP= and DMGDDF= command-line keywords in one of two ways (see “[To Select a Document Name From Table](#)” on page 95 for more information about the syntax of the folder specification).

DFLXOUT Changes

DFLXOUT uses the DMGDDP= and DMGSTAT= parameters in the same manner as described in “*DFLXCOMP Changes*” on page 99. However, *DFLXOUT* requires that the ENV_INI= key be coded in the [DFLXOUT] section of the dflxout.ini file to connect to Documanage.

NOTE

If the path name contains spaces, quotes are required around the entire path and file name (e.g., “RenditionsCAB\Docs \sample(2.5).ddp\143”).

File Specification Format

Because they describe documents on the Documanage server, the DMGDDP= and DMGDDF= parameters use a special format as follows:

cabinet\folder\docname(x.x)\docid

The components in **red** are required; the portions in **blue** are optional. For example, to specify that you want to export SAMPLE.DDP which is stored in Cabinet “RenditionsCAB” and Folder “DDP,” code the command-line parameter like this:

dmgddp=RenditionsCAB\DDP\sample

If you know that the specific major and minor version of SAMPLE.DDP is 2.5 and that its document ID is 143, code the parameter like this:

dmgddp=RenditionsCAB\Foo\sample(2.5)\143

NOTE

You can specify the folder name for the DMGDDP= and DMGDDF= command-line keywords in one of two ways (see “*To Select a Document Name From Table*” on page 95 for more information about the syntax of the folder specification).

Specifying The Exported File Names

When you use the DMGDDP= or DMGDDF= parameters, you must still code the corresponding DDP= or DDF= parameters because the Documanage database interface uses the file names that you pass with DDP= and DDF= as the targets for the documents it exports. For example, if you code

dmgddf=RenditionsCAB\DDP\sampledat
ddf=c:\docucorp\docuflex\projects\sample\sampledat.ddf

then the exported DDF file is stored as c:\docucorp\docuflex\projects\sample\sampledat.ddf.

Status Indicators

You can only use command-line status indicators with the DMGDDP= and DMGDDF= command-line keywords.

The syntax for the DMGSTAT= command-line keyword is as follows:

dmgstat=ssssssss,ssssssss,ssssssss,...

where:

Parameter	Meaning
ssssssss	A user-defined status category name (e.g., Active, In Progress, Pending).
, (comma)	The status flag pair delimiter.

Working with Renditions

Using the Documanager Client software, you can

- import documents
- “check out”, make changes to, and “check in” documents
- manage updates to files and properties

When you integrate Documanager with Docuflex Studio, you can easily insert, as members, documents stored in a Documanager Cabinet.

With the renditions feature of Documanager, you can associate a document or image in one output format with an equivalent document or image in another format (e.g, a bitmap image associated with the equivalent image in an IBM Metacode or Xerox AFP printstream). This rendition association ensures that you receive the fastest possible composition speed for the targeted output format.

Output PDL	Preferred Renditions (1 = Best)
240-dpi IBM AFP (monochrome)	1 240-dpi (AFP) image with PSG reference 2 240-dpi (AFP) image with Graphic 3 240-dpi monochrome Windows bitmap (BMP) 4 240-dpi monochrome Portable Network Graphics (PNG) 5 240-dpi monochrome Tag Image File Format (TIF) 6 240-dpi monochrome JPEG File Interchange Format (JPG)
240-dpi IBM AFP (spot color)	1 240-dpi (AFP) image with PSG reference 2 240-dpi (AFP) image with Graphic 3 240-dpi color Windows bitmap (BMP) 4 240-dpi color Portable Network Graphics (PNG) 5 240-dpi color Tag Image File Format (TIF) 6 240-dpi color JPEG File Interchange Format (JPG)
240-dpi IBM AFP (full color)	■ 240-dpi (AFP) image with PSG reference
300-dpi IBM AFP (monochrome)	1 300-dpi (AFP) image with PSG reference 2 300-dpi (AFP) image with Graphic 3 300-dpi monochrome Windows bitmap (BMP) 4 300-dpi monochrome Portable Network Graphics (PNG) 5 300-dpi monochrome Tag Image File Format (TIF) 6 300-dpi monochrome JPEG File Interchange Format (JPG)
300-dpi IBM AFP (spot color)	1 300-dpi (AFP) image with PSG reference 2 300-dpi (AFP) image with Graphic 3 300-dpi color Windows bitmap (BMP) 4 300-dpi color Portable Network Graphics (PNG) 5 300-dpi color Tag Image File Format (TIF) 6 300-dpi color JPEG File Interchange Format (JPG)
300-dpi IBM AFP (full color)	■ 300-dpi (AFP) image with PSG reference

Output PDL	Preferred Renditions (1 = Best)
300-dpi Xerox Metacode (monochrome)	1 300-dpi (MET) image with IMG reference 2 300-dpi (MET) image with Graphic 3 300-dpi monochrome Windows bitmap (BMP) 4 300-dpi monochrome Portable Network Graphics (PNG) 5 300-dpi monochrome Tag Image File Format (TIF) 6 300-dpi monochrome JPEG File Interchange Format (JPG)
300-dpi Xerox Metacode (spot color)	1 300-dpi (MET) image with IMG reference 2 300-dpi (MET) image with Graphic 3 300-dpi color Windows bitmap (BMP) 4 300-dpi color Portable Network Graphics (PNG) 5 300-dpi color Tag Image File Format (TIF) 6 300-dpi color JPEG File Interchange Format (JPG)
300-dpi PCL (monochrome)	1 300-dpi monochrome Windows bitmap (BMP) 2 300-dpi monochrome Portable Network Graphics (PNG) 3 300-dpi monochrome Tag Image File Format (TIF) 4 300-dpi monochrome JPEG File Interchange Format (JPG)
300-dpi PCL (color)	1 300-dpi color Windows bitmap (BMP) 2 300-dpi color Portable Network Graphics (PNG) 3 300-dpi color Tag Image File Format (TIF) 4 300-dpi color JPEG File Interchange Format (JPG)
600-dpi Postscript	1 600-dpi Encapsulated Postscript (EPS) 2 600-dpi Windows bitmap (BMP) 3 600-dpi Portable Network Graphics (PNG) 4 600-dpi Tag Image File Format (TIF) 5 600-dpi JPEG File Interchange Format (JPG)
600-dpi PDF (only available with Docupresentment)	1 600-dpi Windows bitmap (BMP) 2 600-dpi Portable Network Graphics (PNG) 3 600-dpi Tag Image File Format (TIF) 4 600-dpi JPEG File Interchange Format (JPG)
HTML (only available with Docupresentment)	1 96-dpi Enhanced Metafile (EMF) (<i>Windows platform only</i>) 2 96-dpi Portable Network Graphics (PNG) 3 96-dpi Tag Image File Format (TIF) 4 96-dpi JPEG File Interchange Format (JPG)
XML	1 96-dpi Portable Network Graphics (PNG) 2 96-dpi Windows bitmap (BMP) 3 96-dpi Tag Image File Format (TIF) 4 96-dpi JPEG File Interchange Format (JPG)

Output PDL	Preferred Renditions (1 = Best)
PCL Windows Print Driver	1 Enhanced Metafile (EMF) 2 JPEG File Interchange Format (JPG) 3 Tag Image File Format (TIF) 4 Portable Network Graphics (PNG) 5 Metafile Blob (MFB)
PostScript Windows Print Driver	1 Encapsulated PostScript (EPS) 2 Enhanced Metafile (EMF) 3 Metafile Blob (MFB) 4 Portable Network Graphics (PNG) 5 Tag Image File Format (TIF) 6 JPEG File Interchange Format (JPG)

To use the Renditions feature, you must use **all** of the following features:

- Documange integrated with Docuflex Studio
- Ensure content referencing is enabled (see “[Step 4](#)” on page 82)
- Rendition Keys defined in Documange for a document
- Rendition Set in a Documange Cabinet containing multiple renditions of a Documange document
- Docucorp Control Panel for activating the Rendition Key in the output Printer Definition
- Channels and Recipients defined in the Docuflex Project to coordinate the Rendition Key with the Printer Definition

Defining Rendition Keys

Docuflex uses the Rendition Key to determine which document should be retrieved to compose the output.

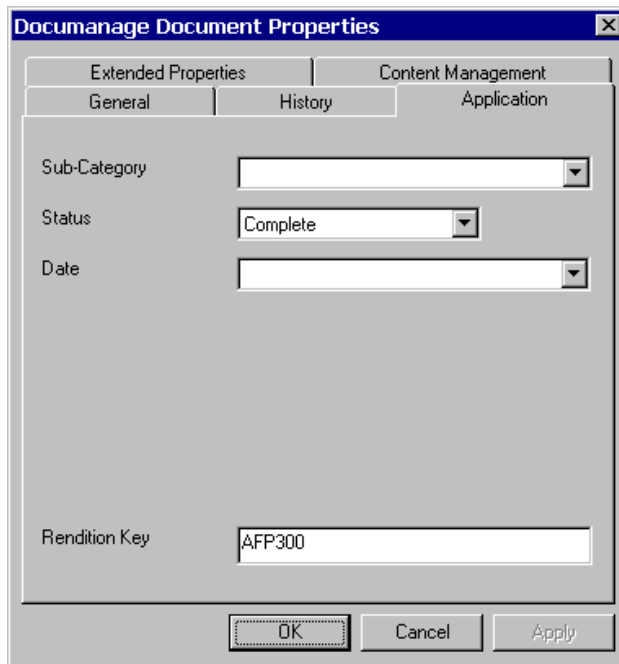
NOTE

You can only define a Rendition Key when you initially import a document into Documange (with Documange Workstation) or check it out for updating.

To Define Rendition Keys

- 1 Launch Documange Workstation.
- 2 “Check Out” the document for which you want to define the Rendition Key.
- 3 Right-click the document, and then select **Properties** from the context menu.
The Documange Document Properties dialog displays.

- 4 Click the **Application** tab to access the Rendition Key.



- 5 In the Rendition Key text box, type the value (up to 256 characters) that you want to define for this document. Be sure to use a descriptive Rendition Key, such as “AFP300” for all device-specific resources composed at 300 dpi.
- 6 Click **OK**.

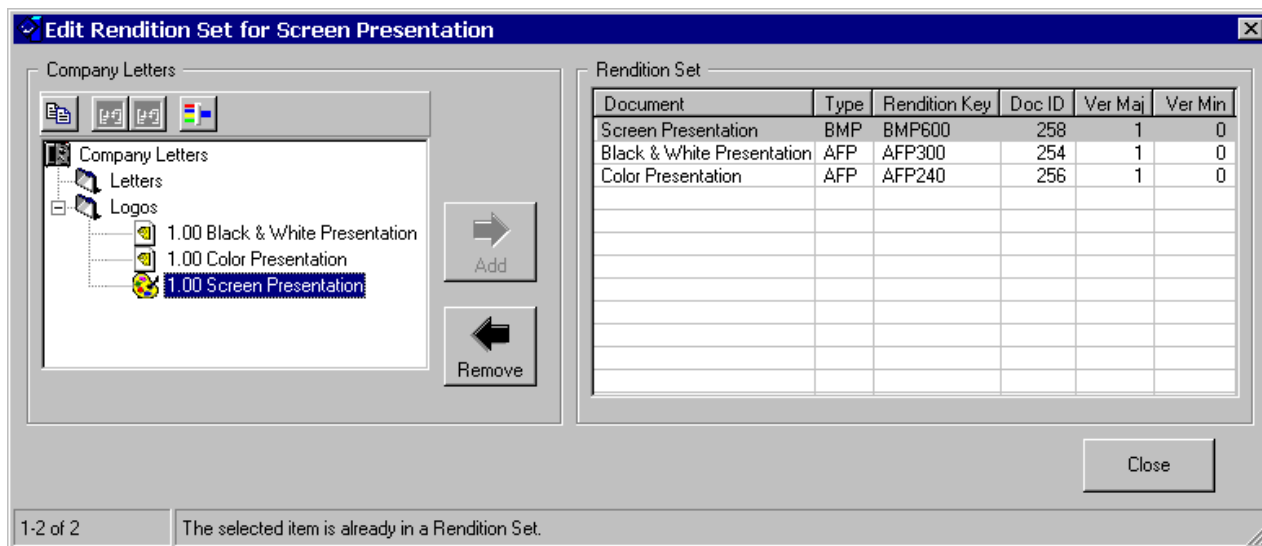
Adding Documents to a Rendition Set

Rendition sets create a “roadmap” between documents stored in different output formats (e.g., you can link a bitmap image, *.bmp, to an image in any number of alternate formats).

To Add Documents to a Rendition Set

- 1 Launch Documanage Workstation.
- 2 Select a Cabinet, then a Folder, and then a document.
- 3 Right-click the document, and then select **Renditions** from the context menu.

The Edit Rendition Set dialog displays.



- 4 Navigate the tree listing of the Cabinet to locate additional documents to add to the set.
- 5 Right-click the document, and then select **Add Item to Rendition Set** from the context menu.

-or-

Highlight the document, and then click 

The additional documents are displayed beneath the original document.

- 6 List as many additional documents as necessary.
- 7 Click **Close** to save changes to the Rendition Set.

Using Renditions to Associate Device-specific Image Resources

When producing IBM AFP or Xerox Metacode output, you often want the output file to reference pre-processed or printer-resident images. With Documanage, you can create a Rendition Set that associates a master image with an AFP Page Segment or Metacode Image.

To Use Renditions to Associate Device-specific Image Resources

- 1 Load into a Documanage Cabinet:
 - an AFP file including a Page Segment reference (e.g., IPS Include Page Segment)
 - a Metacode file including an IMG reference (e.g., DJDE IMAGE=)

TIP

You can use **Docucreate Workstation** to create IBM AFP and Xerox Metacode printer resources and printstreams.

- 2 Create a Rendition Set that associates the master image to this file.

This association allows the AFP or Metacode output from Docuflex to include references to printer-resident images.

Activating the Rendition Key

WARNING!

If Docuflex cannot match the Rendition key in the Control Panel with the one you defined in Documange, the original resource selected in Docuflex Studio is composed in the output and a warning message is written to the Docuflex log file.

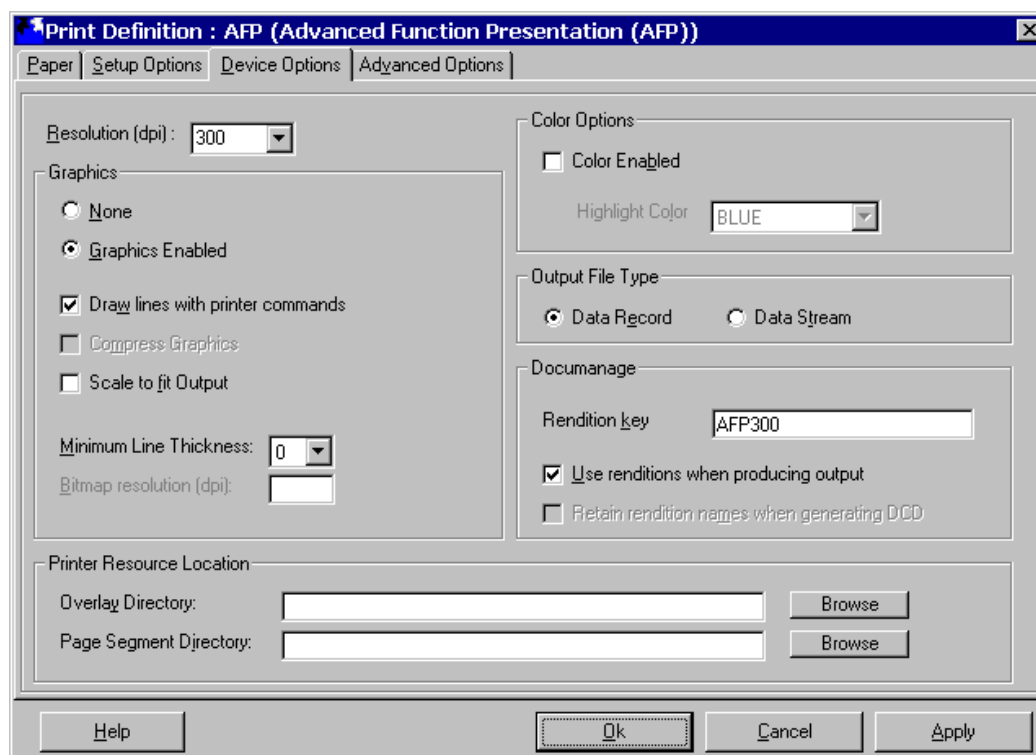
Using the Docucorp Control Panel to activate the Rendition Key is the final step that enables the Renditions feature. If the printer for the target output device contains a value for the **Rendition key**, the Docuflex composition engine can use both the Rendition Set and Rendition Key from Documange to include the proper document in the Docuflex output printstream.

EXAMPLE

If you include a bitmap graphic in Docuflex and you're going to produce AFP output, Docuflex uses the Rendition key in the AFP Printer Definition (e.g., *RenditionKey=AFP300*) plus the Rendition Set and Rendition Key value in Documange to select the AFP resource.

To Activate the Rendition Key

- 1 Launch the Docucorp Control Panel (e.g., **Start>Programs>Docutoolbox>Docucorp Control Panel**).
- 2 Double-click **Printer Definitions**, then double-click the printer for which you want to activate the Rendition key.
- 3 Select the Device Options tab to view the Documange options.



- 4 In the Rendition key text box, type the RenditionKey that you've defined for compatible Documange document(s) you want to use when composing output for the specified device.

- 5 Enable the Renditions feature by checking **Use Renditions when producing output**.
- 6 Click **Ok** to save the Rendition key.

In Docuflex Studio, you choose a document from a Folder within a Documange Cabinet. Then, the composition engine verifies that the document belongs to a Rendition Set. Next, the composition engine verifies that the “Rendition key” in the Printer Definition (e.g., AFP300) matches a RenditionKey in a Documange Rendition Set.

NOTE

The composition engine can generate multiple documents, with different Renditions, based on the output Channels you specify in Docuflex Studio.

Processing Tokenized DCD

To process tokenized DCD, Docuflex relies on the following utilities for reproducing the output:

- **DFLXOUT**—a post-processor that creates output print streams from composed DCD documents created by the Docuflex Composition Engine (see “[DFLXOUT Basics](#)” on page 527).
- **DFLXSAVE**—an archive processor that reads a tokenized DCD file, separates the documents, and creates a queue job to be read by Docusave Server and archived into Documange (see “[DFLXSAVE Basics](#)” on page 550).
- **DCDAPI**—an Application Programming Interface that resides on the Documange Server and helps Documange decipher DCD datastreams. (DCDAPI uses DC2CPY32 for processing; see “[Modifying the Configuration File for DCDAPI](#)” on page 109).
- **DC2CPY32**—an input/output processor that converts an input source into an output target; the discussion is contained in the Docucorp Common Objects documentation (see “[Modifying the Configuration File for DCDAPI](#)” on page 109).

You can store tokenized DCD in your Documange Cabinet for future use, including recreating a document or post-processing by DFLXOUT. Being able to accurately reproduce a copy of a document, as it existed in the past, is the purpose of tokenized DCD.

Docuflex requires a DCDAPI section in the configuration file to produce a tokenized DCD file via the Docuflex Composition Engine.

Modifying the Configuration File for DCDAPI

For these applications to work together, you must modify a configuration file located in the Windows directory (e.g., C:\WINDOWS\isi.ini).

If your configuration file does not already contain a [DCDAPI] section, you must add one so that Documange and Docuflex can identify and use the tokens.

```
ISI.INI File
:
:
[DCDAPI]
ERROR_FILE=C:\TEMP\dcdapi.err
TRACE_FILE=C:\TEMP\dcdapi.trc
LOG_FILE=C:\TEMP\dcdapi.log
ENV_INI=C:\Docucorp\Docuflex\docuflex.ini
CurEnvName=DOCUMANAGE
```

DCDAPI depends on a [DCDAPI] section in the configuration to resolve the tokens. This section requires the following entries:

Entry	Purpose
ENV_INI=	The data path and file name of your Docuflex environment file (e.g., <i>docuflex.dde</i> or <i>docuflex.ini</i>).
CurEnvName=	An optional entry in the [DCDAPI] section of the ISI.INI. If you do not specify it, the current environment name is obtained from the Docuflex environment file.

Modifying the Configuration File for DC2CPY32

For these applications to work together, you must modify a configuration file located in the Windows directory (e.g., C:\WINDOWS\cpy.ini).

Add the following INI entries to enable environment support for tokenized DCD:

```
[ISICpy]
:
:
ENV_INI=C:\Docucorp\Docuflex\Docuflex.ini
CurEnvName=DOCUMANAGE
```

Entry	Purpose
ENV_INI=	The data path and file name of your Docuflex environment file (e.g., <i>docuflex.dde</i> or <i>docuflex.ini</i>).
CurEnvName=	An optional entry in the CPY.INI. If you do not specify it, the current environment name is obtained from the Docuflex environment file.

Using Historical Renditions

Historical Renditions is a feature of tokenized DCD that allows Docuflex to reproduce specific renditions of Documanager documents contained in the project when originally composed (i.e., you could come back at a later date and replicate your output as it existed at some point in the past).

To use historical renditions, you must enable this feature in the DCD Printer Definition.

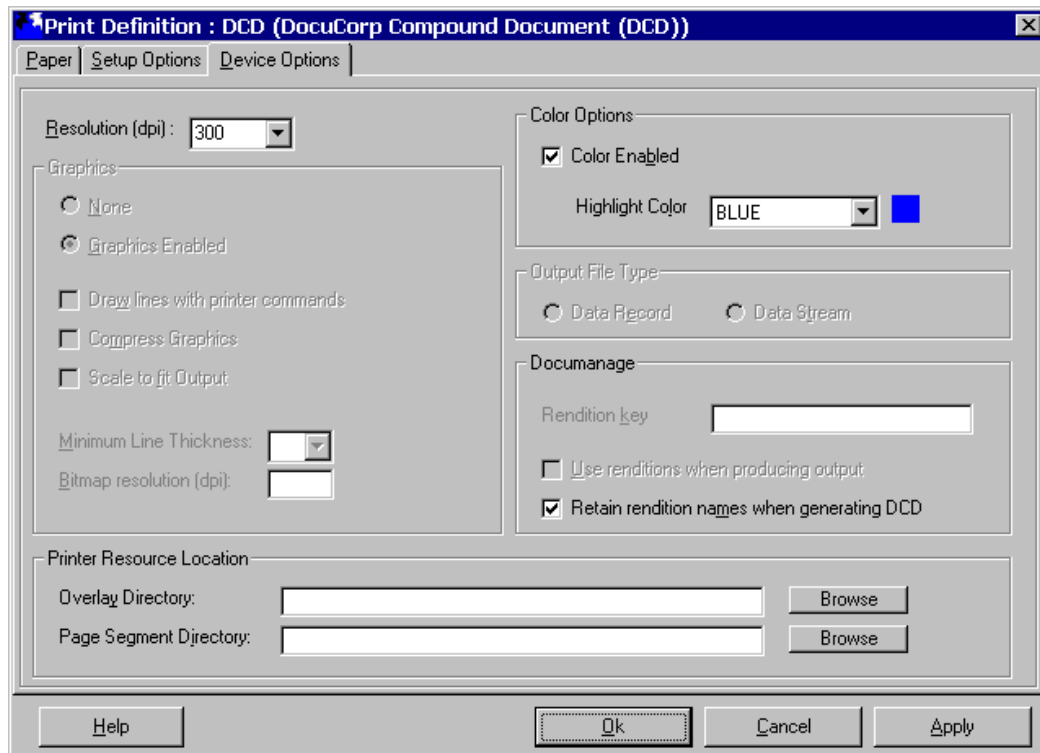
To Use Historical Renditions

- 1 Launch the Docucorp Control Panel
(e.g., **Start>Programs>Docutoolbox>Docucorp Control Panel**).

NOTE

To use the Control Panel to edit the configuration file, the file must be located in the Windows directory.

- 2 Double-click **Printer Definitions**, then double-click the DCD Printer Definition.
- 3 Select the Device Options tab to view the Documanager options.



- 4 Enable the historical Renditions feature by checking **Retain rendition names when generating DCD**.
- 5 Click **Ok**.

This key enables Docuflex to acquire the current renditions of documents *at the time of project composition* and save the information as a token in the DCD file. Thereafter, any time you produce output from the resulting DCD file, Docuflex uses the same versions of the documents (i.e., it ignores the current versions in deference to the “historical” versions).

Using Footnotes

Docuflex now includes a powerful tool for including footnotes within your document. Footnotes are a type of annotation that provide extra information about passage(s) in the document. A passage is marked by a number that matches the number of the footnote. Footnotes typically appear at the “foot,” or bottom, of the page.

Overview

Docuflex provides new DCP.FOOTNOTE.NUMBER.x reserved tags to aid in generating numbers for footnotes:

- DCP.FOOTNOTE.NUMBER—contains the number of the footnote in the document. This number is cumulative from the beginning of the document.
- DCP.FOOTNOTE.NUMBER.INCR—INCRements the footnote number each time the tag is accessed and stores the number in the DCP.FOOTNOTE.NUMBER tag. This tag is necessary to generate the “next” footnote number.
- DCP.FOOTNOTE.NUMBER.PAGE—contains the number of the footnote on the current page. This number is cumulative only for the current page.
- DCP.FOOTNOTE.NUMBER.PAGE.INCR—INCRements the footnote number each time the tag is accessed and stores the number in the DCP.FOOTNOTE.NUMBER.PAGE tag. This tag is necessary to generate the “next” footnote number.

As you can see from the tag names, they are designed to work in pairs—DCP.FOOTNOTE.NUMBER with DCP.FOOTNOTE.NUMBER.INCR and DCP.FOOTNOTE.NUMBER.PAGE with DCP.FOOTNOTE.NUMBER.PAGE.INCR.

You should use the following general steps to construct a matching pair of footnote tags:

- 1 At the end of a passage requiring a footnote, insert either DCP.FOOTNOTE.NUMBER.INCR or DCP.FOOTNOTE.NUMBER.PAGE.INCR to obtain the “next” footnote number.
- 2 At the beginning of the annotation clarifying the passage, insert either DCP.FOOTNOTE.NUMBER or DCP.FOOTNOTE.NUMBER.PAGE to obtain the corresponding footnote number.

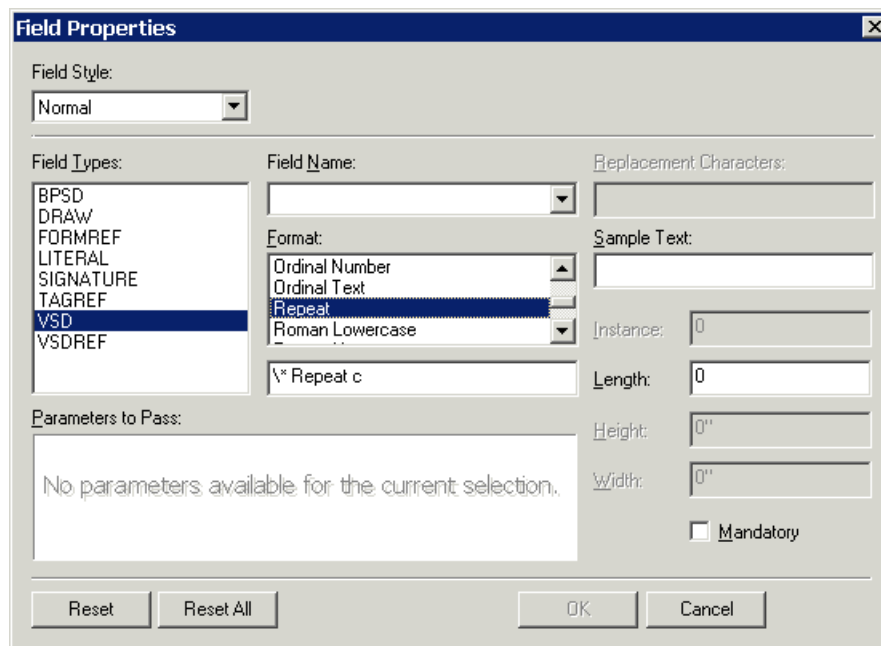
NOTE

You should create these members as pairs to ensure the correct numbering sequence (i.e., make the footnote member a “child” of the member containing the passage).

Numbers vs. Symbols

In most cases, you use a number as the footnote marker; however, you have the option of using symbols instead of numbers.

Docuflex includes two formatting strings available in the Add Field dialog when you are inserting a reserved tag—**Repeat** and **SelectChar**.



You can apply *one* of these to the *pair* of DCP.FOOTNOTE.NUMBER.x fields when you want symbols instead of numbers.

- When you select the Repeat format, you'll see *** Repeat c** in the text box beneath the Format: list box. Click in the lower text box and replace the c with a symbol that you want to repeat. This symbol is then repeated the number of times indicated by DCP.FOOTNOTE.NUMBER. You'll receive an increasing number of repeated symbols (e.g., *, **, ***, ****) as the value of DCP.FOOTNOTE.NUMBER increases.
- When you select the SelectChar format, you'll see *** SelectChar ccc** in the text box beneath the Format: list box. Click in the lower text box and replace the ccc with a series of symbols you want to use—you can use more than three, if necessary.

Docuflex uses the numeric value of DCP.FOOTNOTE.NUMBER as an index to select one of the symbols. If you provide the series @#\$%, for example, then footnote number 1 receives an asterisk, number 2 receives the pound sign, number 3 receives the dollar sign, and number 4 receives the percent sign. Docuflex continues to substitute symbols as the value of DCP.FOOTNOTE.NUMBER increases.

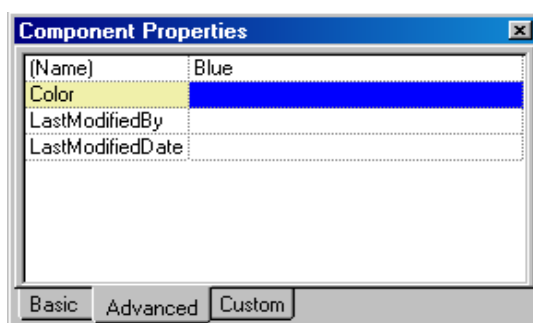
Footnote Placement

You can put footnotes in the same frame as the passage, or in a separate frame, by specifying the FrameOrTableCell property.

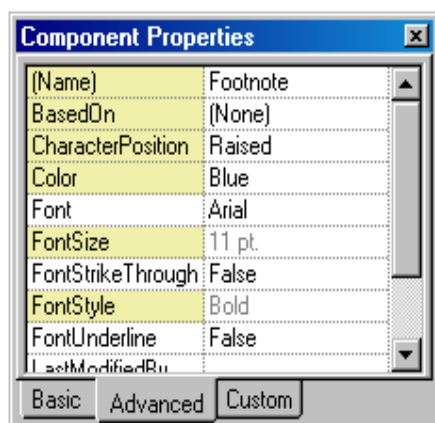
If you put footnotes in the same frame, you should set the VerticalAlign property of the Member containing the annotation equal to Bottom. This setting ensures that all footnotes are stacked, in order, at the bottom of the frame.

To Use Footnotes

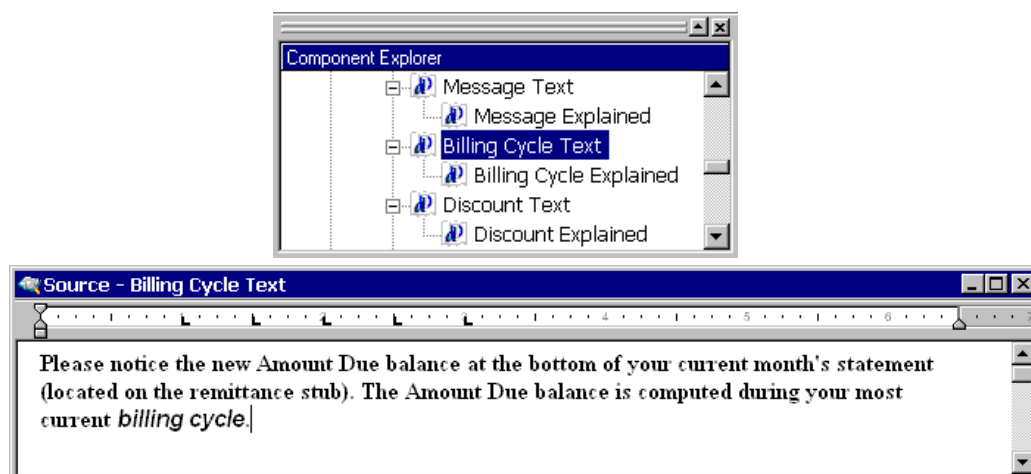
- 1 Create a Color style (e.g., “Blue”) to use on the footnote marker. Using a color helps to give the reader a visual cue that the marker is not just a stray number or symbol.



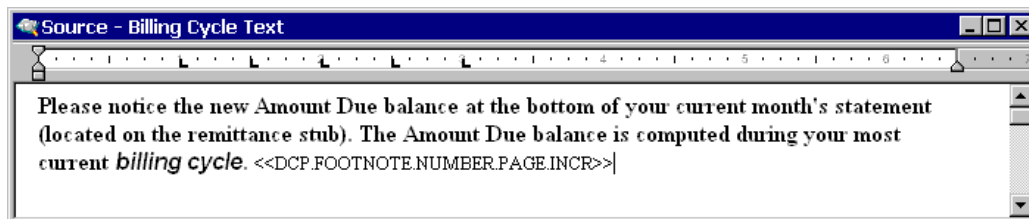
- 2 Create a Character style (e.g., “Footnote”) with CharacterPosition=Raised and Color=Blue. Having a superscripted (“raised”) marker in blue further clarifies that this marker is important.



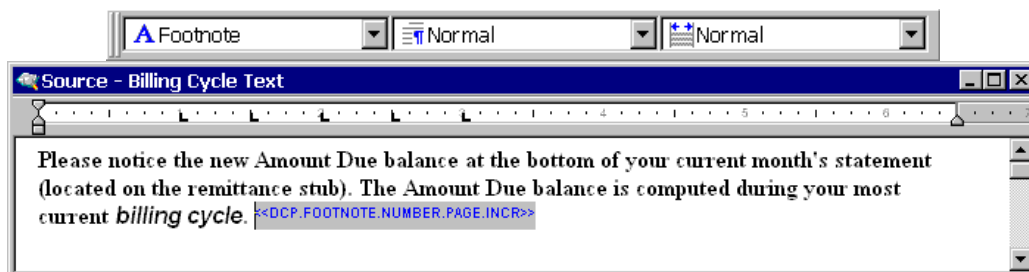
- 3 Create a member (e.g., Billing Cycle Text) and type the text requiring a footnote.



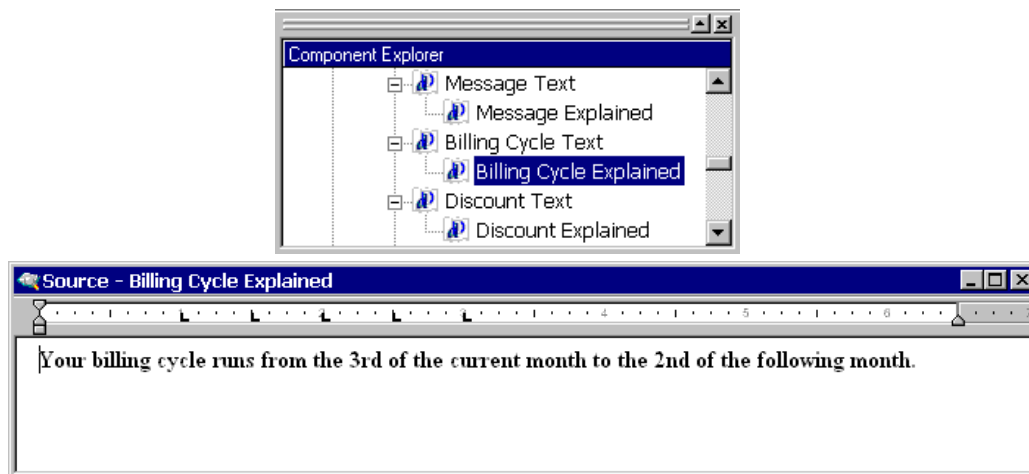
- 4 At the end of the text, type a space, select **Insert>Field**, and choose **DCP.FOOTNOTE.NUMBER.INCR**.



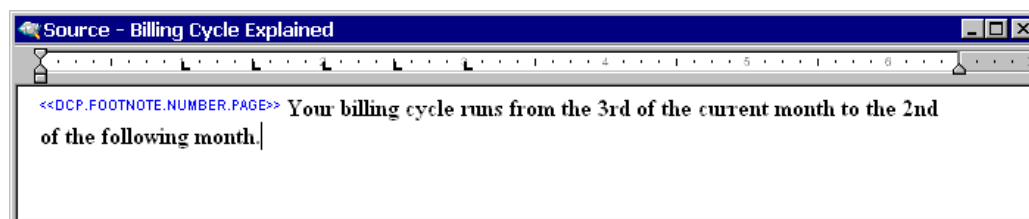
- 5 Highlight the field and apply the Footnote Character style.



- 6 Create a footnote member (e.g., Billing Cycle Explained) as a child of the corresponding passage and type the text of the footnote.



- 7 At the beginning of the text, select **Insert>Field**, choose **DCP.FOOTNOTE.NUMBER**, and type a space. Then, repeat the process of applying the Footnote Character style.

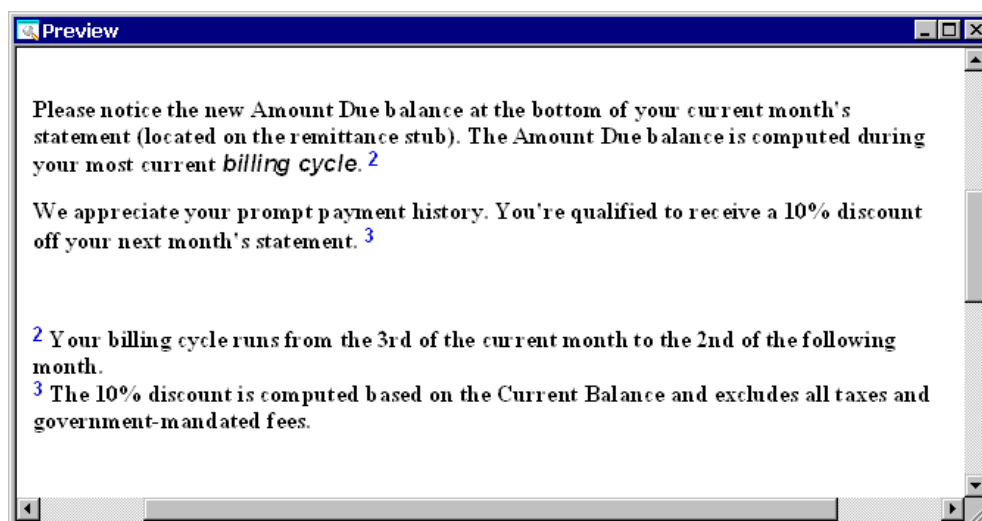


- 8 In the Component Properties, select the appropriate frame for **FrameOrTableCell**.

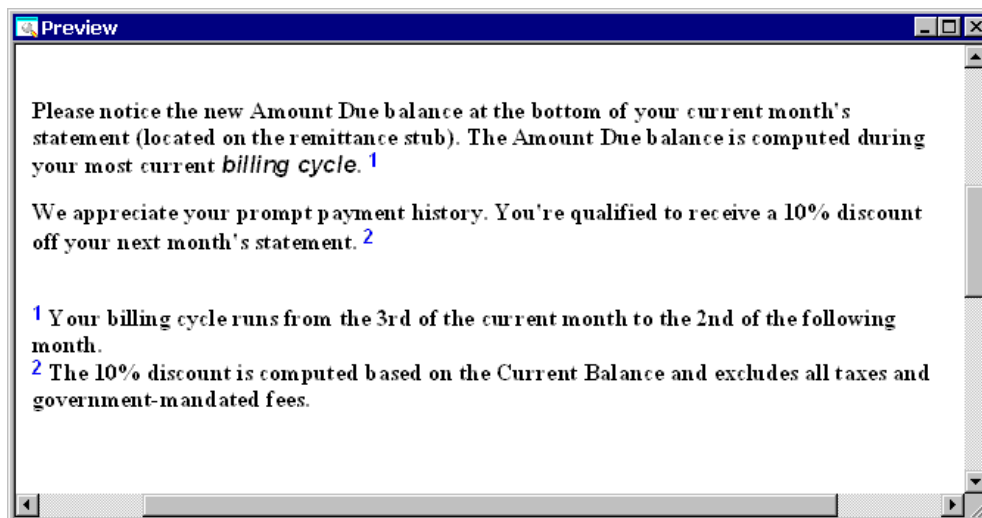
TIP

If you put the footnote in the same frame, you should also set the **VerticalAlign** property equal to **Bottom**.

The Preview window displays the number of the footnote as it appears in the entire document.



If you change the field to `DCP.FOOTNOTE.NUMBER.PAGE.INCR` and `DCP.FOOTNOTE.NUMBER.PAGE`, you'll see the footnote number change to reflect just the ones on the current page.



Using Choice Fields

Two new member properties, **ChoiceField** and **ChoicePrompt**, enable the external collection of preferences that allow Docuflex to dynamically compose documents based on user selections:

- **ChoiceField**—a user-selected “table.column” in the schema to receive the result of a choice
- **ChoicePrompt**—a user-defined prompt string

These choices allow an end user to make True/False (checkbox) selections that determine whether to compose particular components of a Docuflex project. The choices are defined with Docuflex Studio, but the questions are presented to an end user outside of Docuflex Studio (e.g., a page in a Web browser).

The Docuflex Studio **File>Export>Preferences (XML)** menu option creates an XML file containing the user-defined choices. With an appropriate XSL stylesheet, a Web browser presents questions and collects answers in XML format.

When the Docuflex composition engine is launched, you can use Transall to query the answers in the XML and use Inclusion rules on members to either include or exclude the members as desired.

Image Manipulation

Docuflex provides the tools necessary for you to include an image in your document and then make changes to the image without having to use external image editing tools.

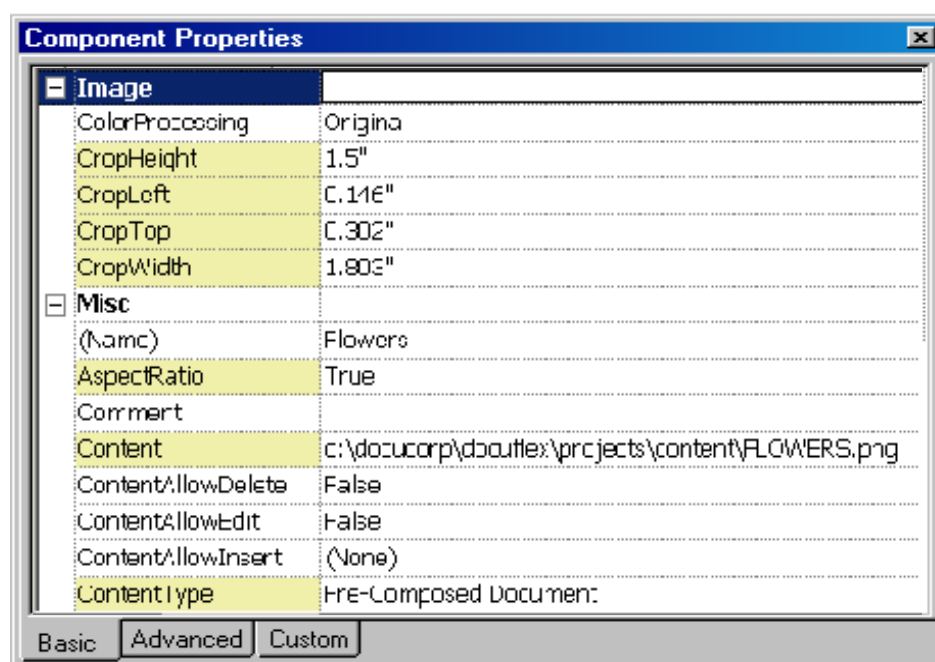
An “image” in Docuflex is a graphic in any of the following formats: BMP, JPG, PNG, or TIF. You insert an image into your document by referencing it in the Content property of a Pre-Composed Document member. After you insert the image, you can change the level of color processing, crop a portion to suit your needs, even scale the image—all without affecting the source image.

NOTE

For best results, all original images should be in RGB (or sRGB) format instead of CMY or CMYK format.

Component Properties

After you insert a Pre-Composed Document member and specify an image file, notice the Image category and member properties on the Component Properties bar.



The **ColorProcessing** property controls the level of color saturation you want to use for the image. The valid choices are as follows:

- **BlackandWhite** — the colors in the image are converted to either black or white. Depending on the resolution of the image and the number of colors, this option might yield less-than-desirable results.
- **Grayscale** — the colors are rendered in grayscale format (i.e., converted to shades of gray).
- **Original** — the “original” colors with which the image was created.

The **CropHeight**, **CropLeft**, **CropTop**, and **CropWidth** properties define the rectangle encompassing the portion of the image you want to include in your output.

Source Window Controls

When you display the Source window for the image, you'll notice several helpful features.



Two toolbar icons are displayed at the top of the Source window:

- The  (Show Additional Properties) icon displays the Properties view (see [“Using the Properties View”](#) on page 241).
- The  (Reset Image) icon resets the cropping values to zero and resets the ColorProcessing property to Original.

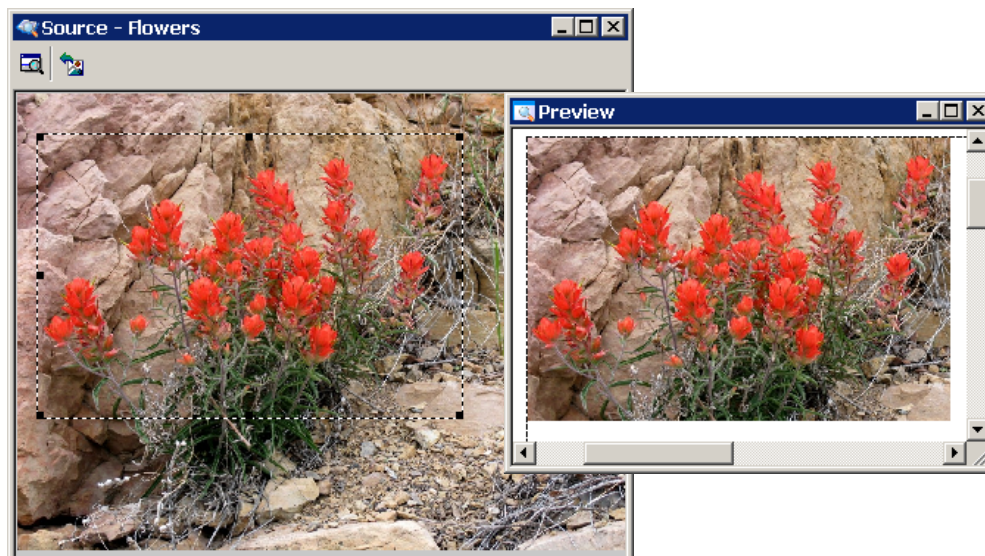
The entire image is surrounded by the cropping rectangle. If you do not want to alter the image, simply ignore the rectangle—it does not appear in the output. If you want to crop the image and alter the output, you can crop the image in one of two ways:

- Use the mouse and the sizing handles (at the edges of the cropping rectangle) to surround the area you want to include. Docuflex automatically supplies the measurements to the cropping property fields in the Component Properties bar. This procedure is similar to resizing a drawing object (see [“To Resize a Drawing Object”](#) on page 249).

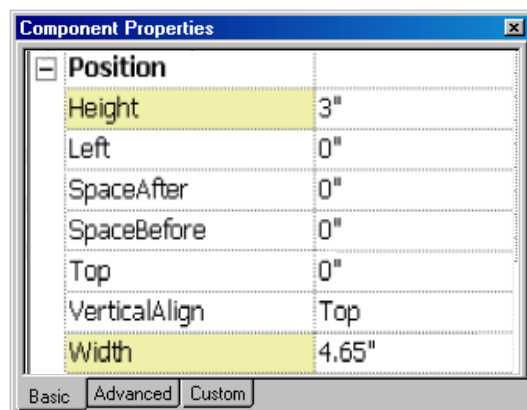
You can also move the cropping rectangle to a different part of the image. This procedure is similar to moving a drawing object (see [“To Move a Drawing Object”](#) on page 248).

- Type the specific dimensions into the cropping property fields in the Component Properties bar. The cropping values must not be negative—Docuflex will prompt you if they are. Also, if either the **CropHeight** or **CropWidth** property is zero, the image will not be cropped.

The Source window continues to display the entire image with the desired area delineated by the cropping rectangle, while the Preview window displays just the cropped portion of the image.

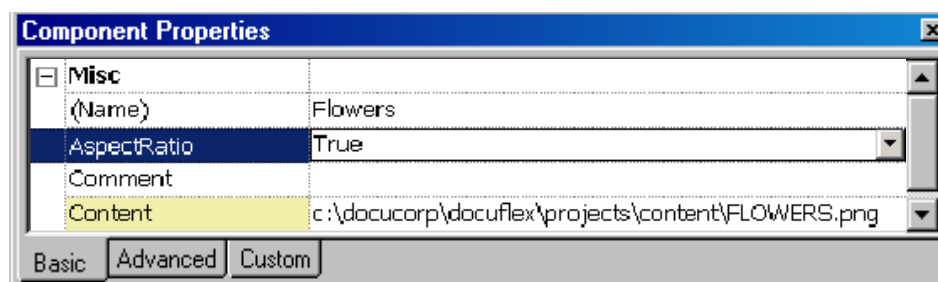


If you want to scale the cropped image for the output, you can specify the new size by typing specifications into the **Height** and **Width** member properties.



If you utilize both scaling and cropping, the cropping process is performed first, followed by scaling.

Depending on the dimensions of your image, scaling the cropped area might yield a distorted image. By also setting the **AspectRatio** property to True, Docuflex fills as much of the specified area as possible without distorting the cropped image (i.e., retains the original ratio between Width and Height).



Running a Docuflex Project in Debug Mode

An important part of ensuring that your Docuflex project is behaving as intended is to watch it in action, but in a controlled fashion. This is called *debugging*. Docuflex Studio contains two types of debugging—visual and rule. If you place a breakpoint on a member, you trigger visual debugging. Likewise, if you place a breakpoint in a function or subroutine, you trigger rule debugging.

After the project's execution is under the control of Docuflex Studio, you can direct the project to precede one statement or member at a time (i.e., from one breakpoint to another). You can also view and update the contents of data variables as the project runs.

To use the debugger in this manner, you first must take one or both of these steps:

- Set a breakpoint on a member in the Component Explorer
- Set a breakpoint on a statement in at least one of the user Rules

Setting Breakpoints

When debugging a project, you can specify that the routine should pause at a particular statement in a user Rule or a particular member. This process is called *setting a breakpoint*. You can set a breakpoint on a member in the Component Explorer or in a user Rule in the Rule Editor.

To Set a User Rule Breakpoint

- 1 Open a user Rule in the Rule Editor.
- 2 Set the cursor on the pertinent statement.
- 3 Select **Debug>Toggle Breakpoint**.
-or-
Press **F9**.

You can set a Rule breakpoint on any statement in a user-written Rule, including a subroutine or function.

When the Docuflex project's execution has paused, you can examine:

- Values of variables defined within the paused Rule (i.e., whose lexical scope is *local*)
- Values of variables defined in the Declarations section of the project's Rules folder (i.e., whose lexical scope is *global*)
- The names of Rules that have been called before reaching the paused subroutine or function

EXAMPLE

If you know that one Rule in your project calls another rule, you can set a breakpoint on a significant statement in the calling routine and on one in the called routine. When Docuflex Studio gains control of the running project, you can allow the execution to pause at the calling routine's breakpoint, and then continue the execution until it reaches the called routine's breakpoint. In this manner, you can verify that the project is behaving as expected within a certain context of execution.

To Set a Member Breakpoint

- 1 Select a member in the Component Explorer.
- 2 Select **Debug>Toggle Breakpoint**.
-or-
Press **F9**.

Operating Docuflex under Debugging Control

Operating Docuflex under debugging control requires a few steps that need further explanation.

To Operate Docuflex Under Debugging Control

- 1 Select **Debug>Go**.

-or-

Press **F5**.

-or-

Click  on the Debug toolbar.

Docuflex Studio starts or intercepts control of the project when it is next started. Notice that Docuflex Studio now presents its debugging interface—“[Run]” is displayed in the title bar.

Docuflex Studio gains control of the project's execution and causes it to pause at the first statement or member encountered where a breakpoint is set.

- 2 As the project executes, use the Debug menu commands or the Debug toolbar icons to step from one statement or member to the next, or from breakpoint to breakpoint.

Control bars in Docuflex Studio's debug interface present

- local and automatic variables (see “[Debug Variables Control Bar](#)” on page 184)
- specified “watch” variables (see “[Debug Watch Control Bar](#)” on page 185)
- the names of the routines presently on the project's routine call stack (see “[Debug Call Stack Control Bar](#)” on page 184)

- 3 To end debugging before the project completes its execution, select **Debug>Stop**.

-or-

Press **Ctrl+F5**.

-or-

Click  on the Debug toolbar.

You can individually configure Docuflex Studio's three debugging control bars. With the mouse cursor over one of these bars, right-click for a pop-up menu that allows you to hide the bar, allow it to float within Docuflex Studio, or allow it to dock on one side of the main window.

After Docuflex Studio gains control of the project's execution, and when paused at any statement or member, you can:

- Select **Debug>Step Into**, or press **F8**, to proceed one statement or member at a time. If the next statement calls another Rule within the project, that Rule is opened and execution continues to the first statement in that Rule.
- Select **Debug>Step Over**, or press **CTRL+F8**, to proceed one statement or member at a time. If the next statement calls another Rule within the project, execution pauses at the next statement in the calling Rule *after* the calling statement.

When you stop debugging the project, Docuflex Studio terminates the debugging interface and reverts to the default, component-oriented interface.

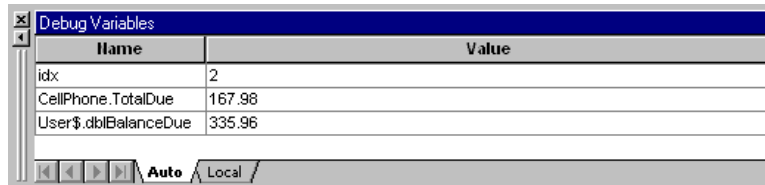
NOTE

Docuflex Studio “remembers” the layout of the main window while debugging and changes to that layout for each debugging session.

Viewing Debug Variables in the Debug Control Bars

The Debug Variables bar offers two tabs to select which set of variable names and values to display:

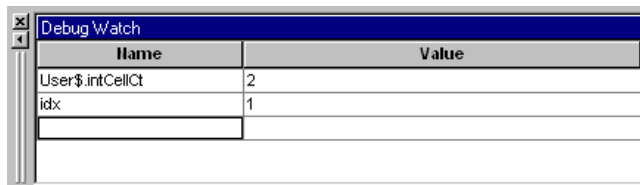
- Auto—Variables in the current and previous line of execution
- Local—Variables in this routine only



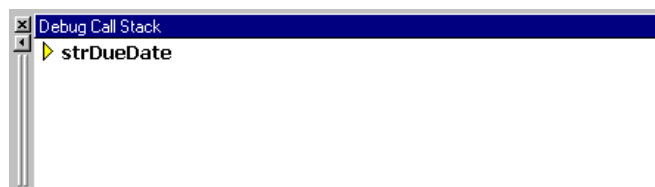
While the project's execution is stopped, change the value of a variable shown in the Debug Variables bar by clicking on the variable's value cell and entering a new value.

In the Debug Watch bar, click in a Name cell and enter the name of a variable. This variable's value will be displayed in the Value cell when it is within the current execution scope:

- Global variables are always “in scope.”
- Local variables (those defined by a Rule's Dim statement) are only “in scope,” and therefore only have a value, while that Rule is being executed.



In the Debug Call Stack bar, you can change the display scope for variables when you click on an item. This action displays the values of variables that exist and are “in scope” for that Rule's execution context.



Working With Docuflex to Produce PDF

In addition to saving the Preview window's content as a PDF file, Docuflex contains useful features to improve the resulting PDF that you produce.

Supplying Data for PDF Document Properties

This section describes the proper method for placing up to four different pieces of information inside the header portion of a PDF file. While you are not required to include the tags in any of the output, the information they contain can be very useful to its readers. You can insert this information via Docuflex Reserved tag variables with the following names:

- DCP.DOC.TITLE
- DCP.DOC.AUTHOR
- DCP.DOC.SUBJECT
- DCP.DOC.KEYWORDS

To Supply Data for PDF Document Properties

- 1 Create a User rule containing up to four **DF\$SetTagValue** script commands, for example:

```
Public Sub SetPDFTags( )
  DF$SetTagValue( "DCP.DOC.TITLE", "Quarterly Sales Revenue by Department" )
  DF$SetTagValue( "DCP.DOC.AUTHOR", "Alan Braun et al." )
  DF$SetTagValue( "DCP.DOC.SUBJECT", "Summation of Departmental Performance for 1Q 2007" )
  DF$SetTagValue( "DCP.DOC.KEYWORDS", "Sales Revenue Department 1Q 2007 Quarter" )
End Sub
```

In the example, constant strings, denoted by quotation marks, populate the tags; however, you could also access the data stored in a schema *table.column* just as well.

- 2 Call this rule as early in the processing as possible (i.e., apply this rule as the PreInclusion Rule on the first section).

When you send the Docuflex output to PDF file, the tags are automatically placed into the appropriate places in the PDF file header. To view the contents of the tags, open the file in Adobe Reader and select **File>Document Properties**. You should see the information you placed in the Reserved tags in your Docuflex project.

Implementing Electronic Signature Fields

Docuflex Tag Manager, Docuflex Studio, and the Stylized Content Editor have been enhanced to allow for the implementation of electronic signature fields. These fields are inserted in the same manner as other Docuflex fields, except that, in some cases, you must change the **FieldType** property on the property grid to **SIGNATURE**. Electronic signature fields form a block of reserved space for the signature, and use only a few of the available field properties:

- Name—a unique name and identifier for the signature field
- Height—the height of the block
- Width—the width of the block
- AreaFill—(optional) the background shading color of the block
- LineWidth—(optional) the line thickness of a border around the block
- LineColor—(optional) the line color of the border
- LineStyle—(optional) the line style of the border

SIGNATURE fields are only recognized when you use Docupresentment to create PDF output. When you view the PDF using Adobe Acrobat, you can use these signature fields to capture digital signatures within the PDF output.

You can insert signatures in the following methods:

- 1 Use Docuflex Tag Manager to insert SIGNATURE fields onto a Microsoft Word document, then use Printcommander to generate a DCD form that you can insert into Docuflex Studio as a Pre-Composed Document member.
- 2 Insert a SIGNATURE field onto a Content Text form in the Stylized Content Editor. You can then insert the DSC form into Docuflex Studio as a Pre-Composed Document member.
- 3 Insert a SIGNATURE field into a Content Text member in Docuflex Studio.

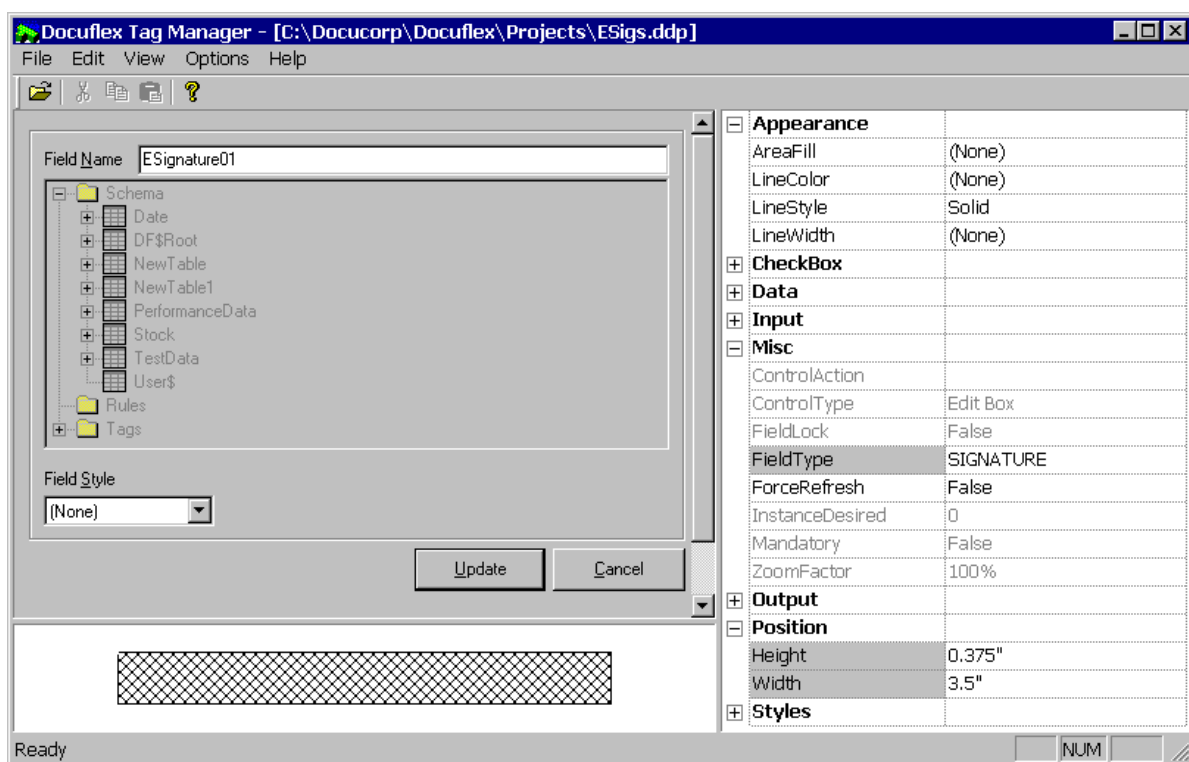
Inserting Signature Fields with Docuflex Tag Manager

You can use a combination of Microsoft Word, Docuflex Tag Manager, Printcommander, and Docuflex Studio to insert a SIGNATURE field into a document and then generate PDF to capture electronic signatures.

To Insert Signature Fields with Docuflex Tag Manager

- 1 Launch Microsoft Word and insert a Docuflex Tag object in your document.

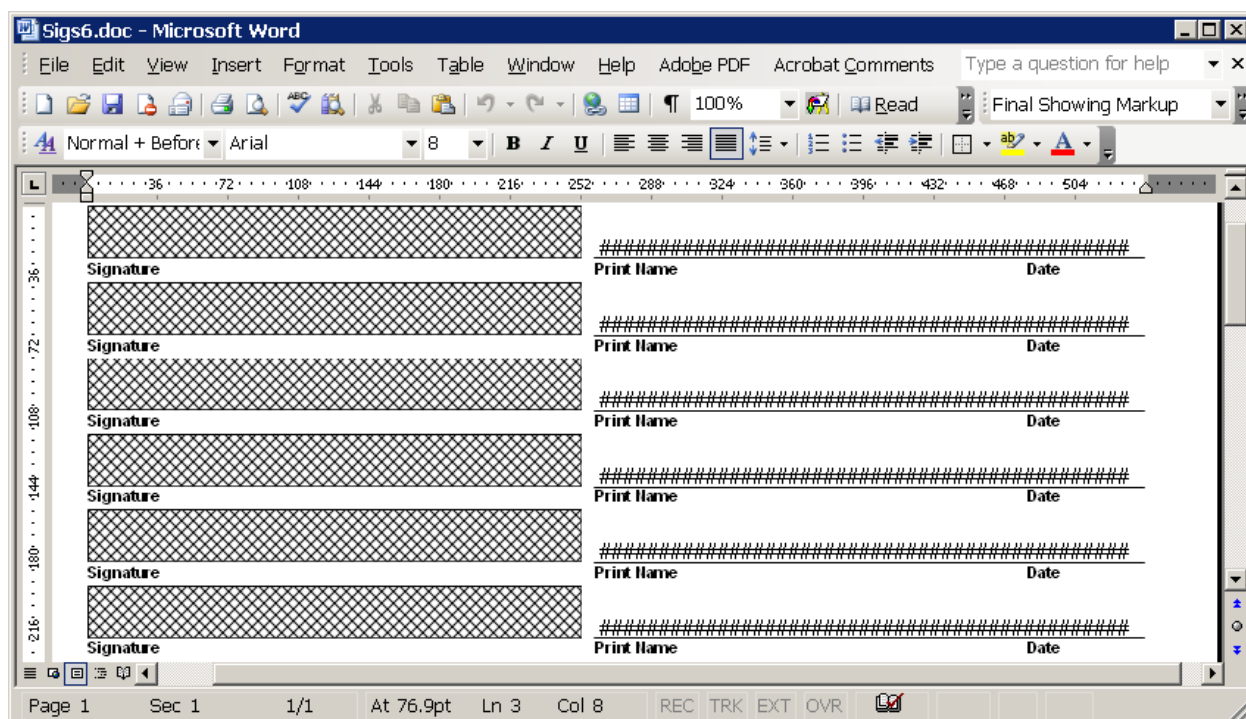
Docuflex Tag Manager displays its main dialog.



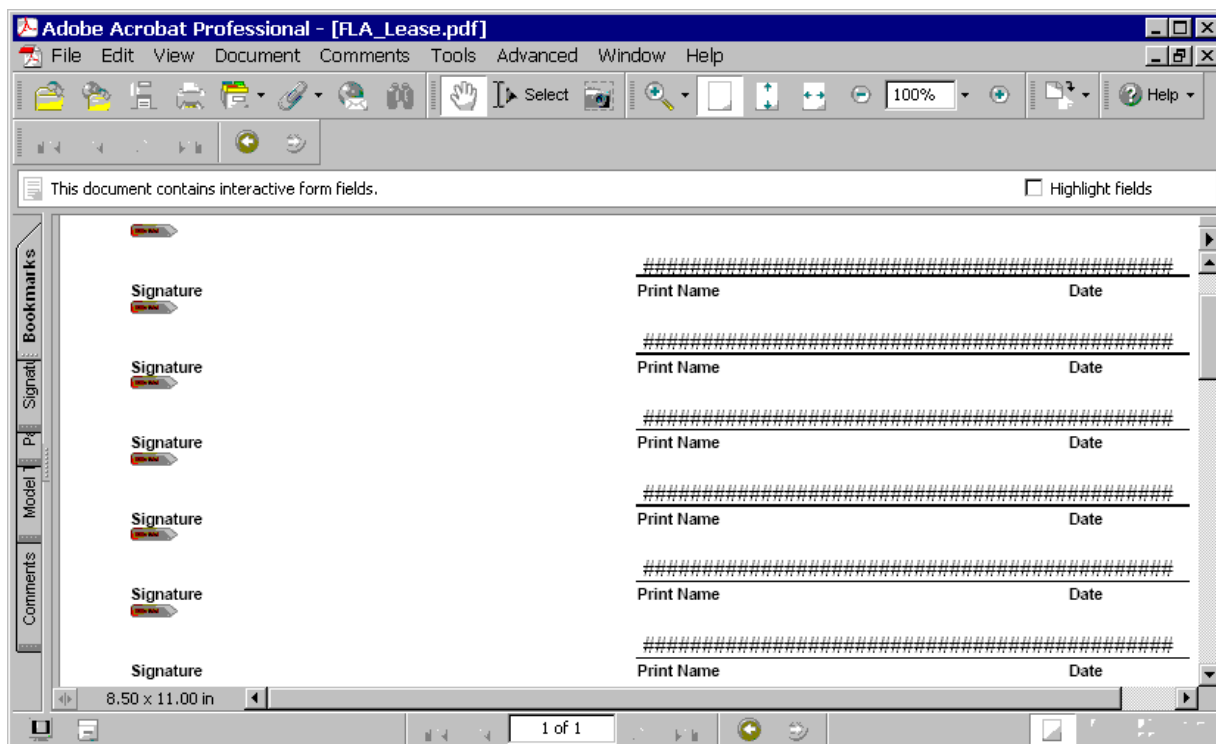
- 2 Change the FieldType to SIGNATURE, type a unique Field Name, and adjust the Height and Width properties.

The preview in the lower-left corner displays the signature block. If you do not select an AreaFill color or a LineWidth, the preview displays the default cross-hatch pattern.

- 3 Click **Update** to insert the object into your Microsoft Word document.



- 4 Use Printcommander to generate a DCD form.
- 5 Add the DCD form as a Pre-Composed Document member to your Docuflex Studio project.
- 6 Generate PDF output.



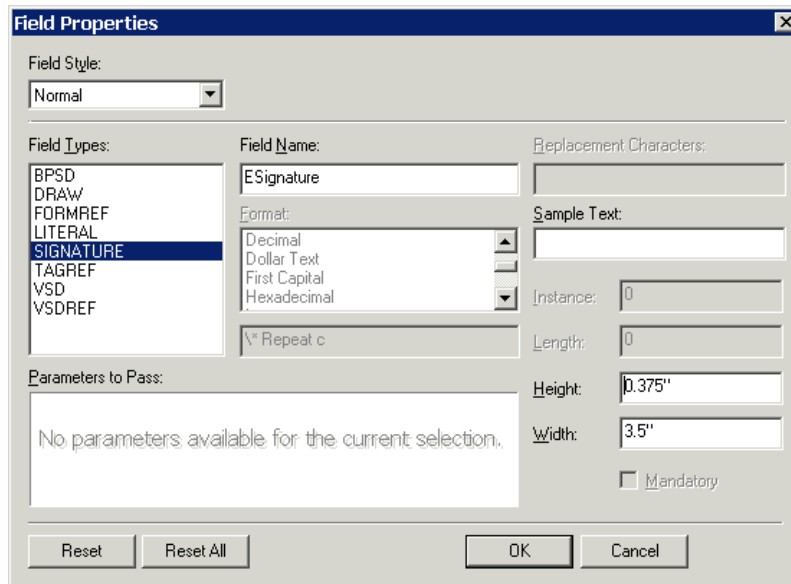
The electronic signature fields are marked with a small flag symbol.

Inserting Signature Fields with Docuflex Studio & Stylized Content Editor

In both Docuflex Studio and the Stylized Content Editor, you can insert a signature field via the **Insert>Field** command into a Content Text or Content Form member.

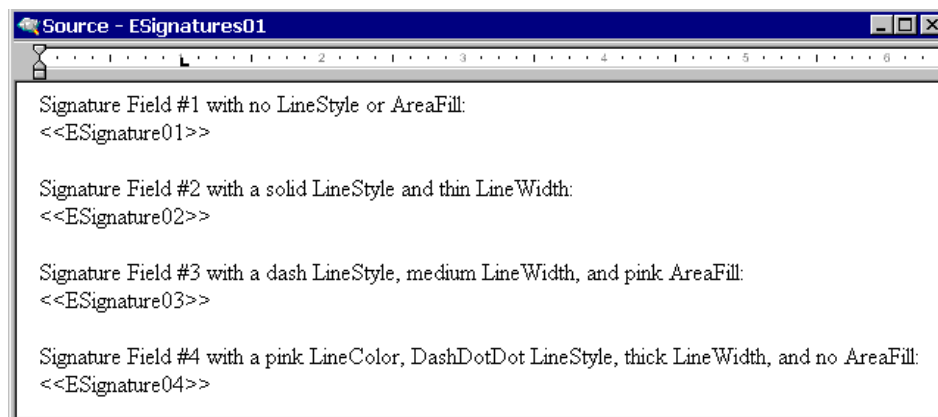
To Insert Signature Fields with Docuflex Studio and Stylized Content Editor

- 1 On a Content Text or Content Form member, select **Insert>Field** to display the Field Properties dialog.

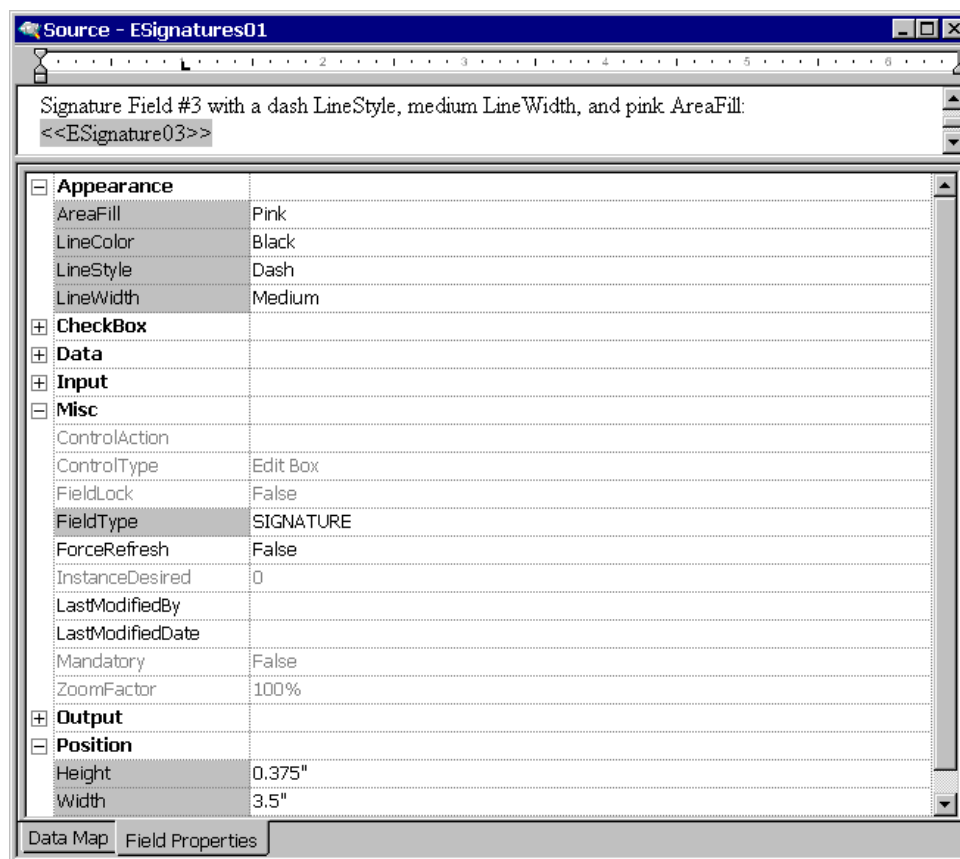


- 2 Select SIGNATURE from the Field Types list box, type a unique Field Name, and adjust the Height and Width properties.
- 3 Click **OK** to insert the signature field.

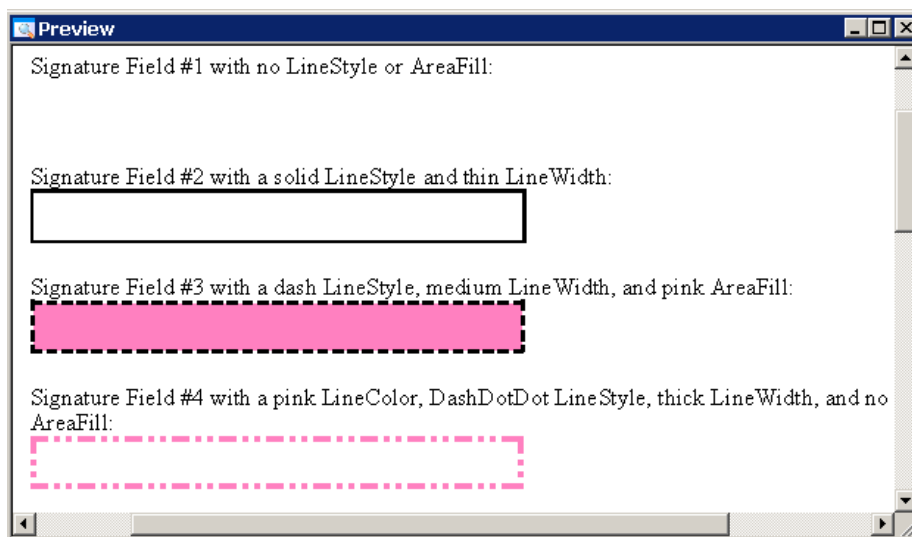
The Source window displays the field.



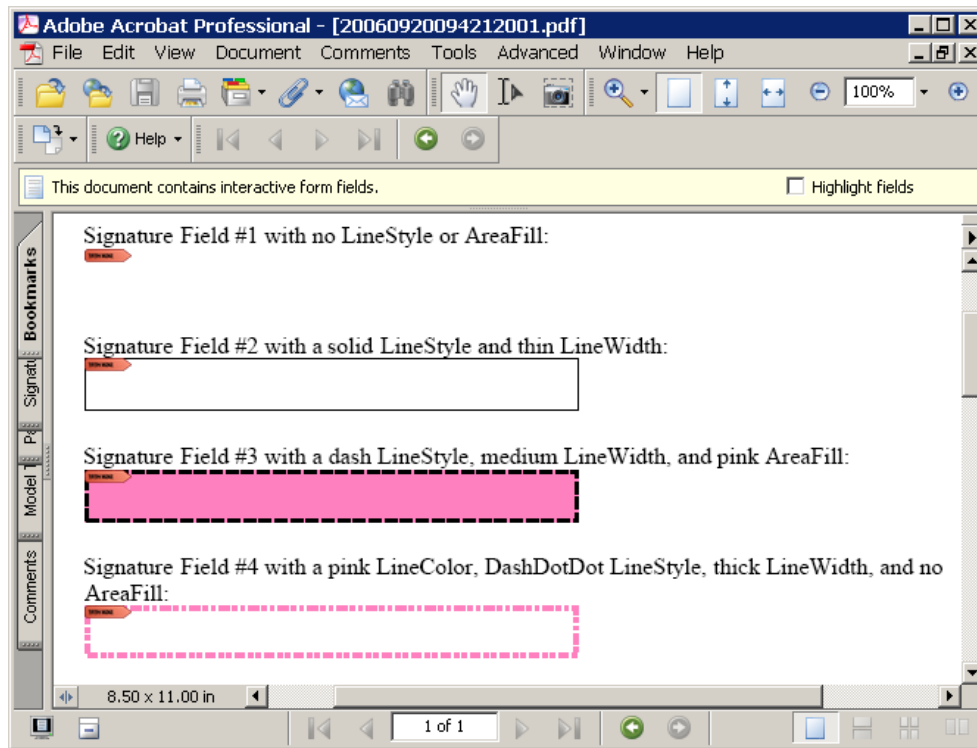
- 4 Alternate-click and select **Show Additional Properties** from the context menu to display the optional field properties.



- 5 Open the Preview window to see the effects of the additional field properties.



6 Generate PDF output.



The electronic signature fields are marked with small flag symbols, as well as any optional field properties you chose.

Docuflex Studio Sample Projects

NOTE

For the purposes of this demonstration, edit only the files provided in the “\Sample” subdirectory (e.g., *Sample.ISI.INI*, *docuflex.dde*).

Two sample projects have been provided with Docuflex. The first project is targeted at demonstrating the ease with which you can generate IBM AFP or Xerox Metacode output; the second, the flexibility to create an attractive welcome letter for new customers, plus a newsletter and a bill for services rendered.

Project #1—Generating Output

- 1 Edit the *Sample.ISI.INI* file (e.g., C:\Docucorp\Docuflex\Projects\Sample) and make the following changes:
 - a (Metacode output only) In the [Metacode Printer,FILE:] section, change the path for the Metacode PFM files.

NOTE

If your Metacode printer settings (e.g., JDL and JDE) are different than those provided, you must use Docucorp Control Panel to edit the [Printdef – META] section. To use Docucorp Control Panel to edit the *Sample.ISI.INI*:

- 1 Rename the *Sample.ISI.INI* file to *ISI.INI*.
 - 2 Rename the *isi.ini* in the \Windows directory to *Back.isi.ini*.
 - 3 Copy the *ISI.INI* to the \Windows directory.
 - 4 Use Control Panel to edit the file.
 - 5 Copy the *ISI.INI* file back to the Sample directory.
 - 6 Rename the *ISI.INI* file back to *Sample.ISI.INI*.
 - 7 Rename the *Back.isi.ini* file in the \Windows directory back to *isi.ini*.
- b (AFP output only) In the [DFXAFPONTS] section, change the path for the AFP PFM files.
 - c Once edits have been completed, save the file.

WARNING

A trailing back slash is required at the end of each path map name.

- 2 Edit the *docuflex.dde* (e.g., C:\Docucorp\Docuflex\Projects\Sample) and make the following changes:
 - a In the [PATH_MAPS] section, change the path map to the directory where the *Sample.ddp* file is located.
 - b In the [Docuflex] section, change the path for the *isi.ini* and the error and log files.
 - c Once edits have been completed, save the file.
- 3 Start Docuflex Studio. In **Tools>Options>Preferences**, select the configuration (*docuflex.dde*) file for the Sample project (in the \Sample subdirectory of your installation). Close and restart Docuflex Studio.
- 4 Edit the *Sample.ddp* with Docuflex Studio.
- 5 In **Document>Channels**, edit the “Error” and “Good” channel settings and, if desired, change the output path and/or file name for each. Save the project with **File>Save**.

- 6 Close Docuflex Studio.
- 7 Edit the *.bat* files (*CreateDDF.bat*, *DFLXCOMP.bat*, and *Dflxout.bat*) and change the directory names for the appropriate executable and file entries. Only the directory names need to be changed—all other names are set up to run the Sample project “as is”.
- 8 Edit the *Dflxout.ini* and make the following changes:
 - a In the [PATH_MAPS] section, change the path map to the directory where the *Sample.ddp* file is located.
 - b In the [DFLXOUT] section, change the path for the *isi.ini* and the error and log files.

TIP

Look though all the path names in every file you edit to make sure they are correct and point to the desired destination.

- c Change the directory names where appropriate.
 - d In the Output Channel Options area, uncomment (i. e., remove the “;” at the beginning of the line) the [Good] and [Error] sections and their corresponding entries, for the desired print stream output. Note that there are three of each—one for Metacode output, one for AFP, and one for PCL. You should uncomment only one [Good] section and one [Error] section.
 - e Once edits have been completed, save the file.
- 9 Using Transall, open the *sample.tpj* project.
 - a Edit the path and directory names for the two source files and two destination files.
 - b Compile the project by selecting **Project>Compile** or pressing **F7**.
 - c Once compiled, save and exit the project.
- 10 Create the data file by running the *CreateDDF.bat* file (optional—the data file *SamplDat.ddf* is provided).
- 11 Compose the Sample project by running *DFLXCOMP.bat*.
- 12 Create the output by running *Dflxout.bat*.

Project #1—Sample Files

Initialization files:

- *docuflex.dde*
- *Dflxout.ini*
- *Sample.ISI.INI*

Sample.ddp—Docuflex project

SamplDat.ddf—data file created by Transall project

SamplDest.DDS—schema file created by Transall project

sample.tpj—Transall project that creates data file, as well as code to create stacked index

SampleIn.txt—input to Transall that is used to create the *Sampldat.ddf* data file

sample.tex—Transall executable

CreateDDF.bat—launches Transall project to create data file that feeds Docuflex project

DFLXCOMP.bat—runs Docuflex batch composition

Dflxout.bat—runs the Docuflex postprocessing step

Metacode PFM files—for three Arial fonts

AFP PFM files—for three Arial fonts

NOTE

To print to a Xerox Metacode or IBM AFP 240 dpi printer, you must use Skywire Software's font conversion product to create the following fonts for your printer:

- Arial 12 pt.
- Arial 12 pt. Bold
- Arial 18 pt. Bold

The PFMs that are necessary for creation of the print streams are provided for you.

Project #2

The second set of sample projects is a showcase for a large number of the features available in Docuflex.

Docuflex leverages the reusability of its content and data mapping capabilities to customize each document according to the company's needs. The second set of sample projects uses the following Docuflex features:

- Multiple external references (Letter->Newsletter->Bill->Styles)
- Image manipulation
- Overflow frames (text “flows” around a picture)
- a Presentation Graphics chart
- a Table of Contents
- Footnotes
- Tables—use of the WidthPercent property and content in Table cells (referenced by table members)
- an Ordered list using a Paragraph style
- Data fields in a precomposed DCD document
- Formatting and Styles for consistency
- Data mapping
- Conditional processing (i.e., Inclusion rules)
- Scripting (i.e., User rules)
- Members under Page Frames in Page Definitions
- Background images with “VisibleIfOutput=Display” (allows printing to preprinted paper)

The second sample comprises four individual projects which were developed independently to make more efficient use of time and resources (i.e., three employees). First, the Styles.ddp was developed after analyzing requirements for the other three projects and determining what would ensure a consistent look. It was also convenient to have all the formatting defined once, instead of “reinventing the wheel” in each project. After the Styles.ddp was created, development then began on the Bill, Newsletter, and Letter projects. The only common piece needed in the development of all projects was the Styles.ddp. So, when development of the actual documents began, the three employees were able to work independently.

The projects used in this sample, the reasons for them, and a summary of the features are as follows:

Styles.ddp

The Styles.ddp defines the fonts, colors, paragraph, and tab styles used by the other projects. If it's necessary to make a change to a style, that change is made to the Styles.ddp and the external reference to it is updated in the other projects that use it.

Bill.ddp

The Bill.ddp is a data-driven project that illustrates Docuflex's capability to generate a utility bill. It includes the following:

- an externally-referenced project (Styles.ddp).
- data mapping. Note the child members under the "Services Detail" member. Each child member has a DataSource defined (i.e., a table in the schema). The arrangement of the members reflects the hierarchy of the data structure in the schema:

<u>Members</u>	<u>Data tables</u>
Service	Service
_ Location	_ Location
_ History	_ History

- members defined in frames in the page definition. These members will be composed on pages where that page definition is being used.
- scripts (User rules) that calculate the total amount due, build data to be graphed, and write a message during batch processing.
- a Presentation Graphics (PG) pie chart, illustrating a comparison between the amount charges for different services.
- an Inclusion rule on the PG chart that allows the chart to be composed only if there is data.
- mapped data fields in a precomposed DCD file.
- an Inclusion rule that allows members to be composed only if a non-zero value is present ("Service" members).
- widow/orphan control on the "Service" details.
- illustration of various paragraph formatting techniques, including alignment, shading, and rounded borders.
- table members that reference Table Definitions with content.
- table cells defined with **WidthPercent** property values.
- an Overflow Definition for the page number. Note that it says "Page n of Bill." This is so that the page numbers for the Bill are not integrated with the page number of the Newsletter.

Newsletter.ddp

The Newsletter.ddp is the main project, or “master,” and uses the Bill project as an external reference. The Newsletter was selected as a “master” project because all customers will always receive a copy of the newsletter with their bill.

When initially developed, the Newsletter.ddp used the Styles.ddp as an external reference. Since it now references the Bill.ddp (which also references Styles.ddp), there was no need for Newsletter to continue to reference Styles. Docuflex is still able to find the Style Definitions, even though they are in a “reference within a reference.”

Initial Development

Newsletter.ddp
|_Styles.ddp

After Completion

Bill.ddpNewsletter.ddp
|_Styles.ddp |_Bill.ddp
|_Styles.ddp

The Docuflex features used in the Newsletter project are as follows:

- an externally-referenced project (i.e., Bill.ddp).
- data mapping.
- wrapping text around a picture, via the **OverflowFrames** property.
- members defined in frames in the Page Definition. These members are composed on pages where that Page Definition is being used. There is a Pre-Composed Document member defined in a frame in each page of the Page Definition. These members are intended to act as background images for each page. On each of the members, **VisibleIfOutput=Display** is specified. This means that, when the pages are composed to a print stream, the background is omitted. This allows the print stream to be printed on preprinted paper.
- illustration of various font and paragraph formatting techniques.
- an Overflow Definition for the page number.
- a Table of Contents.
- a footnote.
- an Ordered List created with the new paragraph style functionality.
- image manipulation (i.e., resizing, cropping, grayscale).

Letter.ddp

The Letter.ddp is a letter welcoming a new customer. It, too, acts as a “master” project and uses the Newsletter project as an external reference.

A company may have a separate batch processing run for new customers, in which case they would want to include the newsletter and bill along with the welcome letter.

As with the Newsletter.ddp, the Letter.ddp was initially developed using Styles.ddp. Since it now contains Newsletter.ddp as an external reference, there’s no need for Newsletter to directly reference Styles.

Initial Development

Letter.ddp
|_Styles.ddp

After Completion

Letter.ddp
|_Newsletter.ddp
|_Bill.ddp
|_Styles.ddp

Features Utilized in this Project

We'll look at each of the pages in the Newsletter.ddp project that contain a new feature, explain the features, and discuss the members that enable those features. Some of the features are explained in greater detail elsewhere in the guide—you'll be directed to follow a cross-reference where applicable.

Page 1



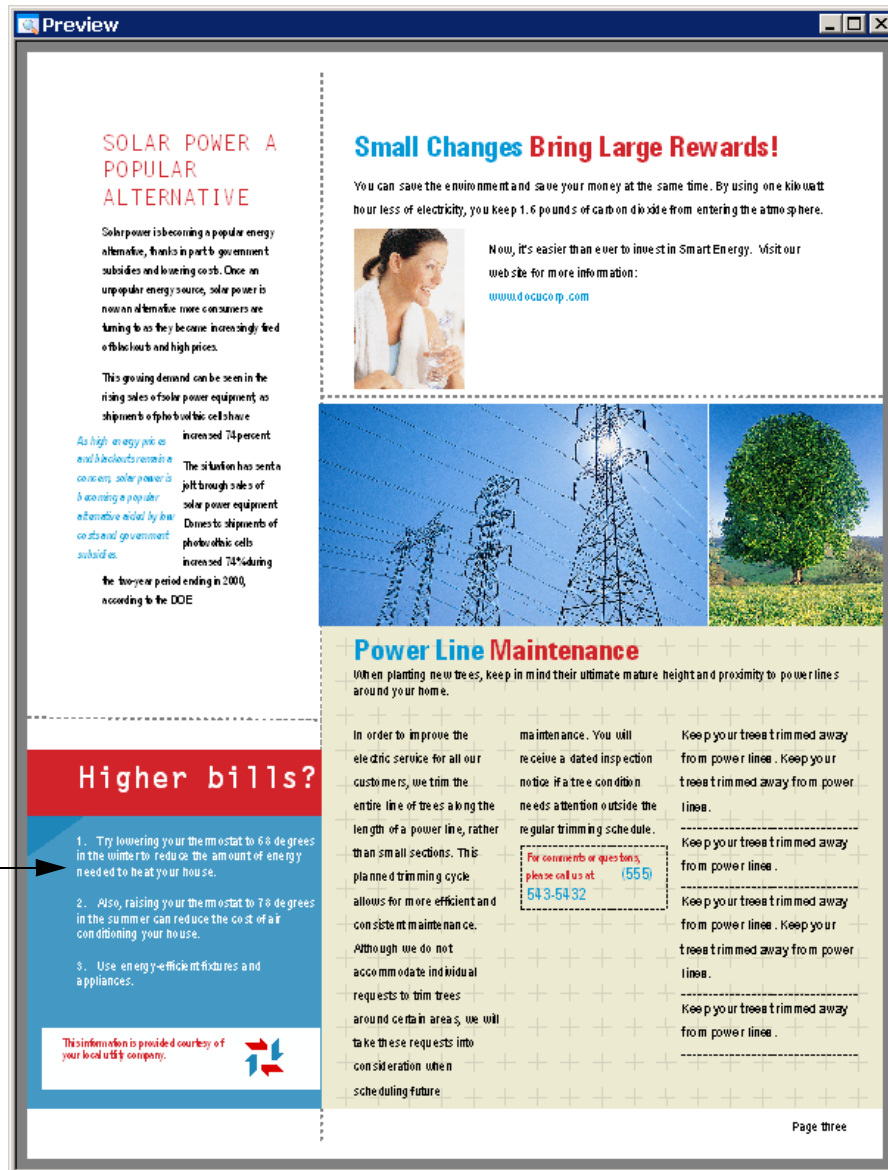
Features:

- 1 Members Under Page Frames**—Page Definitions folder>Newsletter-Normal Page Definition>Page1 Page>BodyMain Page Frame>Background member—loads a bitmap image as a Pre-Composed Document member with property **VisibleIfOutput** set to Display. You only see this background on the display screen; it does not print so that you can output the newsletter on preprinted company stationery.
- 2 Footnotes**—Use the DCP.FOOTNOTE.NUMBER reserved tag, plus the appropriate wording, to generate the footnote number and text using the *Footnote* member (see “Using Footnotes” on page 111).

- 3 **Text flowing around an image using OverflowFrames**—The *Story 1* member has a **FrameOrTableCell** property set to the *Body1* Page Frame. *Body1* has an **OverflowFrame** property set to *Body2*, which overflows to *Body3*. Since the length of the text in *Story1* will not entirely fit within the *Body1* frame, Docuflex places the overflow text into *Body2*. Since the text *still* will not entirely fit, the final portion overflows into *Body3*.
- 4 **Image manipulation**—The *Inset Picture* member under *Frame2* is a bitmap image that's been cropped, scaled (resized), and had its color saturation reduced (see “[Image Manipulation](#)” on page 117).
- 5 **Table of Contents**—The *In this issue - TOC* member supplies the title for the table of contents and has a **TOCInsertionPoint** equal to True, meaning that Docuflex will compose the table of contents when it reaches this member in the composition process (see “[Building a Table of Contents](#)” on page 69).

The Table of Contents folder contains a single TOC entry that formats the look of the entries in the table of contents.

For each member included in the table of contents, the **TOCReference** property is set to True and the **BookmarkText** property already contains the appropriate text to display in the table of contents (e.g., Page 2>*Story 2*).



Feature:

- 1 **Ordered lists using a paragraph style**—you can define all the characteristics for an ordered list within a paragraph style, including the number at which to start the list (StartAt) and level of indentation (OrderListLevel). Now, you can place all items in your list *in the same member (Msg Detail)* and specify paragraph styles to control the indentation and number format.

Preview

Utility Co. Page 1 of bill

Account Number: 000 103 1913
 Contact Name: Oscar O. Ware
 Bill Date: 03/01/2007
 Category: Residential

Amount of your last bill: \$0.00
 Payment Received: \$0.00
 Current Charges: \$329.17

Electric \$8.99
 Sewage \$181.33
 Drainage \$308.84
 Solid waste \$210.55
 Recycling \$137.98
 Yard Waste \$191.19
 Total Amount: \$1,038.88

Service Cost Comparison

Electric Sewage Drainage Solid waste Recycling Yard Waste

Utility Co.
 P.O. Box 7891
 Townville, State 54321
 www.yourutilitycompany.com
 Customer Service: 999.999.2222

Account Number: 000 103 1913
 Date due: Apr 5, 2007
 Amount due: \$1,038.88

Amount Paid:

Features:

- 1 **Formatting**—These members have custom character, paragraph, and tab styles applied.
- 2 **Data mapping**—The *Services* member is looping on a DataSource and contains two fields mapped to *table.columns* in the data file.
- 3 **Presentation Graphics chart**—The *PG Chart* member maps the data retrieved in the *BuildChartData* User rule. The chart is only published if chart data is present in the data file (enabled via the *IfChartDataPresent* Inclusion rule).
- 4 **Data fields in Pre-Composed Documents (DCD)**—The *PaySlipForm* member is a DCD file. It was composed in Microsoft Word with variable fields inserted by Docuflex Tag Manager. The document was then printed with Printcommander to a DCD file and referenced as a Pre-Composed Document in Docuflex Studio.

Utility Co.

Page 2 of bill

Electric

Address: 7510 Fountainhead Ln Kensington, MD 47307-8046

Sewage

Address: 4225 Willowood Rd Lithfield, AL 36112-2637

Period Begin	10/01/2006
Period End	10/04/2006
Total Usage For Period	259
Average Hours	6
Average Daily Cost	\$9.00

Drainage

Address: Apt 60 Prospect, OK 16124-3149

Period Begin	10/11/2006
Period End	10/11/2006
Total Usage For Period	271
Average Hours	2
Average Daily Cost	\$9.00

Address: 1787 Forestdale Ave Dripping Springs, NV 82684-5442

Period Begin	10/11/2006
Period End	10/11/2006
Total Usage For Period	262
Average Hours	7
Average Daily Cost	\$9.00

Solid waste

Address: 1557 Shell St Cambridge, OK 59024-3026

Address: 8304 Sanders Rd Northport, VT 84985-8046

Page 2 and subsequent pages of the bill publish the detailed billing data based on an Inclusion rule. Under the *Services Detail* member, the *Service* member loops on a DataSource and uses an Inclusion rule to determine whether to publish the member and its children. The *Service* member and each of its children have a ContentType of Table. Each referenced table contains members defined under their cells. For each occurrence of *table.column* in the data, the member calls the table and publishes the content.

Features:

- 1 **Members under table cells**
- 2 **WidthPercent property (dynamic table cell width)**—In the Table Definitions folder, the *c* cell of the *HistTbl* uses **WidthPercent** to dynamically adjust the width of the first cell.

Project #3 — Print Preview Sample

The Print Preview Sample demonstrates Docuflex as part of a workflow that includes a web-based method to select which transactions to print or delete. The sample comes as part of the standard Docuflex installation.

Installation

The following software is required for this project:

- Docupresentment 2.0 or higher
- Documaker Shared Objects 11.1 or higher
- Java Runtime Environment 1.4 or higher
- Tomcat 5.5

To Install the Project

- 1 Create a directory named "temp" in your Docupresentment directory (the default install location is 'c:\docserv'). Copy the contents of docserv.snippet.xml to your docserv.xml in your Docupresentment directory. You should copy it to the end of the file, but before the ending </configuration>. 'docserv.xml' is for configuration and the 'temp' directory is where the generated PDF files are cached by Docupresentment.

```
docserv.xml:
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
...
    </section>
    <!-- Start of docserv.snippet.xml -->
    <!--//////////////////////////////////////-->
    <!--      ISICPY Rule Lists-->
    <!--//////////////////////////////////////-->
    <section name="REQTYPE:ISICPY">
        ...
    </section>
    <!-- End of docserv.snippet.xml -->
</configuration>
```

- 2 Deploy dflexpreview2.war to Tomcat. You can do this by going to the Tomcat Web Application Manager, which is usually found at:

<http://localhost:8080/manager/html>

The .war file is basically just a .zip file that contains the dflexpreview2 web application. You can view its contents with any .zip utility.

- 3 To set up the database for the dflexpreview2 servlet, go to Control Panel>Administrative Tools>Data Sources (ODBC). Click the System DSN tab and then the Add button. Use this information to set up the database:
 - **Driver:** Microsoft Access Driver (*.mdb)
 - **Data Source Name:** StackedIndex
 - **Database:** C:\Docucorp\Docuflex\Projects\SamplePrintPreview\stackedindex.mdb (use the appropriate path if you did not use the default Docuflex install location)

Configuration

If you used all the default install locations, no extra configuration is required. If you installed Docuflex in a different directory, you must change the DocuflexCompDir parameter in the WEB-INF/web.xml file in dflxpreview2.war and modify Docuflex.dde, Docuflex.ini, dflxout.ini, Sample.isi.ini, and dcd2pdf.ini to reflect the different locations. To modify dflxpreview2.war, rename it to dflxpreview2.zip and change its contents with your favorite zipping utility. Afterward, rename it back to dflxpreview2.war. You must also change the “Good” document channel in Sample.ddp.

The WEB-INF/web.xml in dflxpreview2.war is the configuration file for the servlet. Most simple configuration settings can be changed in this file. To use Docuflex Thin Entry to modify composed results, set the EnableEntry parameter to “true”. Depending on whether you are saving .dcd or .dwp files, add B4 or B1, respectively, to the “buttons” property in entry’s WEB-INF/classes/normal.properties file (in the docuflex.war file).

If you changed the default Docserver configuration or want to connect to a remote Docserver, you must change WEB-INF/dsmsgclient.properties to allow the web servlet to connect to the Docserver correctly. If classes are missing, you need to copy the needed jars to WEB-INF/lib. See the Java section below.

Theory of Operation

This sample demonstrates a typical Docuflex configuration that includes support for print preview and verification prior to final output distribution (may be printing or other forms of content distribution such as email).

The sample is arranged into these processing steps:

- 1 Data Processing – Gather data from enterprise for document publishing.
- 2 Composition – Process the data gathered, apply business rules, and compose output into an unrendered format for preview access.
- 3 Preview/Edit composed results – Access the composition results via a web application and mark transactions as ready for print, rejected for and ready for delete, or on hold. If you are using Docuflex Thin Entry, you can also modify the composed results during this step.
- 4 Process transactions – Creates final format output for approved transactions.
- 5 Clean up – Deletes transactions that have been processed successfully or marked as rejected.

Operation Details

- 1 The processing workflow begins with CreateDDF.bat. This batch processing file illustrates running Transall to consume a sample input CSV-like file, SampleIn.txt. The CreateDDF.bat process transforms the CSV into a Docuflex Data File (DDF) using the sample.tpj Transall project. For this example, a SamplDat.ddf has already been generated using this batch file.
- 2 The next step in the batch workflow is to run dflxcomp.bat that creates composed output from the Sample.ddp Docuflex project. The composed output is created in the form of a “stacked” Docucorp Compound Document (DCD) file. A stacked DCD file contains one DCD for each document composed but the many DCD files are placed one after another (similar to a stack) in single file.

The Docuflex composition step also creates Stacked Index output. In this case, the Stacked Index is defined to be rows in a SQL DBMS table (but the stacked index data target can be anything that Transall is able to write to). The contents of the Stacked Index data target are three required fields consisting of the name of a stacked DCD, an offset in the stacked DCD file, and a data length for the DCD file's data in the file. The Stacked Index data target can also contain any other fields needed to perform output sorting or mail optimization processing as dictated by the business needs of the composition application (these needs will vary by implementation).

For the sample provided, the Stacked Index contains the following fields:

- BatchRunID – Date/time stamp marking all transaction as being produced by a specific run of dflxcomp.bat
- TransactionID – Unique identifier for a transaction within a BatchRunID set.
- TokenFile (Required) – Name of a stacked DCD file.
- TokenFileBeg (Required) – Offset in the stacked DCD file marking the data start of a document.
- TokenFileLen (Required) – Data length of the DCD file's data.
- DestName (Suggested) – Name of an Output Channel that should be used to render the DCD output into a final presentation format, such as PDF, PCL, PS, AFP, META, HTML, PPT, RTF, and so on.
- TransactionStatus – A files to hold one of three transaction status, h=hold, p=print, d=delete.
- AccountNum – Demo account number value, could be used for supplemental sorting.
- AccountName – Demo account number value, could be used for supplemental sorting.

For the sample application, the Stacked Index data was directed at a SQL DBMS table. The contents of the Stacked Index SQL table are accessed by the dflxpreview2 Web Application (JSP Servlet) to display lists of transactions that can be selected for preview operations.

- 3 The sample dflxpreview2 web servlet is used to view and update the status of each transaction via a web browser. For this sample to function, both the Tomcat and the Docupresentment (IDS) servers must be running. If you are using the default Tomcat settings, the servlet can be accessed at:

<http://localhost:8080/dflxpreview2>

All transactions will begin with a "Hold" status (as this is what the Transall project sets by default). Using dflxpreview2, users can change this status to "Print" or "Delete" at both the batch run and transaction level. When a user views a transaction, dflxpreview2 uses Docupresentment to generate a PDF. This uses the DCD that contains the transaction and the information from the stacked index. Generated PDF files are then automatically deleted from Docupresentment and dflxpreview2 file directories after an hour, by default.

If you are using Docuflex Thin Entry, you can also make changes to the dcd files. When you save a set of changes, a new file is created and the Stacked Index is updated to point to the new file.

- 4 The PPCreateFileStackedIndex.bat batch process creates a new Stacked Index File using Transall for each transaction with the "Print" status. This file and its referenced Stacked DCD files can be used at Skywire Software's ASP along with the Docuflex output processor, dflxout.bat, to produce final output for printing or other delivery options such as e-mail.
- 5 The PPCleanUpCommit.bat batch process removes all the transactions from the Stacked Index database with the status of "Print" or "Delete". If all the transactions for a batch job are removed by this process, then the batch job's Stacked DCD file will also be deleted.

Although an Access database was used to house the Stacked Index in the sample, you can use any ODBC or JDBC accessible database.

Modifying dflxpreview2

Dflxpreview2 exists in three loosely-defined parts: the JSP and HTML, the SQL, and the Java. The JSP and HTML handle presenting the information, the SQL handles retrieving the information, and the Java handles communication with Docupresentment and deleting old files from dflxpreview2. They loosely exist in the 'dflxpreview2/', 'dflxpreview2/sql', and 'dflxpreview2/WEB-INF/classes' directories, respectively.

JSP and HTML

Most of the simple, presentational logic is performed with taglib. Documentation can be found at

<http://java.sun.com/products/jsp/jstl/1.1/docs/tlddocs/index.html>

The HTML is HTML 4.01. A list of tags and their available attributes can be found at

http://www.w3schools.com/tags/ref_byfunc.asp

SQL

The SQL statements use the default database set in WEB-INF/web.xml. To change the default database, change javax.servlet.jsp.jstl.sql.dataSource in web.xml.

Java

The Java files must be recompiled if they are changed. To compile a java file, run:

```
javac -sourcepath . -classpath
../lib/idsjsp.jar;../lib/./../common/lib/servlet-api.jar
com\docucorp\dflxpreview\FileToCompile.java
```

Use this command from the classes directory, such as c:\Program Files\Apache Software Foundation\Tomcat 5.5\webapps\dflxpreview2\WEB-INF\classes. Depending on your version of Tomcat, you may need to adapt the classpath. Also note that you will need to reload dflxpreview2 in Tomcat for the change to take place (the Tomcat Web Application Manager lets you easily reload dflxpreview2).

The WEB-INF/lib directory of the dflxpreview2 contains .jar files needed to communicate with Docupresentment. These files were obtained from Docupresentment's DSI_SDK/java/jars folder.

Java Files

FileCleanup.java—handles cleaning up files after at least a specified delay of n seconds. Every n seconds, it deletes files that have been in the cache and not re-added to the cache, for n seconds.

FileGenerator.java—handles using `com.docucorp.ids.jsp.dsi` to communicate with Docupresentment. It also is very tightly coupled with the configuration file. It is a convenience class to remove code from `jsp`. If the file to generate is already in the cache, it will not be regenerated.

Docuflex Studio

This overview of Docuflex Studio comprises the following topics:

- “Basic Docuflex Concepts” on page 146
- “Opening Docuflex Studio” on page 161
- “The Docuflex Studio Screen” on page 162
 - “Toolbar Icons” on page 164
 - “Component Explorer” on page 169
 - “Component Properties” on page 171
 - “Data Control Bar” on page 177
 - “Debug Control Bar” on page 184
 - “Member Styles Control Bar” on page 185
 - “Output Control Bar” on page 186
 - “Styles Control Bar” on page 187
- “Page Layout Window” on page 209
- “Preview Window” on page 211
- “Preview Edit Window” on page 214
- “Report Window” on page 219
- “Rule Editor” on page 221
- “Source Window” on page 234
- “Compile Errors Window” on page 251
- “Log File Window” on page 252

Basic Docuflex Concepts

Docuflex Studio controls all aspects of creating and managing a complex document. As a result, you should familiarize yourself with the different document components.

What are Page Definitions?

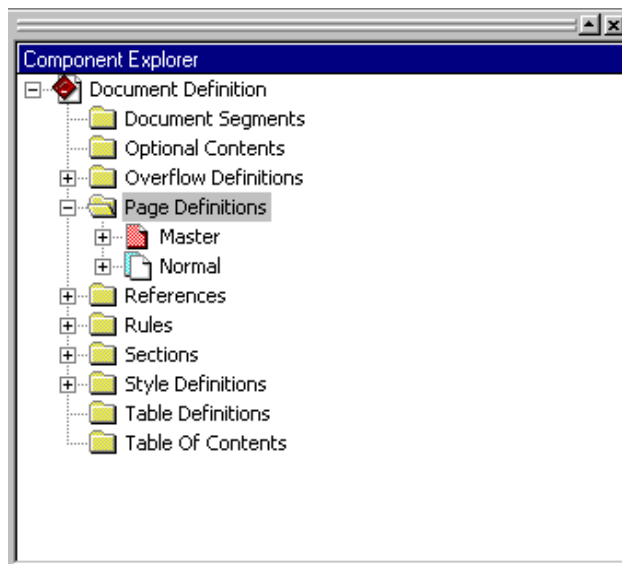
A Page Definition is a grouping mechanism for the Page Layouts in your document. Within your document, you can define one or more Page Definitions to store Page Layouts for different sections of your document. If you think of Page Definitions, Page Layouts, and Frames as a “collection-section-member” analogy, the concept is much easier to grasp.

Within a Page Definition, you can define one or more Page Layouts that share a common theme or makeup. You may be producing a utility statement, for example, which includes a summary and a detail section. While the format of these sections is slightly different, they both share a common purpose—reporting utility usage charges for the current month.

Within a Page Layout, you define page frames to contain the various types of content for the page. Your frame can contain text mixed with variable data, graphics, or embedded files from other locations.

When a section of your document contains drastically different page layouts or formats from previous sections, you can create another Page Definition to hold the new pages and their layouts.

The basic Page Definition framework consists of a Master page and at least one Page Definition. The Master contains, by definition, all the frames for your entire document, regardless of the page to which they belong.

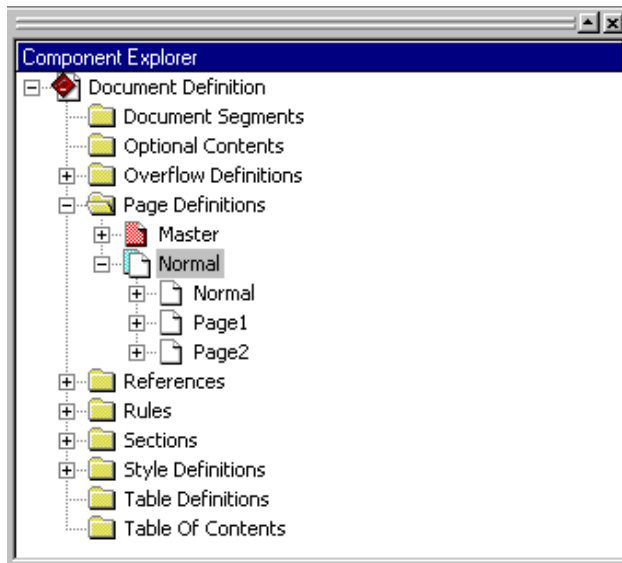


For more information about page definitions, see [“To Add a Page Definition”](#) on page 353.

What is a Page Layout?

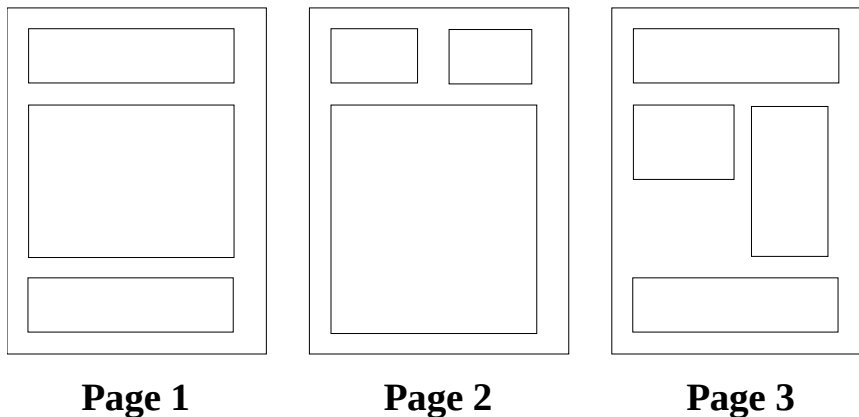
The term “page” carries many different connotations. To some people, a page is synonymous to a physical sheet of paper with two sides; to others, a page is either the front or back side of a sheet of paper. In Docuflex Studio, a Page Layout can span many sides and sheets of paper. A page layout is a label that represents any number of sides or sheets with an identical layout. You only need to define a new page layout if the physical appearance of a page or pages changes.

A page layout is the palette on which the structure, or look-and-feel, of your document is built. It can be any size necessary for your document (e.g., Letter, Legal, A4). You simply enter the measurements of your paper stock and the composition engine displays the page image for you.



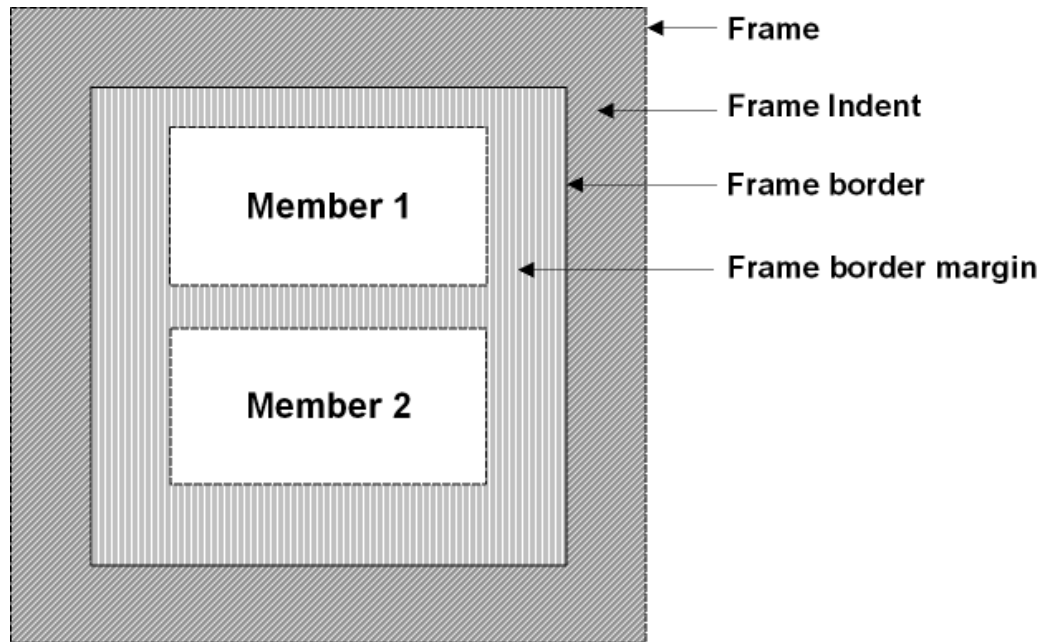
For more information about page layouts, see [“To Add a Page Layout”](#) on page 354.

Sample Page Definition (consisting of three Page Layouts)

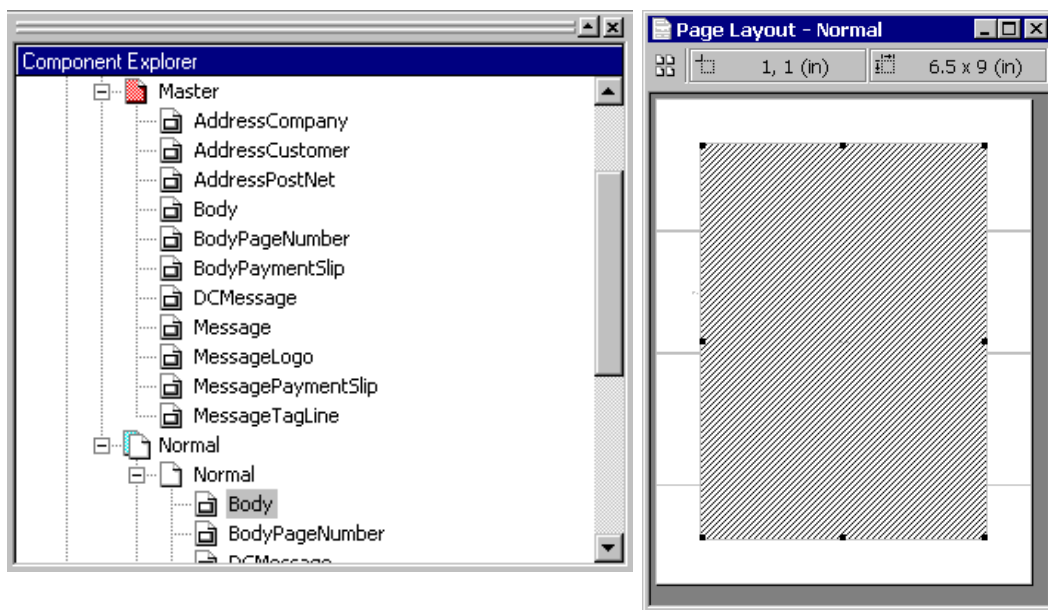


What is a Frame?

A Page Layout must contain at least one frame, which is the boundary on a page for placing the document components/members (e.g., an area of the page in which tagged text, rich text, or static components may flow).



The basic Page Layout framework consists of a primary frame and additional support frames. The Master Page contains, by definition, all the frames for your entire document, regardless of the page layout to which they belong. If you want to add a new frame to a page, you must first add it to the Master, and then include it on the proper page layout.

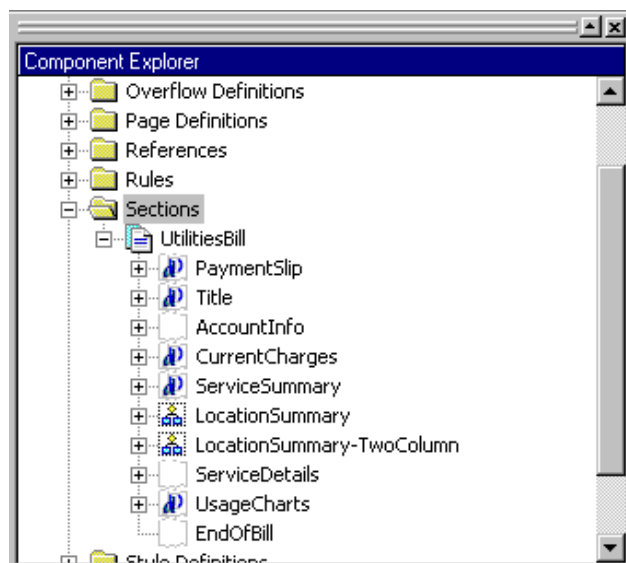


For more information about frames, see [“To Add a Page Frame”](#) on page 358.

What are Sections?

A Section is a major division in the document that's composed of members and their sub-members. In the same way that a page definition is a grouping mechanism for the physical pages in your document, a section is a grouping mechanism for the members that supply the data for your document. You can think of each section as a separate “chapter” in your “book.”

Docuflex Studio provides several starting parameters so you can exert greater control over where your next section begins, including EvenPage, NewPage, NewSheet, NewSheet(EvenPage), and OddPage.



For more information about sections, see “[To Add a Section](#)” on page 368.

The Sections folder, which contains the sections, also uses properties (see “[Sections Folder](#)” on page 371).

What is a Member?

Because of its very nature as a document composition tool of documents with many different sources, Docuflex Studio incorporates a blanket term, “member,” to describe any of the following types of document content:

- **Chart**—You can create charts for your document which present graphical illustrations of the data in your data source.
- **Content Form**—A member containing formatted text, schema data fields, and graphical drawing objects. You can add and format drawing objects using the Draw, Drawing Styles, and Format menus.
- **Content Text**—A member containing text, which is formatted according to the Character, Paragraph, and Tab styles designated in the Source window, as well as variable data fields inserted from the source data file.
- **Docuflex Stylized Content**—You can load members, saved to a DSC file, that were created using the Content Editor. This file cannot be edited with Docuflex Studio (see “[Docuflex Stylized Content Editor](#)” on page 627).
- **Document Name from Table**—You can create a member that retrieves a document name from the data set at the time you execute Docuflex.

- Empty—A member chiefly designed to help in organizing lower-level members.
- Pre-Composed Document—You can load external files into Docuflex Studio, such as DCD, EMF, RTF, BMP, JPG, TIFF, and PNG.

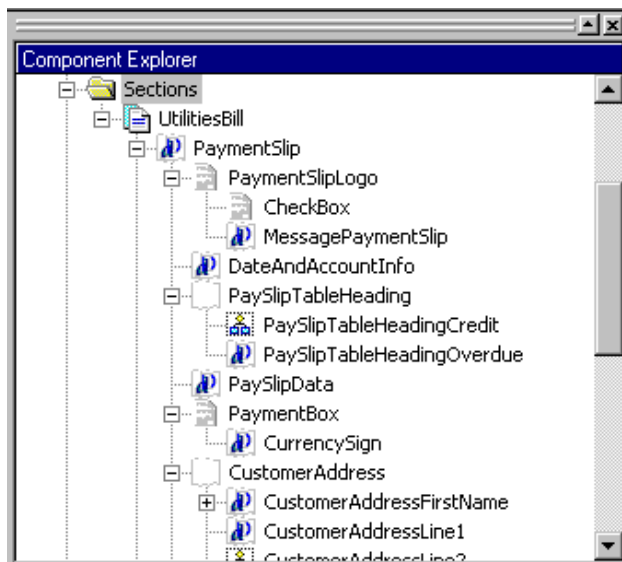
NOTE

Docuflex does not support CMYK colors in pre-composed images. All colors must be specified in RGB (or sRGB) format.

- Presentation Graphics Chart—A graphical illustration of your data using templates and charts from Three |D| Graphics, Inc.
- Segment Reference—You can store a recurring document member in your document.
- Table—You can link a single Table member to a Table Definition and compose an entire table.
- Text—You can create a member that contains plain text, with limited formatting options, that you can then edit through the Source window.
- Text Document—You can load external text files into Docuflex Studio. You have limited formatting options with these text files.

NOTE

With Text and Text Document members, you can only apply one of each of the formatting styles to the entire member (e.g., one Tab, Character, Paragraph, and Member style).



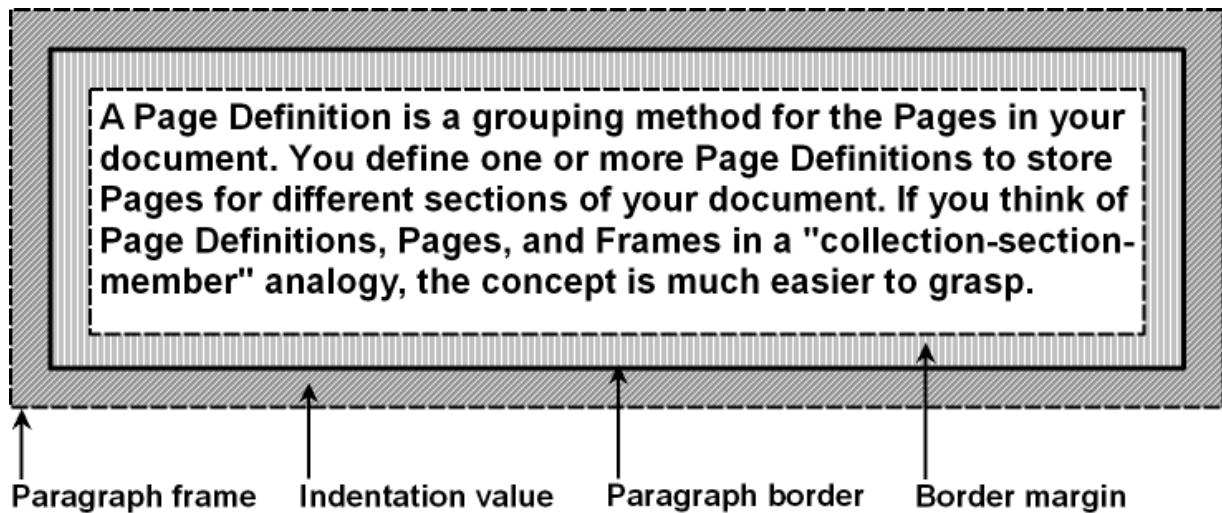
For more information about members, see “[To Add a Member](#)” on page 294.

What is a Paragraph?

In Docuflex Studio, a “paragraph” is a collection of formatted text and variable data fields contained within a member. A paragraph can be of any length and the paragraph itself consists of three parts:

- Text, which you can easily see.
- A surrounding border, which you can see if enabled in the paragraph style.
- A paragraph frame, not to be confused with a page frame.

Paragraphs and their construction are more throughout discussed in “[Source Window](#)” on page 234.

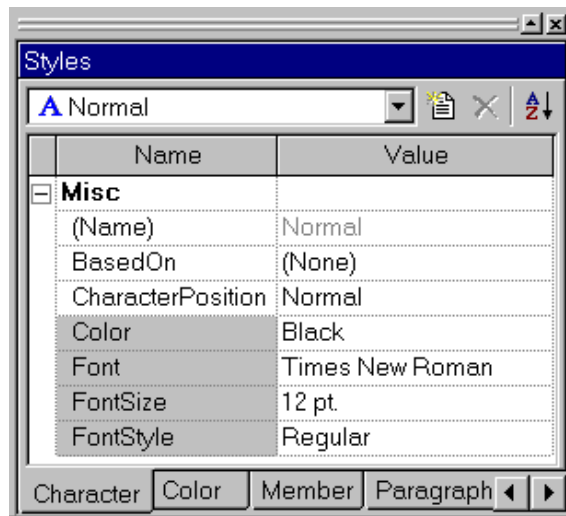


Docuflex Studio uses paragraph styles to format paragraphs. For a more detailed discussion of paragraph styles, see “[Using the Paragraph Styles View](#)” on page 202.

What are Style Definitions?

Since a major portion of your document is most likely composed of unformatted text, Docuflex Studio offers several formatting styles that you can customize and save for multiple uses. These styles provide the composition engine with instructions for building a document component; from a character, to a sentence, to a paragraph, to a member.

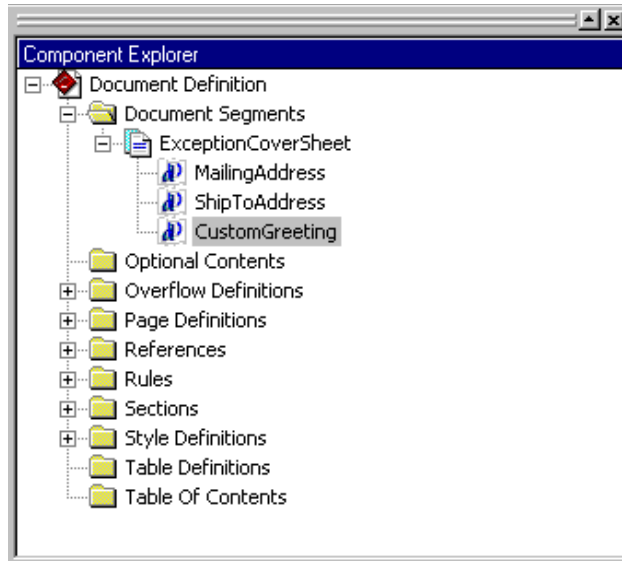
- Character—control the font, color, and character formatting options for the targeted text element
- Color—control color schemes
- Field—control the actions of variable data fields
- Member—control the formatting and placement of a member
- Paragraph—control the formatting of a paragraph
- Tab—control the tab positions, alignment, and leaders



For more information about styles, see “[Styles Control Bar](#)” on page 187.

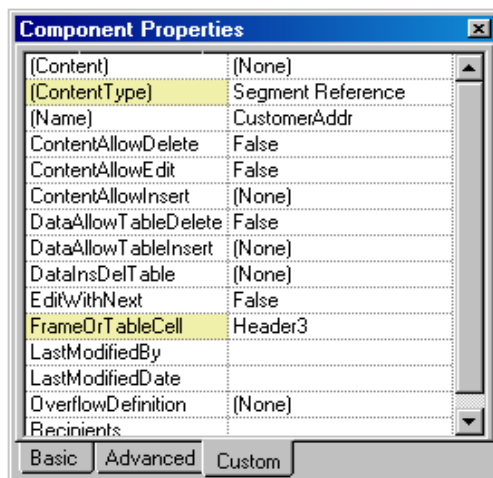
What are Document Segments?

A Document Segment is identical to a Section, in that it can contain members and sub-members. The way you create a Document Segment is also identical to setting up a Section. If you want to display your company's logo at the top or include the page number at the bottom of your document, for example, you can place these values into a Document Segment.



The most common use for a Document Segment is to store a component that will be repeated several times throughout the document. You can completely control the range of your definition by using the `SectionBegPage` and `SectionEndPage` properties. These two properties let you dictate the single page or range of pages in a Section on which a document component prints.

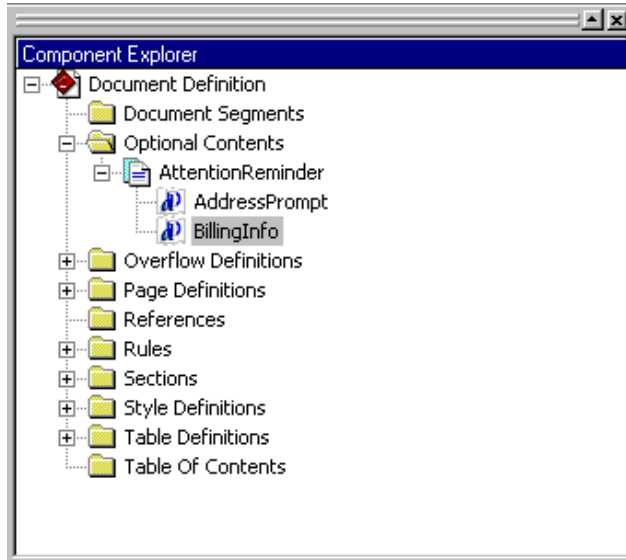
You can set up the Document Segment once, and then reference it as needed from another member. The advantage of using Segments is, when you need to make a change to the Segment, you only have to change the content of the Segment itself and all references to the Segment are automatically updated.



For more information about Document Segments, see ["To Add a Segment"](#) on page 372.

What is Optional Contents?

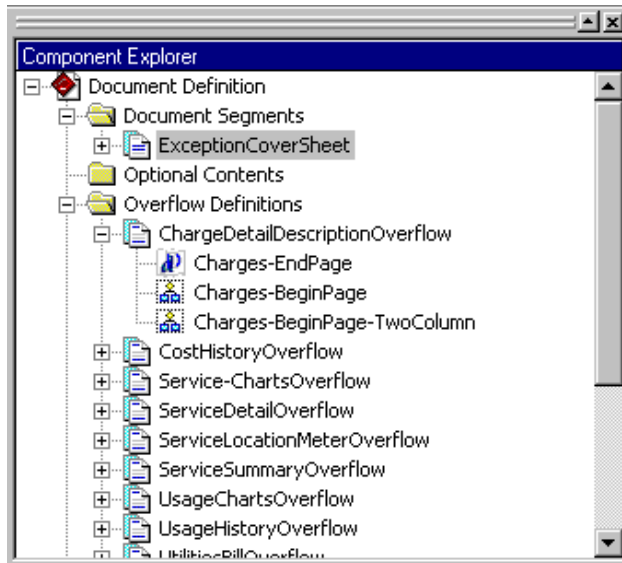
Optional Contents is identical to a Section, in that it can contain members and sub-members. The way you create Optional Contents is identical to setting up a Section. You can place frequently-used content that you place randomly throughout the document in a single section within the Optional Contents folder.



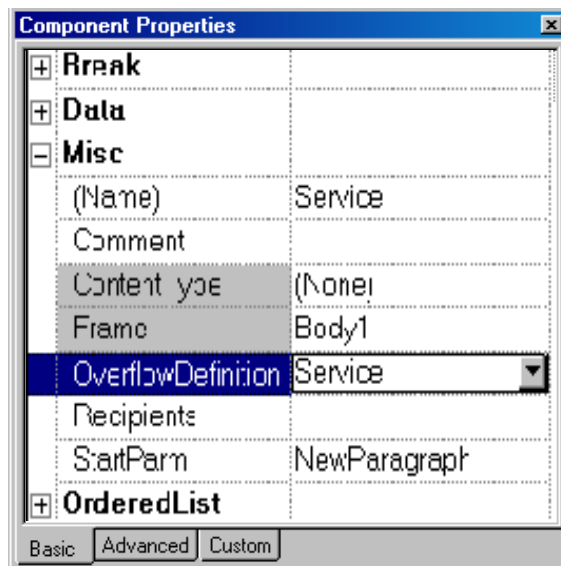
For more information about Optional Contents, see [“Add Optional Content”](#) on page 290.

What are Overflow Definitions?

An Overflow Definition is identical to a Section, in that it can contain members and sub-members. The way you create an Overflow Definition is identical to setting up a Section. If you want to display a continuation line at the top of a column or include a subtotal amount at the bottom of a page, for example, you can place these values into an Overflow Definition.



The major distinction of an Overflow Definition is that you invoke it when a document component will not fit within a specified boundary (e.g., page or column). You can set up an Overflow Definition to take effect if the entire member will not fit on the column or page. You can create the Overflow Definition once, and then reference it as needed from the appropriate member(s).



For more information about adding Overflow Definitions, see [“To Add an Overflow Definition”](#) on page 294.

For a more detailed discussion about using Overflow Definitions, see [“Overflow Processing”](#) on page 48.

What is a Schema?

The schema is the contract between the Docuflex Composition Engine and the data. The schema is the format of the data, and is constructed so the data is presented in a logical order for the current use. The two following examples illustrate the flexibility and customizing of a schema.

The schema for a utility bill might encompass a structure similar to the following:

Account Data (Account Number, Billing Address, ...)
Service (Service, Service Period, ...)
Location (Address, Reading Date, ...)
Meter (Reading, Meter Type, ...)

The same type of structure could apply to an automobile insurance policy:

Policy Data (Policy Number, Policy Holder, ...)
Insured Motorist (Name, DL Number, ...)
Insured Vehicles (Model, Make, ...)

For more information about the data schema, see [“Using the Schema View”](#) on page 179.

What is a Data File?

The data file is the actual set of data for merging and rule usage. The data file is created by Transall and is the basis for creating a schema.

For more information about the data file, see [“Using the Data Set View”](#) on page 178.

What is Variable Data?

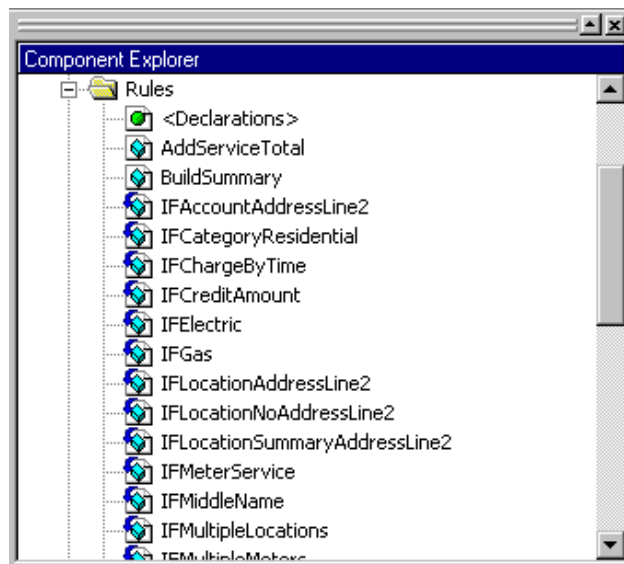
Variable data is simply data that's extracted from the data file, so called because its contents differs, or varies, between data files. Variable data serves two purposes. You can

- “Merge” variable data with other, fixed data in the document, and
- Use variable data fields while composing business and assembly rules

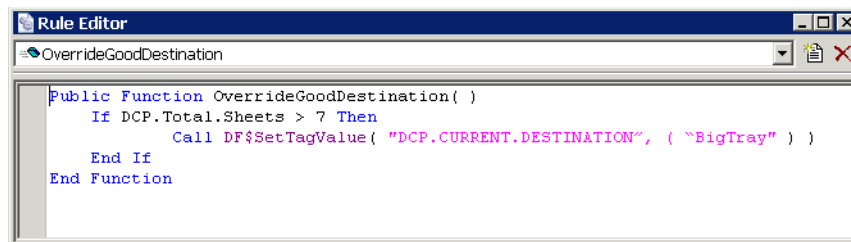
What are Rules?

Rules, whether inclusion rules or processing rules, are mechanisms for qualifying a document component or assigning a value. As a qualifying mechanism, a component must satisfy the condition set forth by the inclusion rule before it's included in the document. When you use a processing rule to assign a value, the rule can, among other things:

- Assign a value to a variable
- Compute a value and assign the value to a variable
- Format the value assigned to a variable



You can create and edit rules through the Rule Editor.



For more information about creating processing rules, see [“To Compose a Rule”](#) on page 222.

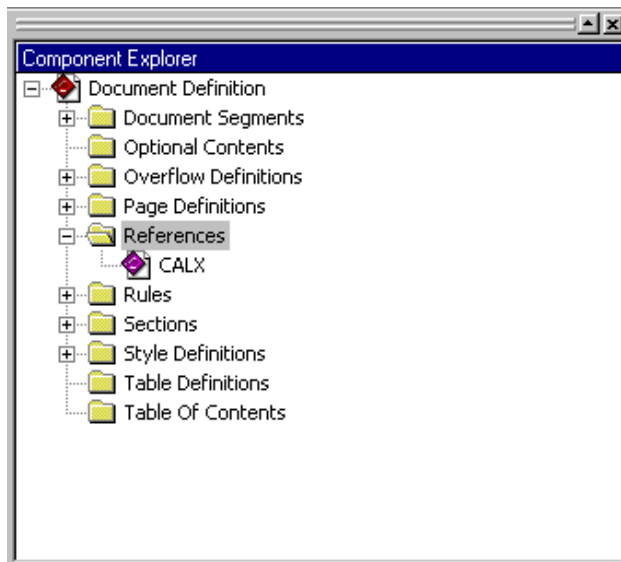
What are References?

References are external projects that you've created and want to use again in part or whole. You can compose a document, for example, and then use that document as the basis for another project.

EXAMPLE

Suppose you issue credit card statements to your customers, who are spread all over the country. Let's say you want to include the official logo of each customer's state on the statement. Just imagine the time it would take to create up to 50 separate projects, where the only difference is the inclusion of the state logo.

With References, you create a single project to issue the statements to all your customers. Then, you can create all the necessary "master" projects that reference the project for issuing statements. The only additional task the master project completes is placing the state logo on the statement. In this manner, each master project is completed quickly and easily, because you re-use the same project and add the desired logo



For more information about References, see ["To Add an External Reference"](#) on page 363.

What are Tables?

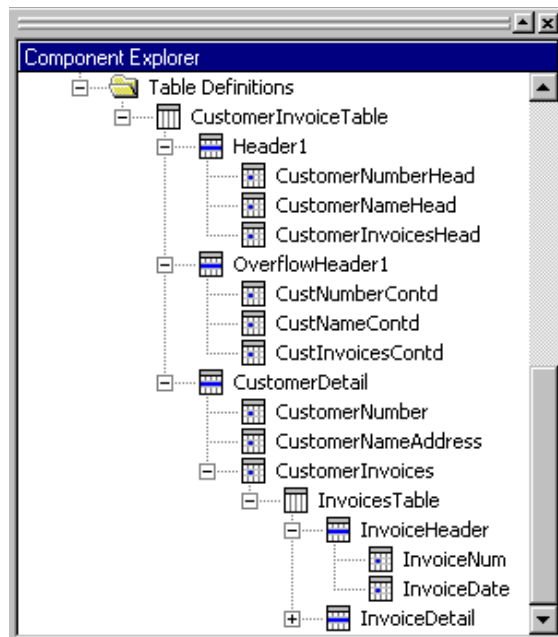
Tables in Docuflex Studio are similar to tables in other applications, in that you can compose your data in tabular form. Docuflex Studio tables are different, however, because the table is only generated as it is filled with data; you cannot view an “empty” table.

Keep in mind that, in building the table, you are specifying the *formats* for the rows, not the actual numbers of rows. As your project is composed, Docuflex keeps expanding the table to fit the amount of data. A table consists of the following types of row formats:

- Overflow Header
- Header
- Content (for data)
- Footer
- Overflow Footer

NOTE

Content rows are called “detail rows.”

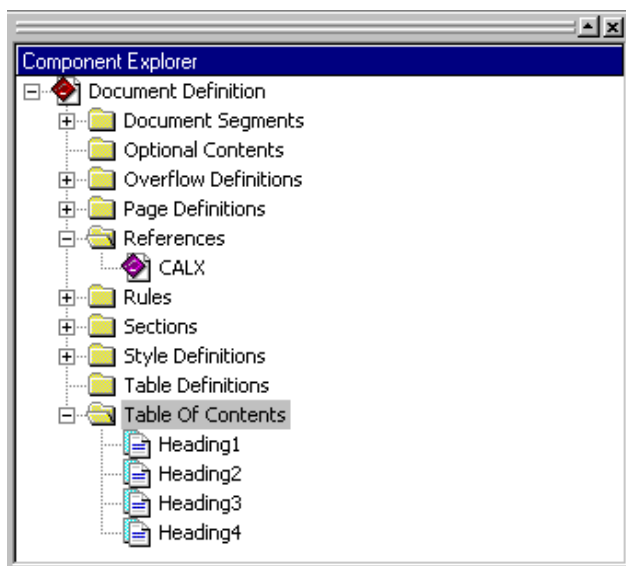


For more information about using tables, see “[Building Tables](#)” on page 64.

What is a Table of Contents?

A Table of Contents (TOC) is an ordered list of the important topics in the document. This tool helps the reader to quickly scan the list and find a topic of interest along with its location in the document (e.g., the page number).

A simple TOC consists of a description followed by the page number (in various formats). In Docuflex Studio, you're creating the *format and contents* of each kind of entry. If you want to indent paragraph headings according to their relative importance, for example, you must create a separate TOC entry for each instance.



For more information about creating TOC entries, see [“Add TOC Entry”](#) on page 381.

For more information about using TOC entries, see [“Building a Table of Contents”](#) on page 69.

Opening Docuflex Studio

Since Docuflex Studio is a true Windows application, it follows the established constructs and standards of the Windows environment.

To Open Docuflex Studio

- ▶ Do one of the following:

If you want to open Docuflex Studio	Do this:
With its Windows icon	“To Open Docuflex Studio with its Icon” on page 161
From the command prompt	“To Open Docuflex Studio from the Command Prompt” on page 161

To Open Docuflex Studio with its Icon

After you install Docuflex in your Windows system, the Start menu's Programs sub-menu displays the Docuflex Studio folder.

- ▶ Click **Docuflex Studio 11.3** to display the main application window:

To Open Docuflex Studio from the Command Prompt

- ▶ Invoke Docuflex Studio from the command prompt using the following syntax:

```
dfxstd.exe project_name [env_file] [/NOLOGO]
```

where:

Parameter/Switch	Value
project_name	The full path and file name of the Docuflex document project file to open initially (e.g., C:\Docucorp\Docuflex\Myproj.ddp).
env_file	The environment file contains path maps identifying resources that Docuflex needs for producing a document (e.g., ini=Docuflex.ini or dde=Docuflex.dde ; see “Environment Manager” on page 480).
/NOLOGO	Command-line switch disabling the initial “splash” screen that’s displayed when you start Docuflex Studio.

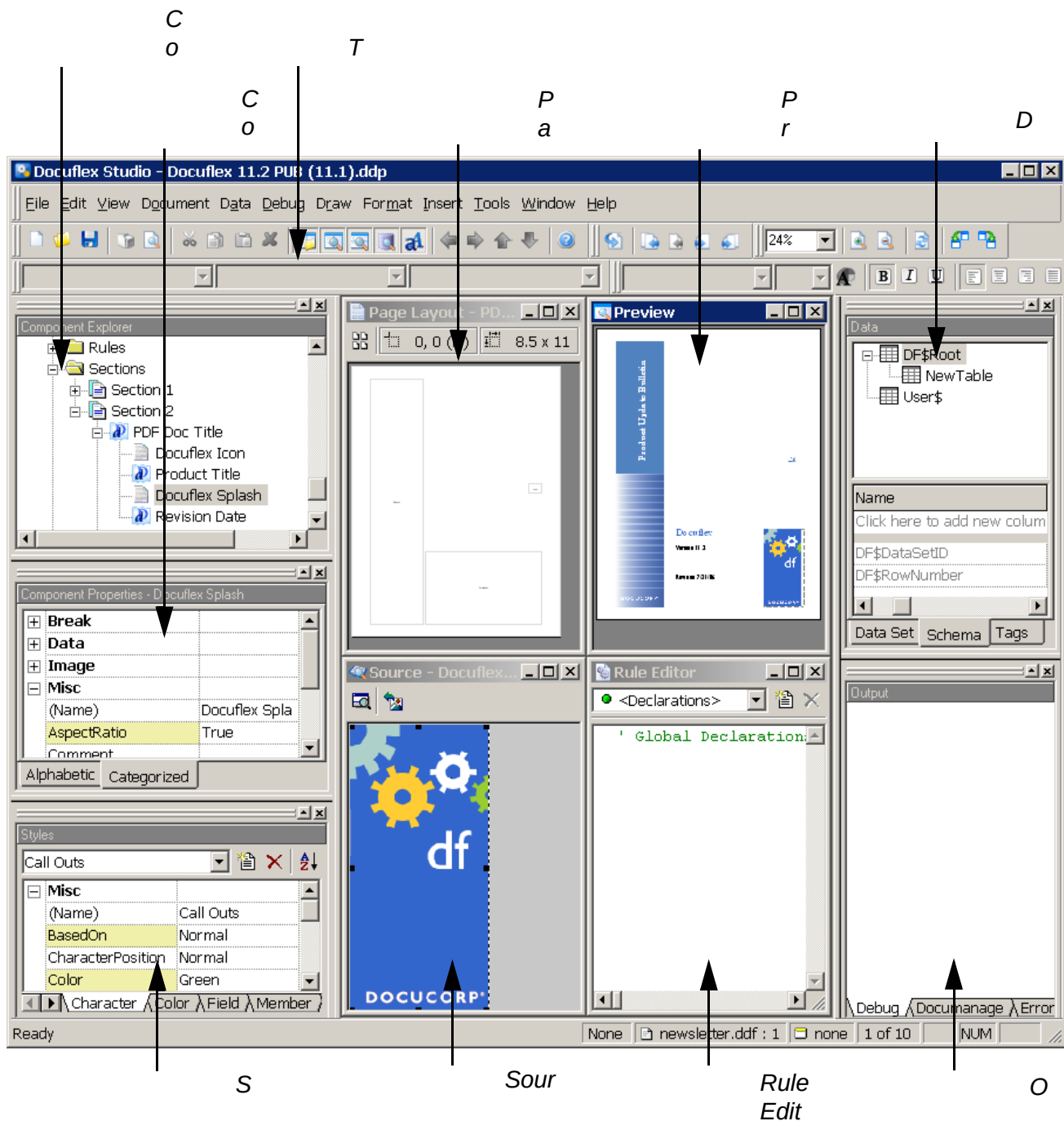
NOTE

The project name is the only required parameter; all others are optional. You can enter the parameters in any order, but be sure to separate them with a space.

The Docuflex Studio Screen

Docuflex Studio creates the Docuflex document project. The project contains all the information necessary to build a document excluding:

- Variable data—This information is provided by some other application, such as Microsoft Excel, and obtained by Docuflex through Transall.
- Printer definitions—These definitions describe the physical print or display device and are stored in the Docucorp Control Panel.
- Pre-formatted document components—These components are produced by another application, such as Docuword or Microsoft Word, and referenced by Docuflex Studio member objects.



You can access each of the following windows and control bars from the View menu:

Compile Errors —(not shown) displays any compilation errors encountered by Docuflex, usually as a result of a business or inclusion rule (see “ Compile Errors Window ” on page 251).	Output —displays the results of the Interactive Debugger. The Output control bar lists the steps the composition engine performs as it composes your document (see “ Output Control Bar ” on page 186).
Component Explorer —displays a tree-like list of Document Definition components, including Document Segments; Optional Contents; Overflow, Page, Style, and Table Definitions; References; Rules; Sections; and Table of Contents (see “ Component Explorer ” on page 169).	Page Layout —displays a single- or multiple-page view of the page currently selected in the Component Explorer (see “ Page Layout Window ” on page 209).
Component Properties —displays the properties of the item currently selected in the Component Explorer (see “ Component Properties ” on page 171).	Preview —displays a WYSIWYG (What-You-See-Is-What-You-Get) representation of the document for a specified recipient (see “ Preview Window ” on page 211).
Data —displays the current Data Set, Data Schema for the data file, and Docuflex reserved Tag variables (see “ Data Control Bar ” on page 177).	Preview Edit —(not shown) displays the document as it will display as an HTML data entry form (see “ Preview Edit Window ” on page 214).
Debug —(not shown) displays a list of the qualified members that will be included in the final document. This control bar only displays during a debugging session (see “ Debug Control Bar ” on page 184).	Report —(not shown) displays a complete listing of all components in your project, including Overflow Definitions, Sections, and Style Definitions (see “ Report Window ” on page 219).
Debug Call Stack —(not shown) displays the business rule you’re currently considering. If you have nested rules, this bar displays the tree and indicates the current rule (see “ Debug Call Stack Control Bar ” on page 184).	Rule Editor —displays the instruction code of the business or inclusion rule associated with the item currently selected in the Component Explorer (see “ Rule Editor ” on page 221).
Debug Variables —(not shown) displays both Auto and Local variables (see “ Debug Variables Control Bar ” on page 184).	Source —displays DSC (Docuflex Stylized Content) files and other pre-composed document components, as well as Content Text, Content Form, and text documents (see “ Source Window ” on page 234).
Debug Watch —(not shown) displays the variables whose values you want to monitor, regardless of their location (see “ Debug Watch Control Bar ” on page 185).	Styles —provides a central area to maintain character, color, member, paragraph, and tab styles (see “ Styles Control Bar ” on page 187).
Log File —(not shown) displays a complete listing of all processes performed on your project. This file is useful for troubleshooting any procedural problems with the Hotline support personnel (see “ Log File Window ” on page 252).	Toolbars —contain icons representing shortcuts to menu options (see “ Toolbar Icons ” on page 164).
Member Styles —(not shown) displays a listing of frequently-used Member styles to help you quickly create new members (see “ Member Styles Control Bar ” on page 185).	

Toolbar Icons

Docuflex Studio's toolbar icons let you execute some of the most frequently-used commands with a click of the mouse. The following section displays the various toolbars, their icons, and associated actions.

The Data Toolbar



Icon	Description	Icon	Description
	Previous navigates to the previous record in the data file.		Remove Data File removes the link between the project and the data file.
	Next navigates to the next record in the data file.		Open Schema opens the source schema for the project.
	Data Search searches through the data file for data sets matching the specified search criteria.		Remove Schema removes the link between the project and the schema.
	Open Data File opens the source data file for the project.		Insert Row inserts a row into the data file. The source data file is not affected, only the current project.
	Save Data File saves only the current record in the data file (i.e. the saved data file only contains a single record).		Delete Row removes a row from the data file. The source data file is not affected, only the current project.

The Debug Toolbar



Icon	Description	Icon	Description
	Start Debugging initiates the interactive debugger.		Step Over processes all the children of the current member and stops at the next member of the same level (i.e., sibling).
	Stop Debugging terminates the interactive debugger.		Next Statement goes to the next statement to execute when at a Rule breakpoint.
	Debug Break pauses the debugging routine at the current point.		Enable Pass1 Break stops the debugging procedure at the next valid break point in the Inclusion pass.
	Single Step executes a rule, if any, and reports the results.		Enable Pass2 Break stops the debugging procedure at the next valid break point in the Composition pass.
	Step Into processes the current member and stops at the next member, regardless of level.		Toggle Breakpoint toggles a breakpoint marker.
	Step Out finishes processing the children of the current member and stops at the next parent member.		

The Drawing Toolbar



Icon	Description	Icon	Description
	Select lets you select one or more drawing objects to edit.		Ellipse lets you draw an ellipse (e.g., circle or oval).
	Line lets you draw a straight line (e.g., horizontal, vertical, or diagonal).		Text Box lets you insert a text box in which you can include any type of document component.
	Rectangle lets you draw a square or rectangle.		Field Box lets you include a schema data field directly to the document.

For more information, see “[Working with Drawing Objects](#)” on page 245.

The Drawing Styles Toolbar



Icon	Description
	Border Style displays the current BorderStyle property.
	Border Color displays the current BorderColor property.
	Background Color displays the current BackgroundColor property.

The Formatting Toolbar



Icon	Description
	Character Style displays the current character formatting.
	Paragraph Style displays the current paragraph formatting.
	Tab Style displays the current tab stops.

The Navigate Toolbar



Icon	Description	Icon	Description
	Go To displays the Go To Page dialog box.		Next Page displays the next page in the Preview window.
	First Page displays the first page of the document in the Preview window.		Last Page displays the last page of the document in the Preview window.
	Previous Page displays the previous page in the Preview window.		

The Output Toolbar



Icon	Description	Icon	Description
	Magnification drop-down list box displays a selection of degrees of magnification.		Refresh updates the Preview window to reflect the current changes.
	Zoom In increases the magnification of the image in the Preview window.		Rotate Left rotates the view in 90° increments counterclockwise.
	Zoom Out decreases the magnification of the image in the Preview window.		Rotate Right rotates the view in 90° increments clockwise.

The Recipient Toolbar



Icon	Description	Icon	Description
	Previous Recipient Type in the list.		Previous Recipient Name from the data table (e.g., Customer.Name).
	Next Recipient Type in the list.		Next Recipient Name from the data table (e.g., Customer.Name).
	Recipient Type displays the current type.		Recipient Name displays the current recipient from the data table (e.g., Customer.Name).
			Edit Recipients invokes the Recipients dialog box (see “To Display the Recipients Dialog” on page 397).

The Standard Toolbar



Icon	Description	Icon	Description
	New opens the New dialog and displays predefined templates.		Component Properties toggles the display of the Component Properties control bar.
	Open displays the Open dialog for opening an existing project.		Output toggles the display of the Output control bar.
	Save stores the project to your hard disk.		Data View toggles the display of the Data control bar.
	Print displays the Print dialog for selecting print options.		Styles toggles the display of the Styles control bar.
	Print Preview displays a WYSIWYG representation of your project.		Promote moves the member up to a "parent" level.
	Cut deletes the selected content and copies it to the Windows clipboard.		Demote moves the member down to a "child" level.
	Copy copies the selected content to the Windows clipboard.		Move Up places the member before the previous member on the same level.
	Paste copies the contents of the Windows clipboard.		Move Down places the member after the next member on the same level.
	Delete removes the selected item.		About displays the About Docuflex Studio dialog box.
	Component Explorer toggles the display of the Component Explorer control bar.		

The Text Format Toolbar



This toolbar is only available for Text and Field Boxes in Content Form members.

Icon	Description	Icon	Description
	Font displays the type face assigned by this member's Character style.		Font Size displays the point size assigned by this member's Character style.
	Font Color displays the font color assigned by this member's Character style.		Center centers the current paragraph.
	Bold makes the selected text bold .		Align Right makes the current paragraph right-justified.
	Italic makes the selected text <i>italicized</i> .		Justify makes the current paragraph fully-justified.
	Underline makes the selected text <u>underlined</u> .		Line Spacing varies the spacing of the lines in the current paragraph between single- and triple-spaced.
	Align Left makes the current paragraph left-justified.		

The User Layouts Toolbar



Icon	Description
	The number (1 through 5) assigned to a specific configuration of control bar positions and toolbar locations

The Windows Toolbar



Icon	Description	Icon	Description
	Preview displays or makes active the Preview window.		Report displays or makes active the Report window.
	Source displays or makes active the Source window.		Preview Edit displays or makes active the Preview Edit window. Note: The Preview Edit icon is unavailable if the Preview window is open. Also, none of the other icons are available if the Preview Edit window is open.
	Page Layout displays or makes active the Page Layout window.		Composition Summary Report displays or makes active the Composition Summary Report dialog.
	Rule Editor displays or makes active the Rule Editor window.		

Component Explorer

The Component Explorer is the central location for accessing, viewing, adding, and deleting the main document components in your project.

Tree Structure / Hierarchy Display

The document components are arranged in a tree structure with a “parent/child” hierarchy. If a “parent” component owns “child” components, a plus sign (+) displays next to the parent. To view the children, click the plus sign and expand the tree. Likewise, you can click the minus sign (-) to contract the tree.

TIP

To completely expand a branch of the tree, select the parent and press “*” (asterisk) on the numeric keypad. Conversely, you can use the “-” on the numeric keypad to contract a branch.

When adding a new component, Docuflex Studio, depending of the component type, may invoke a wizard specific to that component. In the wizard, you’ll need to decide on the location within the hierarchy where you want to insert the component:

- If the new component will be placed on the same level as an existing component, it becomes a sibling.
When you add the component, highlight the sibling and select either “Before selected item” or “After selected item”.
- If the new component will be placed below an existing component, the new component becomes a child and the existing component becomes the parent.
When you add the component, highlight the parent and select “Child of selected item”.

NOTE

When viewing Style Definitions in the Component Explorer, the “parent/child” hierarchy actually reflects the BasedOn property of the styles.

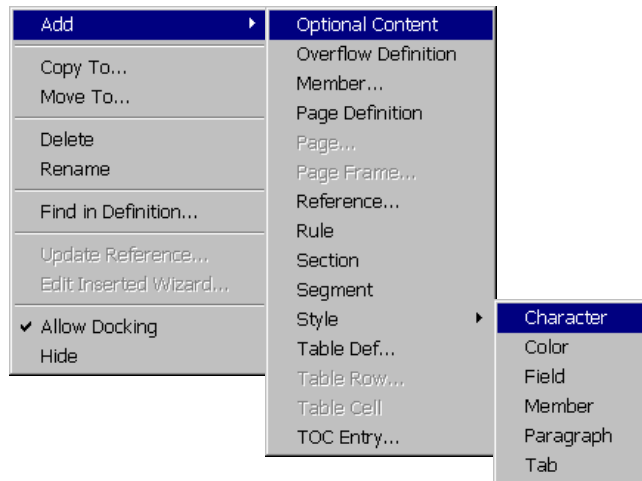
Contents

The Component Explorer displays the main document components:

- Document Segments
- Optional Contents
- Overflow Definitions
- Page Definitions
- References
- Rules
- Sections
- Style Definitions
- Table Definitions
- Table of Contents

Most of the main components are collections, or groups, of smaller components.

Since the Component Explorer is the central location for most of your document construction, it includes a very powerful context menu for completing many of the routine tasks. You can access the context menu by alternate-clicking anywhere on the Component Explorer.



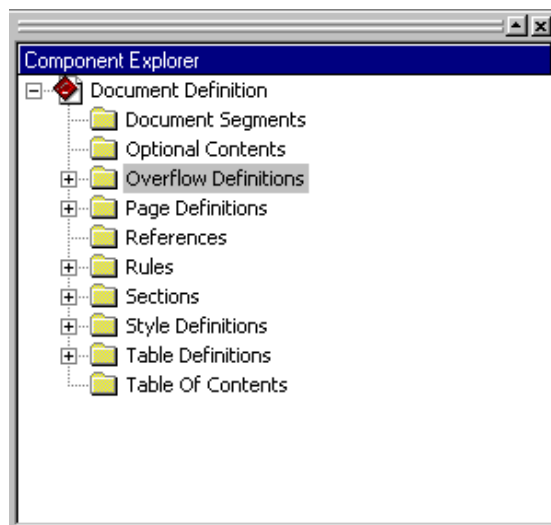
The Add option on the context menu displays those components available for addition, based on the highlighted component. If the category of the component you want to add is not available (i.e., the category is “grayed out”), select another component in the Component Explorer and invoke the context menu again.

To Display the Component Explorer

- Select **View>Controlbars>Component Explorer**.
- or-

Click  in the Standard Toolbar.

The Component Explorer displays.



Because you can perform several tasks in the Component Explorer, this guide provides a separate topic for each task:

If you need to	Go to
Add a component to the Document Definition	“Document Menu” on page 289
Copy a component to another position	“Copy To” on page 383
Move a component to another position	“Move To” on page 384
Delete a component	“Delete” on page 269
Rename a component	“Rename” on page 385
Update an external reference	“Update Reference” on page 390
Edit an inserted wizard	“Edit Inserted Wizard” on page 389

Component Properties

The Component Properties is the central location for adding, editing, and deleting values of the properties, or attributes, of the components in your document. These properties control all aspects of the member, including the content, appearance, formatting, and placement.

As your document takes shape, you can change the appropriate properties to suit the changing needs of your project.

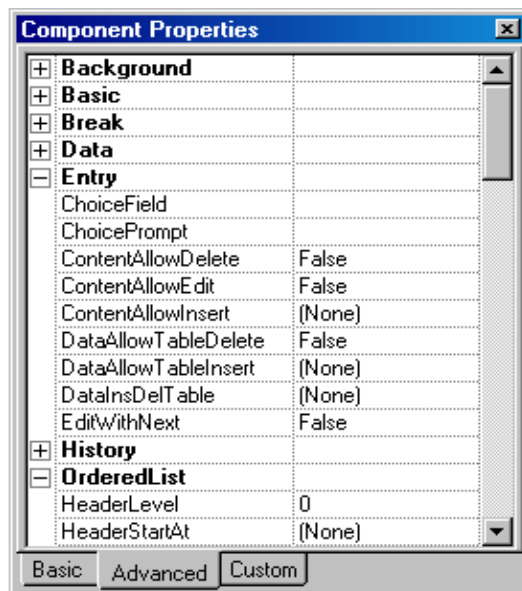
To Display the Component Properties

- Select **View>Controlbars>Component Properties**.

-or-

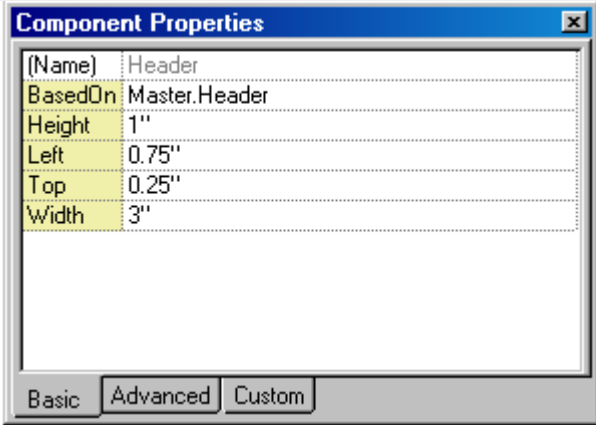
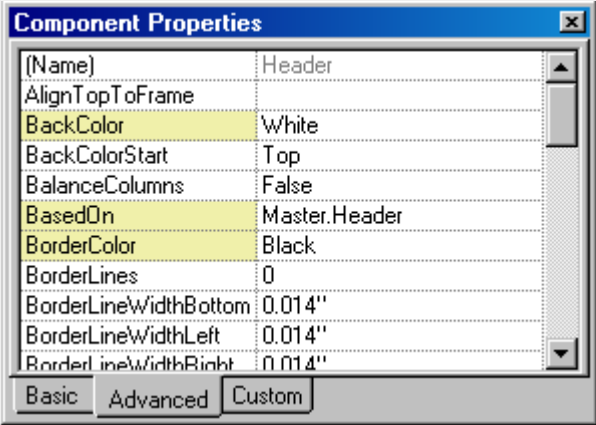
Click  in the Standard Toolbar.

The Component Properties displays.



Using the Component Properties Tabs

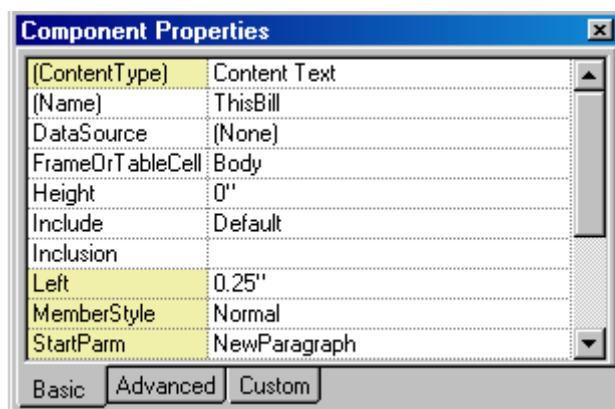
The Component Properties contains three tabs:

Select	To
Basic	Display a subset of properties that are used the most. This tab allows the user to setup basic functionality without having to be exposed to all of the properties. 
Advanced	Display all available properties. 
Custom	Display only those properties that the user has selected in the Tools>Options>Properties tab. Refer to “Using the Properties View” on page 501 for more information.

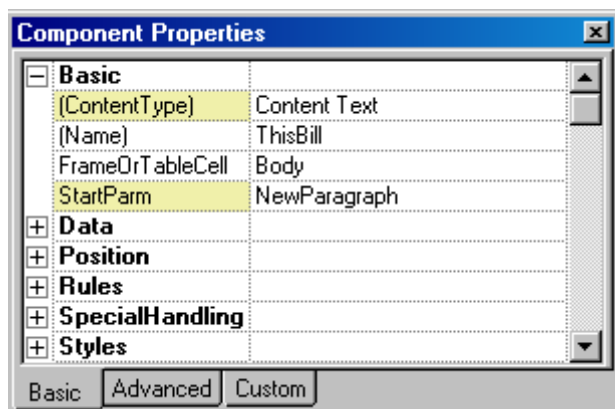
Using the Component Properties Views

The Component Properties allows you to display the contents of the Component Properties according to two views: **Alphabetic** and **Categorized**.

The **Alphabetic** view lists all properties in alphabetical order:



The **Categorized** view groups all properties according to their functional categories:



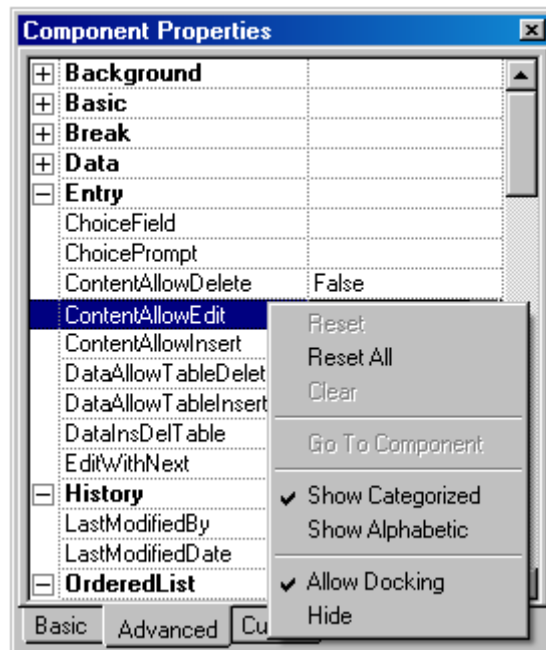
The parameters you specify control many aspects of a component, including:

- Physical appearance
- Printer control
- Usage
- Frame and column control
- Widow/orphan control
- Multiple inclusion
- Member content
- Assembly and placement

To Select a Component Properties View

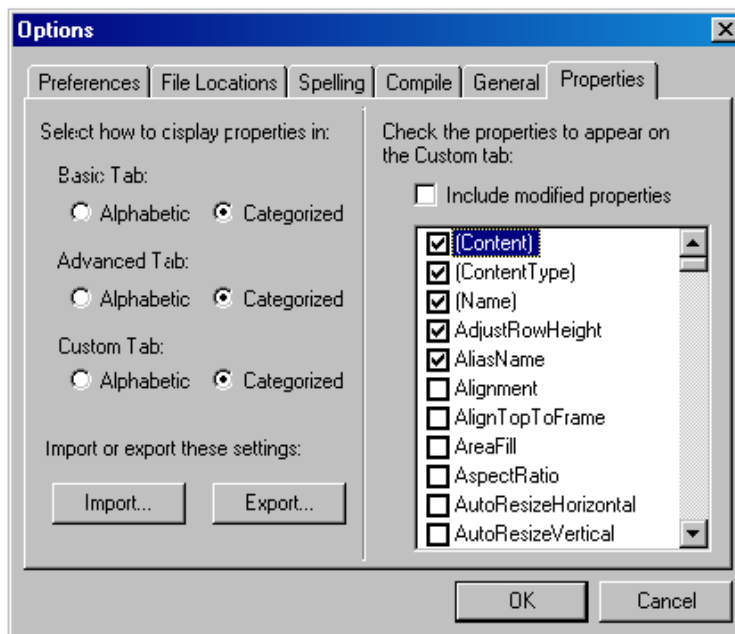
There are two ways to set the view:

- Display the right-click menu within the Component Properties and select the desired view:



-or-

Go to Tools>Options>Properties and check the radio button of the the view that you wish to use as your default view for that particular tab. The view can be changed at anytime using the Component Properties' right-click menu. Refer to [“Using the Properties View”](#) on page 501 for more information.



Because you can specify many different component properties on the two views, this guide provides a separate topic for each task:

If you need to	Go to
Specify a property's value	"To Edit the Value of a Property" on page 175
Simultaneously edit property values for multiple members	"Editing the Value of a Property in Multiple Members" on page 176
Record your changes and have them take effect	"To Make Your Changes Active" on page 175

To Edit the Value of a Property

- 1
- Select the Value field of the property for which you want to add a value.

TIP

If the Value is represented by anything OTHER than a unit of measure, you'll also need to click on the graphic (e.g.,  or ) displayed at the right side of the field to select the proper Value.

- 2
- Type the desired value.
- or-
- Select the appropriate value.

For a complete list of component properties, see ["Alphabetical Reference"](#) on page 555.

To Make Your Changes Active

- ▶
- Press **ENTER**.
- or-
- Click on any other field.

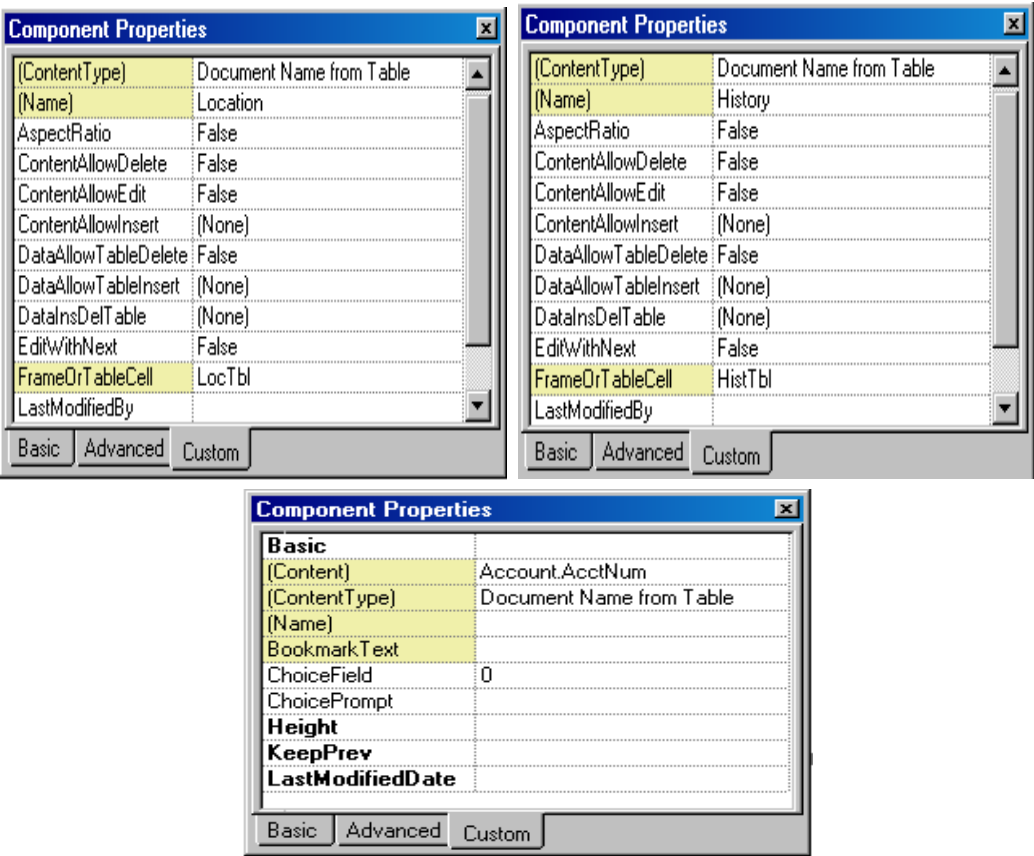
Editing the Value of a Property in Multiple Members

In the process of creating a document, you're very likely to have several members which contain the same value for a given property, such as a border width on a paragraph style or the beginning and ending rows within a data file.

Since the need to edit a property that's common to multiple members is extremely likely, Docuflex Studio includes a feature whereby you can select more than one member (from within the Component Explorer), change the value of a property (from within the Component Properties), and update that value for all selected members. You can select multiple members in one of two ways:

- Select contiguous members by highlighting the first member in the series, then using a **SHIFT+CLICK** combination on the last in the series.
- Select non-contiguous members by highlighting the first member in the series, then using a **CTRL+CLICK** combination to select the desired members.

The following example illustrates the different ways in which Docuflex Studio presents visual clues to inform you of the presence or absence of common values. For this example, you'll see the Component Properties for the member Location on the left, History on the right, and for both beneath.



The first visual clue that you've selected more than one member is in the Title Bar of the Component Properties: the title changes from a member name to **"*Multiple Selections*"**. The second clue is that both (Name) and FrameOrTableCell are blank, meaning they were different for each member.

The color of the contents in the Value field is the key indicator of the status of the property between members.

If the content in the Value field is	Then
Black	The property value is identical for the selected members.
Gray	You cannot edit the value because the property is unavailable in one or more of the members.
Blank (non-existent)	The property value is not the same for the selected members. This situation is useful if the value is supposed to be identical, but is not because of a data entry error.

Data Control Bar

The Data control bar displays all of the data file elements for your document, including the

- Data Set—the data organized by the schema
- Schema—the framework or layout of the data file
- Tags—specialized variables for use in extracting data from the file

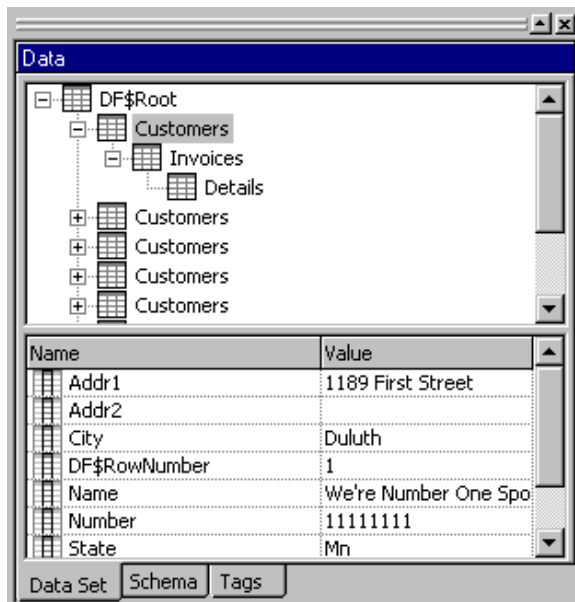
To Display the Data Bar

- Select **View>Controlbars>Data**.

-or-

Click  in the Standard Toolbar.

The Data bar displays.



Using the Data Bar and Views

The Data bar contains three views. You explore and manipulate the data in these views.

To Use a Data View

- ▶ Do any of the following:

To view the	Go to this topic
Data Set	“Using the Data Set View” on page 178
Schema	“Using the Schema View” on page 179
Tags	“Using the Tags View” on page 182

Using the Data Set View

Use the first view in the Data control bar to

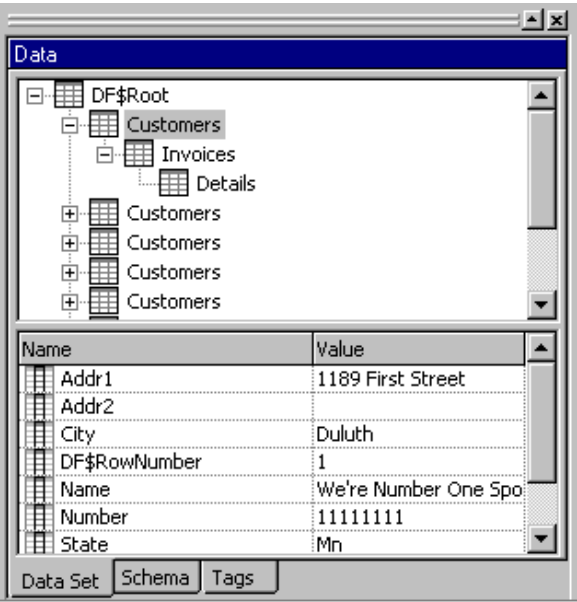
- Open, save, or delete the data file for the document
- View the Data Sets
- Insert rows into or delete rows from the Data Sets

NOTE

The schema and data file are available for editing during the “design phase” of your document; however, the schema must match the data file you’re using for batch processing (*DFLXCOMP.exe*; see [“DFLXOUT Basics” on page 527](#)).

To View the Data Sets

- ▶ If the Data Set view is not displayed in the Data bar, select the **Data Set** tab.



Because you can perform several tasks associated with data sets, this guide provides a separate topic for each task:

To	Go to this topic
Open the data file for the project	“To Open a Data File” on page 421
Save the data file	“To Save a Data File” on page 423
Delete the data file	“To Remove a Data File” on page 422
Go to the next data set	“To View the Next Data Set” on page 427
Go to the prior data set	“To View the Previous Data Set” on page 427
Insert a row into the data file	“To Insert a Row” on page 429
Delete a row from the data file	“To Delete a Row” on page 430
Edit the value of a field	“To Edit the Value of a Field” on page 179
Record your changes and have them take effect	“To Make Your Changes Active” on page 175

To Edit the Value of a Field

- 1 Navigate the data file to locate the desired data set (see [“To View the Next Data Set”](#) on page 427 or [“To View the Previous Data Set”](#) on page 427).
- 2 In the lower portion of the Data bar, click an insertion point in the Value column of the field whose value you want to change.

WARNING!

The field DF\$RowNumber is a system-generated value. You should not use it for sorting purposes or change its value via script (e.g., processing rule).

- 3 Type the new Value for the field.

Using the Schema View

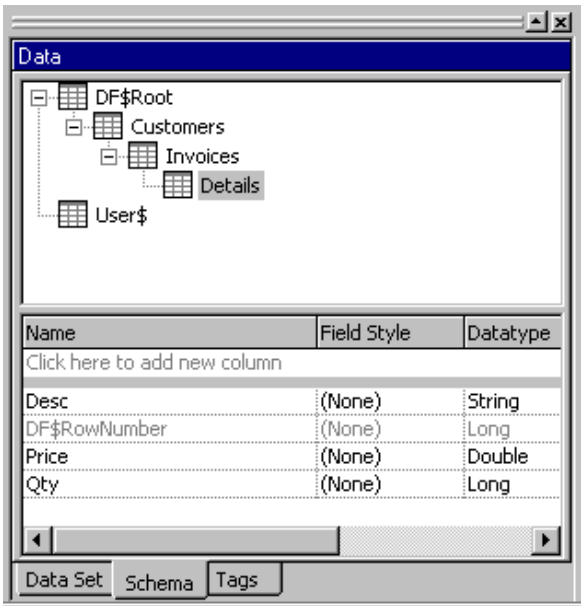
Use the second view in the Data bar to view and edit the structure of the data from the data file, and create user-defined data variables for use in processing rules and functions. The Schema is a representation of the format of the data and is saved inside the project.

NOTE

The schema and data file are available for editing during the “design phase” of your document; however, the schema must match the data file you’re using for batch processing (*DFLXCOMP.exe*; see [“DFLXOUT Basics”](#) on page 527).

To View the Schema

- If the Schema view is not displayed in the Data bar, select the **Schema** tab.



Because you can perform several tasks associated with the Schema, this guide provides a separate topic for each task:

To	Go to this topic
Open the schema for the current project	“To Open a Schema File” on page 424
View the structure of the schema	“To View the Structure” on page 180
Insert a table (row)	“Insert Schema Table” on page 431
Delete a table (row)	“Delete Schema Table” on page 431
Create and modify User Data variables	“Editing User Data Variables” on page 181
Add, edit, or delete columns	“Modifying Columns in the Schema Tables” on page 181
Delete the schema	“To Remove a Schema File” on page 425
Save the changes	“To Save a Project” on page 258

To View the Structure

- Expand and contract the tree listing to display the contents of the schema.
The table names display in the upper portion of the bar, and the field names and data types display in the lower portion.

Editing User Data Variables

You can create a User Data variable (User\$) to store a value for use in a function to, for example, calculate a total value or satisfy a publishing condition.

To Edit User Data Variables

- Perform any of the following:

To	Go to this topic
Add a variable	“To Add a Column” on page 181
Edit a variable	“To Edit a Column” on page 182
Delete a variable	“To Delete a Column” on page 182

Modifying Columns in the Schema Tables

You can add columns to, edit columns in, and delete columns from tables within the schema.

WARNING!

If your data file contains more than one Data Set (document set), you cannot edit either the data file or the schema.

Because you can perform several tasks associated with columns in the schema tables, this guide provides a separate topic for each task:

To	Go to this topic
Add a column	“To Add a Column” on page 181
Edit a column	“To Edit a Column” on page 182
Delete a column	“To Delete a Column” on page 182

To Add a Column

- 1 In the top section of the Data bar, highlight a table to which you want to add a column.
- 2 In the bottom section, select **Click here to add new column**.
Docuflex Studio displays the fields for a new column.
- 3 In the Name field, type the name you want to assign to this variable.
- 4 In the Field Style drop-down list box, select the style you want to use with this variable.
If you need to add a field style, see [“Using the Field Styles View”](#) on page 193.
- 5 In the Datatype drop-down list box, select the type you want to assign to this variable.
- 6 In the Description text box, type a description for this column.
If you want to add another variable, press **ENTER** and repeat Steps 3 through 6.
- 7 Save the project (see [“To Save a Project”](#) on page 258).

To Edit a Column

- 1 In the bottom section of the Data bar, select the column you want to edit.
- 2 Do any of the following:

If you want to change the	Do this
Name	Click in the Name field and type the correction.
Field style	Click in the Field Style field and select a different style. If you need to add a field style, see “Using the Field Styles View” on page 193.
Datatype	Click in the Datatype field and select a different type.
Description	Click in the Description field and edit the description.

CAUTION

If you manipulate a User Data variable in any way and that variable is already in use by a Rule, you may receive compiler error messages.

- 3 Save the project (see [“To Save a Project”](#) on page 258).

To Delete a Column

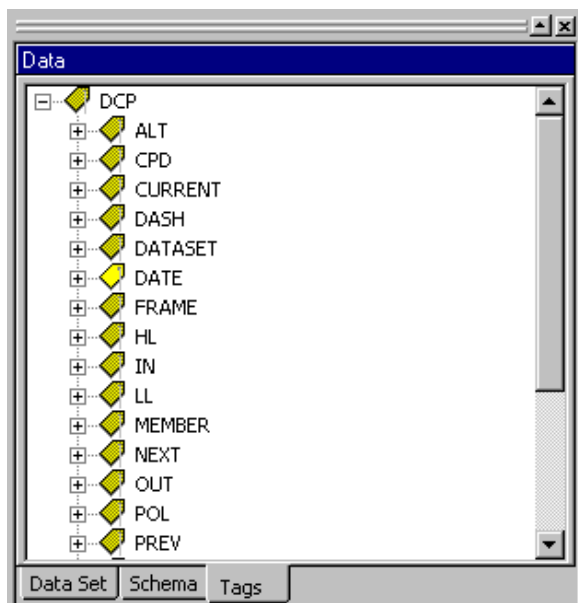
- 1 In the bottom section of the Data bar, select the column you want to delete.
- 2 Alternate-click to display the context menu, and then select **Remove Rows**.
- 3 Save the project (see [“To Save a Project”](#) on page 258).

Using the Tags View

Use the third view in the Data bar to view built-in, special-purpose system variables (tags). With tags inserted into your document, you can let Docuflex retrieve the information represented by these tags when you compose your project. As an added feature, you can click-and-drag the tag names into the Source window of a member, thus saving time and effort.

To Use Tags

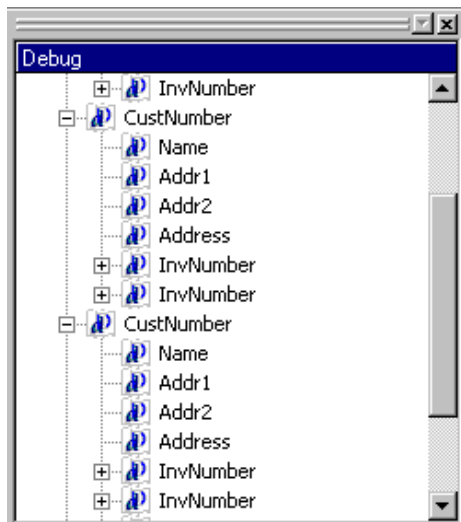
- 1 If the Tags view is not displayed in the Data bar, select the **Tags** tab.



- 2 Expand the tree as necessary to locate the desired tag.
- 3 Click-and-drag the tag into the Source window of the current member.
The Field Properties dialog box displays.
- 4 Complete the Field Properties for the chosen field (see [“Using the Field Properties Dialog”](#) on page 447).

Debug Control Bar

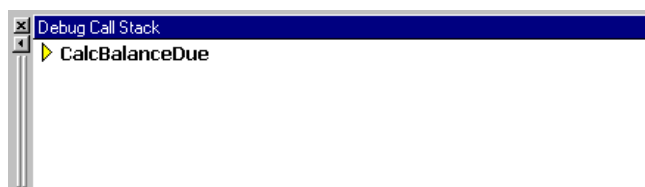
The Debug bar displays at the beginning of the debugging process. From this bar, you can see a listing of all the members that passed their inclusion rules and are eligible for publication in the document.



For more information about the debugging process, see “[Debug Menu](#)” on page 432.

Debug Call Stack Control Bar

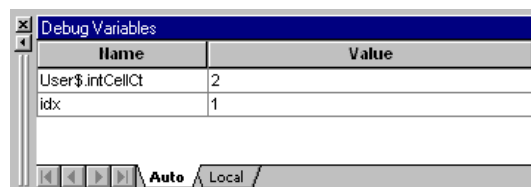
The Debug Call Stack bar displays the current business rule being processed. If you have nested rules, this bar displays the tree view and indicates the current rule.



For more information about the debugging process, see “[Debug Menu](#)” on page 432.

Debug Variables Control Bar

The Debug Variables bar displays both Auto and Local variables.

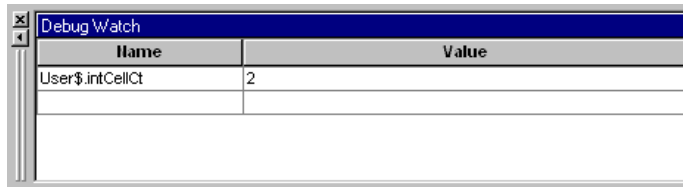


The Auto tab displays the variables, for the current and previous lines, that you’re debugging at the current time. The Local tab displays all variables defined inside the function.

For more information about the debugging process, see “[Debug Menu](#)” on page 432.

Debug Watch Control Bar

The Debug Watch bar displays the variables whose values you want to monitor, regardless of their location.



For more information about the debugging process, see “[Debug Menu](#)” on page 432.

Member Styles Control Bar

The Member Styles bar streamlines the process of adding members by displaying a listing of all the member styles you create in the project.

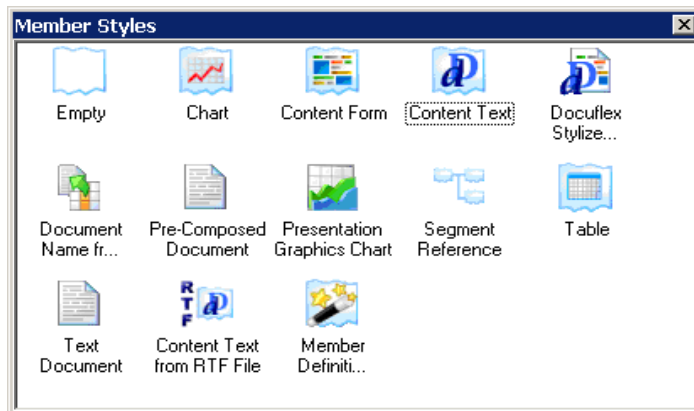
Member styles are assigned a default icon; you can override the default, however, by selecting an external bitmap or icon in the **IconFileName** property.

You can also set the **ContentType** property of a member style. Then, when you add a member based on this style, the ContentType of the new member defaults to the one you specified in the style.

To Display the Member Styles Bar

- Select **View>Controlbars>Member Styles**.

Docuflex Studio displays the Member Styles bar.



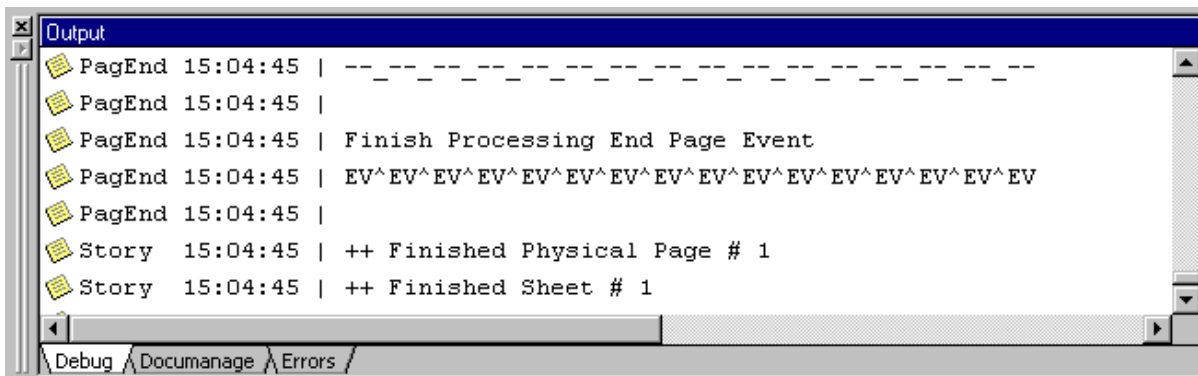
By creating member styles, you can quickly create several members that all use the same style (see “[To Add a Style](#)” on page 190). For more information about adding members using member styles, see “[To Add a Member](#)” on page 294).

Output Control Bar

The Output bar displays the results of three powerful features within Docuflex:

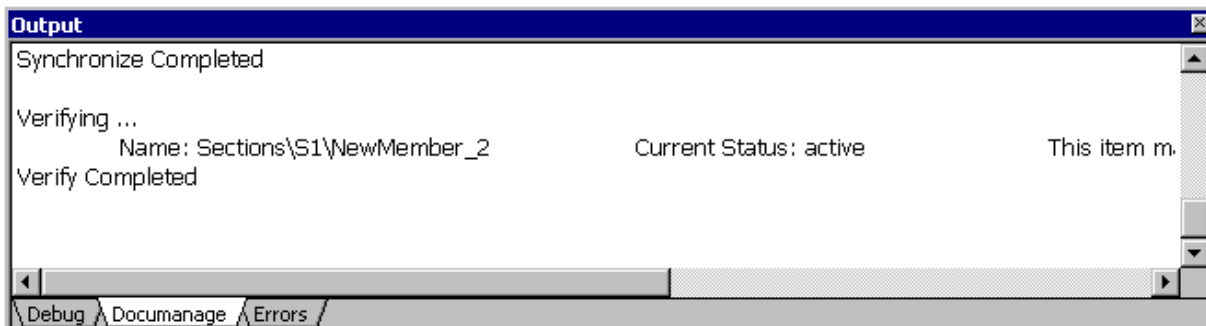
- The interactive debugger, which is a troubleshooting tool
- The messages pertaining to pre-composed documents originating from Documanager
- Any data entry fields failing validation checks

With the Debug view selected, the Output bar displays the steps involved in composing your document.

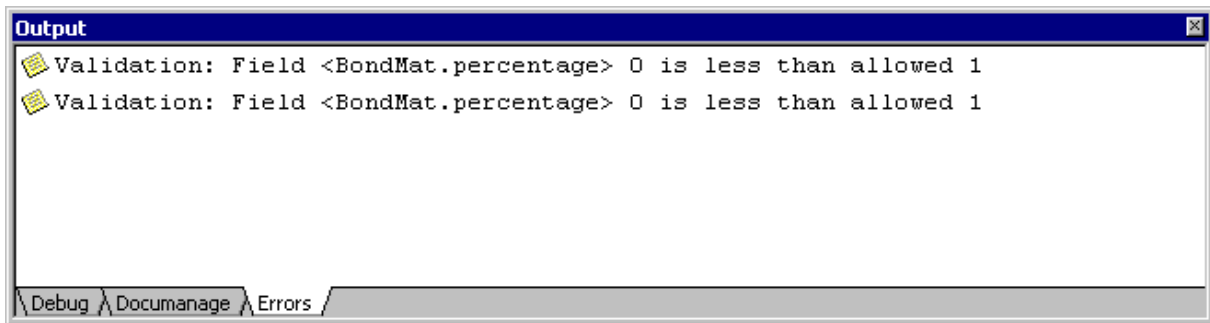


You can use the various toolbar icons and menu options to view each step of the procedure. You can also use the debugger to locate any error situations that the composition engine encounters (see “[Debug Menu](#)” on page 432).

With the Documanager view selected, the Output bar displays information pertaining to Documanager documents that you’ve loaded into your project as pre-composed members (see “[Integrating Docuflex with Documanager](#)” on page 77).



With the Errors view selected, the Output bar displays the names of fields that failed their validity checks as specified in the Field Properties view of the Source window.



If you select a field in error, Docuflex Studio takes you to that field so you can correct the data.

For more information about displaying validation errors, see [“To Specify the Default Settings”](#) on page 409. For more information about specifying the valid values for a field, see [“DataListValidate”](#) on page 620.

Styles Control Bar

The Styles bar is the central location for maintaining all of the formatting styles for the components in your document.

Docuflex Studio is designed to encourage consistent formatting throughout your document. Formatting styles—Character, Color, Member, Paragraph, and Tab—each control a different aspect of the format.

Most of the styles conform to a definite hierarchy, or tiered structure.

The hierarchy is best described by the following illustration:



NOTE

Color styles, while not included in the illustration, can be applied to various properties in Character and Paragraph styles.

In the illustration, you start by creating character and tab styles. Then, when you create a paragraph style, you can specify that you want this style to inherit a certain character and tab style. Finally, you can create a member style which inherits a paragraph style. In this way, you automatically build a consistent look to your document.

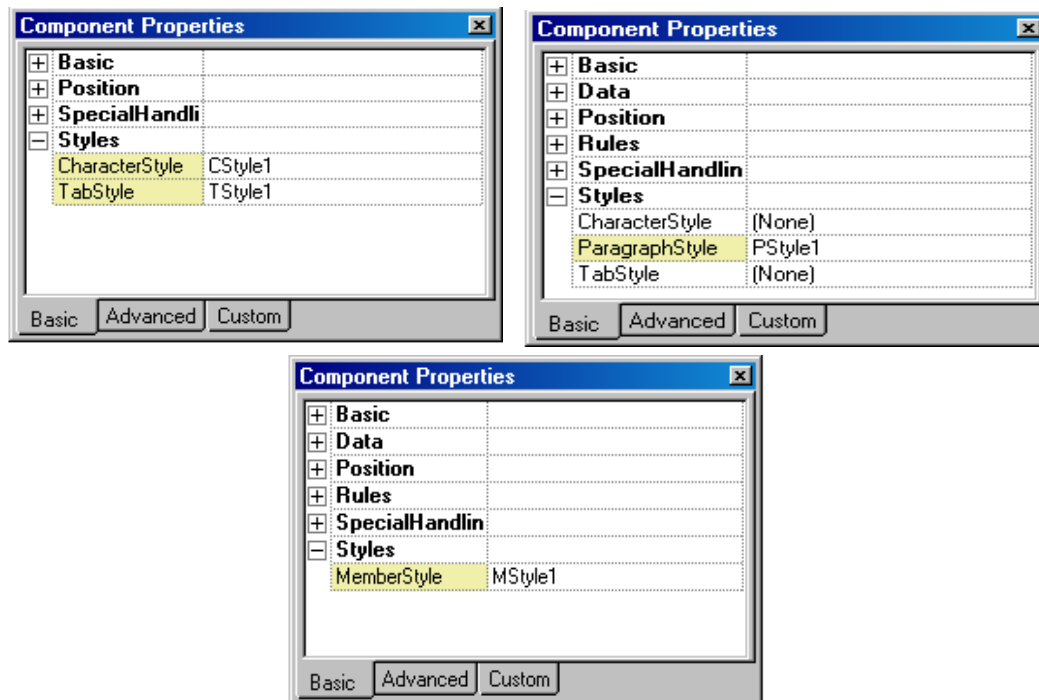
TIP

Docuflex Studio does not force you to use the Member - Paragraph - Character/Tab style hierarchy: you can randomly assign styles to each member (the “brute force” approach). However, you’ll receive more consistent results and reduce the time it takes to make changes if you create styles while composing your document.

If you apply character styles with brute force while editing content in the Source window, and then need to change character styles, you’ll have to re-apply the character style for each and every member. If you set up paragraph styles, on the other hand, you only have to change the character style within the paragraph style and the changes are automatically enforced.

At each higher level, however, you can opt to override the inherited, lower-level style and replace it with another style.

In the following screen captures, you’ll see how style inheritance is displayed in the Styles and Component Properties windows:



The following list discusses style inheritance and how the inheritance flows between styles.

- In the left-hand screen, the paragraph style (PStyle1) references a character style (CStyle1) and a tab style (TStyle1).
- In the right-hand screen, the member style (MStyle1) only references PStyle1. However, since PStyle1, in turn, references both CStyle1 and TStyle1, those styles are automatically inherited by MStyle1.

TIP

In this situation, having a style equal to “(None)” would *not* cause an error situation: Any value *other* than (None) means you’ve overridden the inherited styles at this level.

- In the bottom screen, a member references MStyle1. The paragraph, character, and tab styles are automatically referenced because of the inheritance rules.

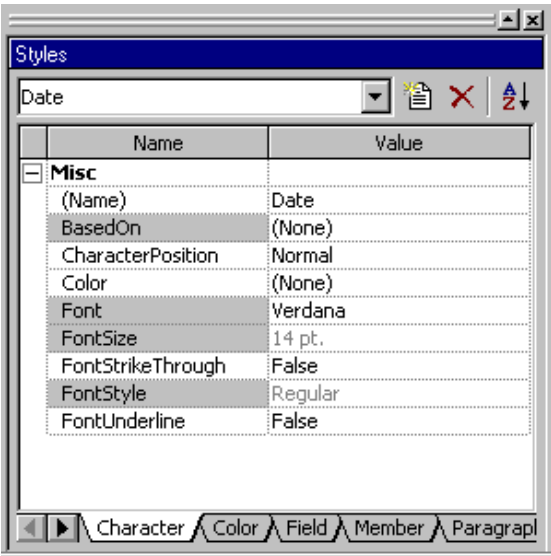
NOTE
The only time all four formatting styles are effective is if the ContentType of the member is Text Document.

To Display the Styles Bar

- ▶ Select **View>Controlbars>Styles**.
-or-

Click  in the Standard Toolbar.

Docuflex Studio displays the Styles bar.



Using the Styles Bar and Views

The Styles bar contains multiple views. You create, edit, and delete various formatting styles in these views.

To Use a Style View

- ▶ Do any of the following:

To view the	Go to this topic
Character styles	“Using the Character Styles View” on page 190
Color styles	“Using the Color Styles View” on page 192
Field styles	“Using the Field Styles View” on page 193
Member styles	“Using the Member Styles View” on page 196
Paragraph styles	“Using the Paragraph Styles View” on page 202
Tab styles	“Using the Tab Styles View” on page 206

To View a Style

TIP

Any style that’s listed as the child of a style is done so because the child style is BasedOn the parent style. When you edit the properties, this situation can change if you change the BasedOn value.

► Select the style you want to view from the drop-down list box.

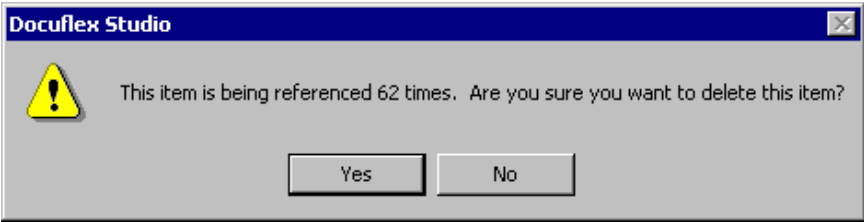
To Add a Style

► Click  on the appropriate view of the Styles bar. Make sure you’ve selected the corresponding view for the desired type of style.

You should now specify the values for the properties (see “To Edit the Value of a Property” on page 175).

To Delete a Style

- 1 Select the style you want to delete from the drop-down list box.
 - 2 Click  in the Styles bar.
- Docuflex Studio prompts you to confirm your decision.



- 3 Click **Yes** to delete the style; otherwise, click **No** to cancel.

To Toggle the Style Properties

► Click  in the Styles bar.

Docuflex Studio toggles between listing the properties in categorized or alphabetized order.

Using the Character Styles View

Character styles control the formatting of text content. With a character style, you can specify the color, font, and relative line position of the text.

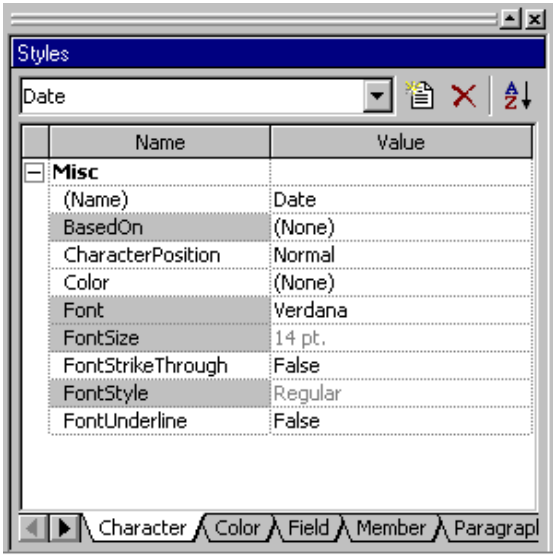
Character styles provide the means of manipulating the text by incorporating the following properties:

Property Category	Property	Description
Miscellaneous	(Name)	Name of the character style
	BasedOn	The character style on which this style is based
	CharacterPosition	Character position relative to the text baseline
	Color	Color style in which the text is displayed
	Font	The type face of the text
	FontSize	The point size of the text. This property value is for display only—you set it when you select the Font
	FontStrikeThrough	Whether to print text with a line through the middle. This property value is for display only—you set it when you select the Font

Property Category	Property	Description
	FontStyle	The weight of the text (e.g., Italic or Bold). This property value is for display only—you set it when you select the Font
	FontUnderline	Whether to print text with an underline. This property value is for display only—you set it when you select the Font
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	Shading	The background color of the text

To Display the Character Styles

- If the Character Styles view is not displayed in the Styles bar, select the **Character** tab.



Because you can perform several tasks in the Character Styles view, this guide provides a separate topic for each task:

To	See this topic
View a Character style	“To View a Style” on page 190
Add a Character style	“To Add a Style” on page 190
Edit a Character style	“To Edit the Value of a Property” on page 175
Delete a Character style	“To Delete a Style” on page 190
Toggle the property listing	“To Toggle the Style Properties” on page 190

Using the Color Styles View

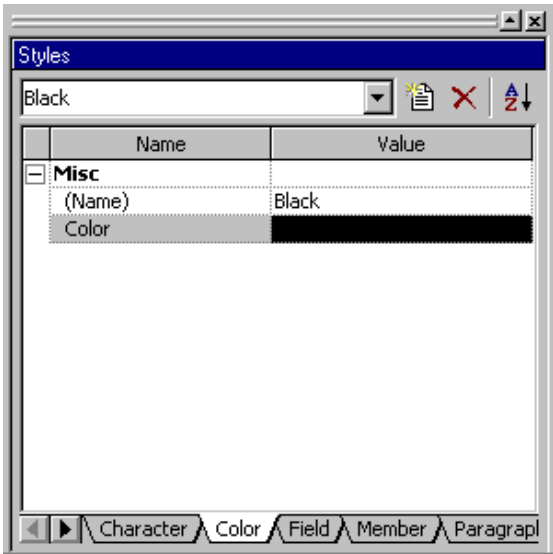
With color styles, you can store established colors or mix custom colors and save them as choices whenever a color is required for a component.

Color styles determine the appearance of a member by incorporating the following properties:

Property Category	Property	Description
Miscellaneous	(Name)	Name of the color style
	Color	Color assigned to this color style
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only

To Display the Color Styles

- ▶ If the Color Styles view is not displayed in the Styles bar, select the **Color** tab.



Because you can perform several tasks in the Color Styles view, this guide provides a separate topic for each task:

To	See this topic
View a Color style	“To View a Style” on page 190
Add a Color style	“To Add a Color Style” on page 193
Edit a Color style	“To Edit the Value of a Property” on page 175
Delete a Color style	“To Delete a Style” on page 190
Toggle the property listing	“To Toggle the Style Properties” on page 190

To Add a Color Style

- 1 Click  on the Color Styles view of the Styles bar.
Docuflex Studio adds the style and its properties.
- 2 Click the Name cell, and then type the name you want to assign to this color style.
- 3 Click the Color cell, and then click .
The Color dialog displays.
- 4 Pick a color. For details about using the Color dialog, refer to “Color Dialog” on page 569.
- 5 Click **OK**.

Using the Field Styles View

With field styles, you can store default values for variable data tags and save them as choices whenever a field style is required for a tag.

Field styles are similar to member styles, in that field styles control much more than just the formatting: you can also manipulate the incoming data, assign sample text, and specify replacement characters for the tag.

Field styles determine the appearance of a tag by incorporating the following properties:

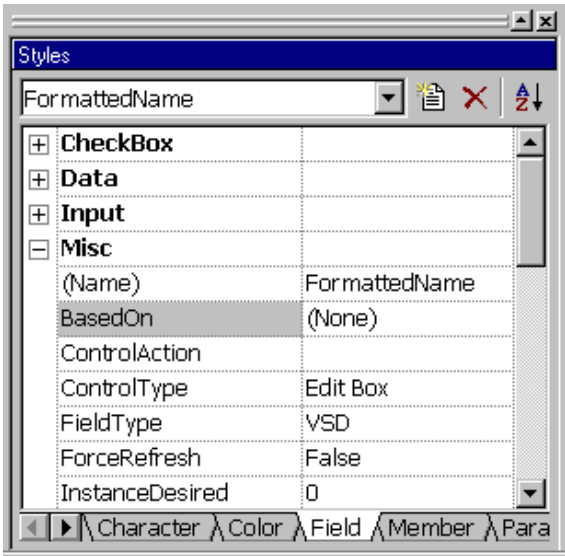
Property Category	Property	Description
CheckBox		Data fields you can designate as “clickable” checkboxes when viewed in both the Preview Edit window of Docuflex Studio and Docuflex Data Entry in Internet Explorer.
	CheckBoxOffCharacter	Character to use for fields of type “check box,” typically in a symbol font, depicting an empty check box
	CheckBoxOnCharacter	Character to use for fields of type “check box,” typically in a symbol font, depicting an active check box
	CheckBoxWithFont	Whether to create fields of type “checkbox” with a font or vector drawing commands
Data		Data properties control the format, available choices, and source of the data.
	DataFormat	Format of the data, such as upper or lower case, or numeric
	DataListType	Source of the data (e.g., user supplied or table from data file)
	DataList	Available choices seen in a combo box (see “ DataList Choices for ComboBox Fields ” on page 76).
	DataListValidate	Indicates whether the field’s value should be validated against a list of choices in the DataList
Input		Input properties control the representation of the data to make data entry easier.
	AutoTab	Whether data entry should automatically “tab” to the next field once enough data has been entered
	Case	Indicates whether to force a particular case (e.g., upper) on entered data
	FullFill	Indicates if the field’s value should be validated as containing the required number of characters

Property Category	Property	Description
	Length	Specifies the maximum width of field
	Mask	Specifies the formatting mask for the data
	Prompt	Displays message on status bar of browser
	RangeBeginEnable	Whether the field's RangeBegin value should be validated
	RangeBegin	Minimum value that the field must contain to be considered valid
	RangeEndEnable	Whether the field's RangeEnd value should be validated
	RangeEnd	Maximum value that the field can contain to be considered valid
	ReadOnly	Indicates whether the field should disallow editing (e.g., ReadOnly=True means disallow editing)
	SampleText	Provides an accurate representation of the width of the field
	SpellCheck	Provides spell checking for variable data as a field validation technique.
	ToolTipText	Textual description of the field's purpose or a hint that displays as a "tooltip"
	Validation	Specifies a rule to run that validates the value of the field
Miscellaneous	Name	The name of the field style
	BasedOn	The field style on which this style is based
	ControlAction	The JavaScript code or function call that controls further processing
	ControlType	Type of input field for data entry (e.g., button, check box, combo box; see "Check Box Fields" on page 74).
	FieldType	The type of field (e.g., BPSD, VSD, DRAW)
	ForceRefresh	Indicates whether a Refresh should occur when this field's value is changed. There is some delay and flicker that you can avoid by not refreshing the entire page for a field whose value does not impact the values or layout of the page
	InstanceDesired	The particular occurrence of a member
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	OverrideError	Indicates whether you may elect to override or ignore validation errors
	Mandatory	Whether supplying a value for a field is required
	ZoomFactor	Specifies the magnification of a field on an HTML data entry form.
Output	Output properties control the amount of reserved space for a field	

Property Category	Property	Description
	Justify	Indicates whether the field's value should be aligned within the space held by the field; most applicable for fields of a fixed size
	Locale	Specifies the locale setting which determines the syntax for various fields (e.g., MM/DD/YYYY vs. DD/MM/YYYY)
	ReplacementCharacters	Supply one character for each space required to hold the data
Styles	CharacterStyle	Default character style. Unless overridden, fields that refer to a field style automatically use this style
	FieldStyle	Default field style. Unless overridden, fields that refer to a field style automatically use this style

To Display the Field Styles

- If the Field Styles view is not displayed in the Styles bar, click the **Field** tab.



Because you can perform several tasks in the Field Styles view, this guide provides a separate topic for each task:

To	See this topic
View a Field style	“To View a Style” on page 190
Add a Field style	“To Add a Style” on page 190
Edit a Field style	“To Edit the Value of a Property” on page 175
Delete a Field style	“To Delete a Style” on page 190
Toggle the property listing	“To Toggle the Style Properties” on page 190

Using the Member Styles View

Unlike Character and Paragraph styles, Member styles control more than formatting. Member styles also control the assembly, placement, and inclusion of members in a document.

Member styles may reference predefined Character, Paragraph, and Tab styles, but Docuflex Studio only applies these formatting styles to Text Document components, as opposed to precomposed document components.

A Member style may reference other styles to help enforce consistency throughout the document. A Member style may:

- Be BasedOn another Member style. Docuflex Studio uses the properties of the “based on” style unless overridden by this Member style.
- Reference a Character style
- Reference a Paragraph style
- Reference a Tab style

Document members referencing a Member style inherit the Member style's properties, including the Character, Paragraph, and Tab styles, unless the member overrides them at the member level.

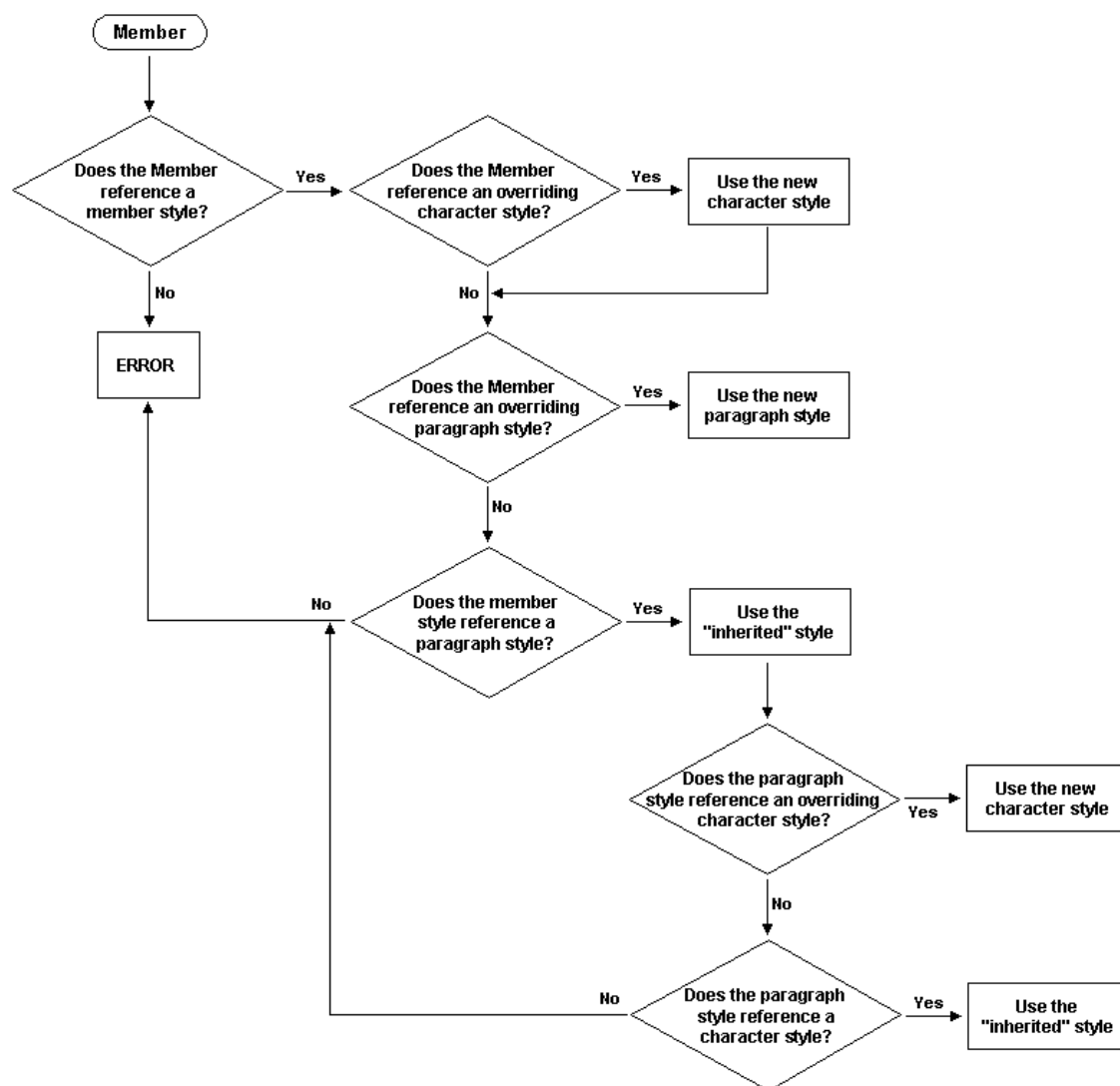
EXAMPLE

At composition time, the composition engine checks the Member for the presence of member, paragraph, character, and tab styles. These styles affect the “style inheritance” hierarchy that exists within Docuflex.

If the Member directly references a paragraph style, Docuflex uses that style; otherwise, Docuflex uses the paragraph style referenced by the member style.

Likewise, if the Member directly references a character or tab style, Docuflex uses that style; otherwise, Docuflex uses the character or tab style referenced by the paragraph style.

The following illustration graphically describes the inheritance hierarchy.



Basically, any settings made at the Member level override the settings made at the member style level. Likewise, any settings made at the member style level override the settings made at the paragraph style level, or:

- Highest Priority – Settings made at the Member level
- 2nd Place – Member style settings
- 3rd Place – Paragraph style settings

With a member style, you can specify the data source, relative position, business rule, and formatting styles. Member styles determine the appearance of a member by incorporating eight categories of properties:

Property Category	Property	Description
Widow/Orphan Control (Break)	Break properties ensure that members which should be kept together ARE kept together	
	KeepFirstNOccur	Keep a specified number of recurring members together at the beginning of the group
	KeepLastNOccur	Keep a specified number of recurring members together at the end of the group
	KeepPrev	Keep this member with the previous member

Property Category	Property	Description
Data (Multiple Inclusion)	Data properties control whether a member is included, based on the occurrences of rows in a Docuflex schema	
	DataSource	The source table of the variable data
	DataSourceSort	Whether the data file is sorted
	DataSourceSortCol	The column in the data file by which to sort
	RowBegin	The row of the table on which you start collecting data
	RowEnd	The row of the table on which you cease collecting data
	RowIncrement	Increment for reading rows in the table (e.g., a value of 2 means to read every other row)
Image	Image properties control the color and dimensions of the cropped portion of an image	
	ColorProcessing	The color of the image
	CropHeight	The height of the cropped portion
	CropLeft	The location of the left side of the cropped portion
	CropTop	The location of the top of the cropped portion
	CropWidth	The width of the cropped portion
Miscellaneous	(Name)	Name of the member style
	BasedOn	The member style on which this style is based
	Comment	Any clarifying description about the style
	ContentAllowDelete	Whether a user can delete a member
	ContentAllowEdit	Whether a user can edit a member
	ContentAllowInsert	Whether a user can insert Optional Contents
	ContentType	The type of content contained in the member. This type cannot be changed in a Member Style; the value always equals (None)
	DataAllowTableDelete	Whether a user can delete a row from a table
	DataAllowTableInsert	Whether a user can insert a row to a table
	DataInsDelTable	The table to which a user can add a row or from which a user can delete a row
	EditWithNext	Make this cell eligible for grouping with the next cell
	FrameOrTableCell	The frame or table cell in which this member should be placed
	IconFileName	The name of a bitmap or icon file associated and displayed with this style.
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only.
	OverflowDefinition	Default Overflow Definition
	Recipients	Recipient for this member
	StartParm	The place within the page or document to “start” this member

Property Category	Property	Description
OrderedList		Ordered lists can consist of either arabic or roman numeral outline-style lists
	HeaderLevel	Determines the level of a heading in an ordered list or outline (up to sixteen)
	HeaderStartAt	The starting number of the first heading
	OrderListLevel	Determines the level of a member in an ordered list or outline (up to sixteen)
	StartAt	The starting number of the first list item
Position (Assembly & Placement)		Position properties control the positioning of a member as related to the Frame, Column, and Page boundaries
	Height	Member height
	Left	Member position in relation to the left side of the frame
	SpaceAfter	Vertical space after the member
	SpaceBefore	Vertical space before the member
	Top	Member position in relation to the top of the frame
	VerticalAlign	The vertical alignment of the member
Rules	Width	Member width
		Rule properties control the point in the composition procedure where any processing rules are applied.
	Inclusion	The rule to be executed to qualify the member for inclusion in the document
	PostComposition	The rule to be executed after composing the document
	PostInclusion	The rule to be executed after including the member
	PreComposition	The rule to be executed before composing the document
Special Handling	PreInclusion	The rule to be executed before including the member
	BeginUseDate	The processing date on which the member is eligible for inclusion
	BookmarkLevel	The heading level (level of indention) for the bookmark
	BookmarkText	The text or wording of the bookmark
	EndUseDate	The processing date on which the member is no longer eligible for inclusion
	Include	Apply or override an inclusion rule qualifying a member
	IncludeIfFits	Whether to include a member when publishing a page. Note: This property only applies to Overflow Definitions
	IncludeIfRow	Whether to include a member representing a multiple occurrence of data in a data file
	ProcessFirstChild	Whether to process all children of the member or process the children until reaching the first child whose inclusion rule is satisfied

Property Category	Property	Description
	ReferenceIteration	Specifies the particular occurrence of a member that occurs multiple times due to looping on the table named by the member's DataSource property
	ReferenceMember	Specifies the member that is the destination for the reference
	ReferenceType	Specifies whether to use a member or a URL as the cross-reference
	ReferenceURL	Specifies the URL that is the destination for the reference
	SectionBegPage	The starting page of the valid range for this member
	SectionEndPage	The ending page of the valid range for this member
	SuppressBlankLines	Whether to include a member if the source data for that member is blank
	TOCInsertionPoint	Specifies the member that holds the Table of Contents
	TOCReference	Indicates which TOC entry format to use
	UseOnce	Use this member once and then remove it from the list of eligible candidates
	VisibleIfOutput	Whether to include a member marked for display, print, or both
	WhenUsed	The composition event that triggers the inclusion of this member
	WhereUsed	Side of the physical page on which to use this member
Styles	CharacterStyle	Default character style. Members that refer to this Member style automatically (indirectly) use this character style unless it's overridden by the CharacterStyle applied to a specific piece of text
	ParagraphStyle	Default paragraph style
	TabStyle	Default tab style

To Display the Member Styles

- If the Member Styles view is not displayed in the Styles bar, click the **Member** tab.

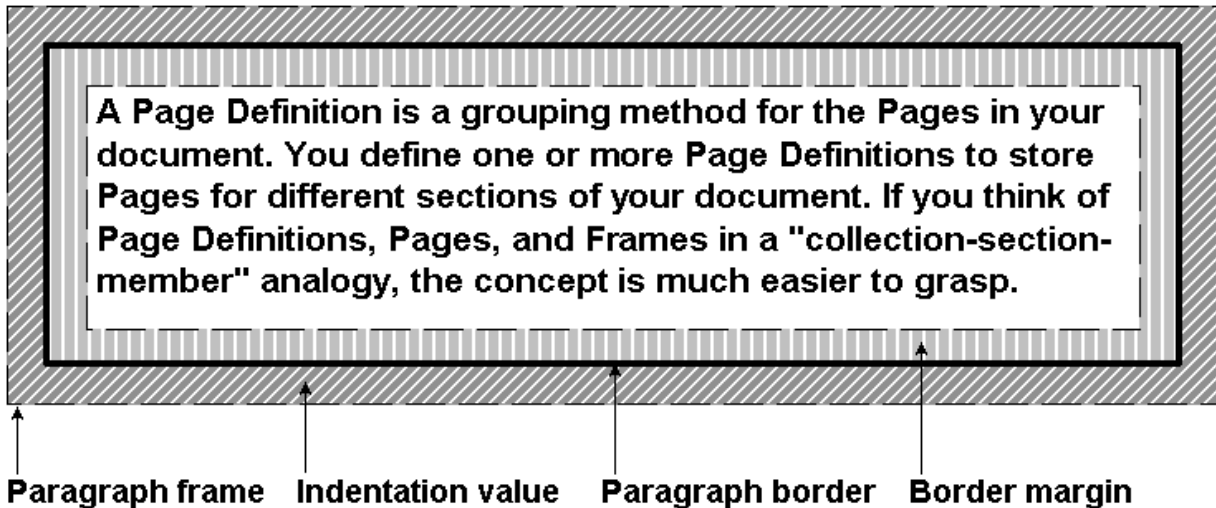


Because you can perform several tasks in the Member Styles view, this guide provides a separate topic for each task:

To	See this topic
View a Member style	“To View a Style” on page 190
Add a Member style	“To Add a Style” on page 190
Edit a Member style	“To Edit the Value of a Property” on page 175
Delete a Member style	“To Delete a Style” on page 190
Toggle the property listing	“To Toggle the Style Properties” on page 190

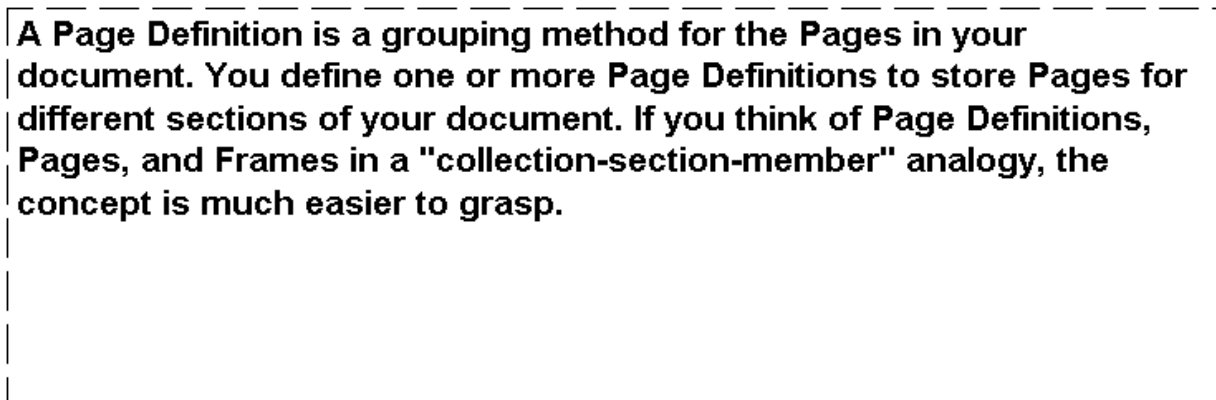
Using the Paragraph Styles View

Paragraph styles dictate the formatting of the paragraph. With a paragraph style, you can specify such formatting controls as horizontal alignment, borders, indentation, line spacing, and shading (e.g., text background color).

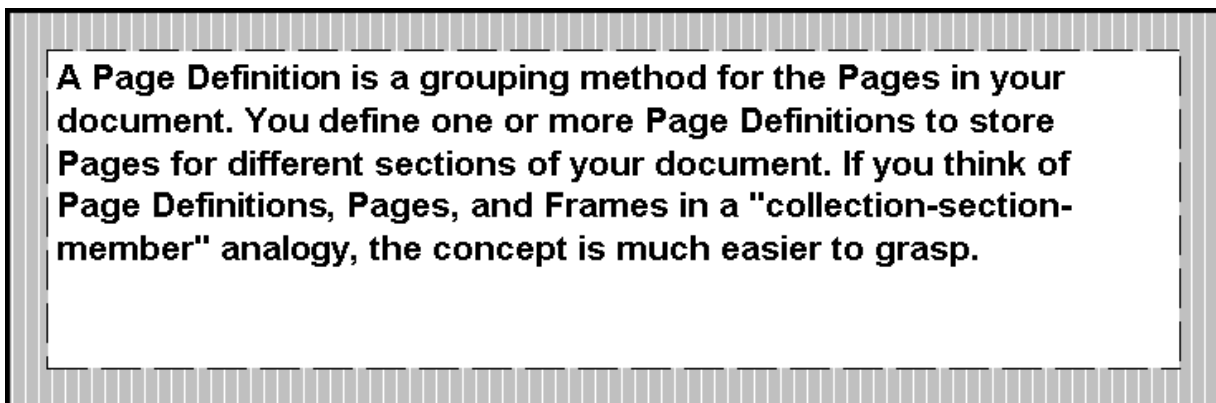


All paragraphs have a border surrounding them. If you want to view the border, you simply enable it by typing a positive number for the `BorderLines=` parameter.

If `BorderLines` are not enabled, the paragraph border is the same as the paragraph frame.



You can enable `BorderLines` and specify a `BorderMargin` measurement to add space between the text and the border. The paragraph border is still the same as the paragraph frame, but there is more space between the border and the text.



Finally, you can specify an Indentation measurement to add space between the paragraph frame and the paragraph border.

A Page Definition is a grouping method for the Pages in your document. You define one or more Page Definitions to store Pages for different sections of your document. If you think of Page Definitions, Pages, and Frames in a "collection-section-member" analogy, the concept is much easier to grasp.

Paragraph styles determine the appearance of a paragraph by incorporating five categories of properties:

Property Category	Property	Description
Borders	Control the appearance of the paragraph border	
	BorderColor	The color of the border around the paragraph
	BorderLines	The number of border line(s) around the paragraph
	BorderLineWidthBottom	Width of the bottom border
	BorderLineWidthLeft	Width of the left border
	BorderLineWidthRight	Width of the right border
	BorderLineWidthTop	Width of the top border
	BorderMarginBottom	Space between the text and the bottom border
	BorderMarginLeft	Space between the text and the left border
	BorderMarginRight	Space between the text and the right border
	BorderMarginTop	Space between the text and the top border
	BorderStyleBottom	Style of the bottom border
	BorderStyleLeft	Style of the left border
	BorderStyleRight	Style of the right border
	BorderStyleTop	Style of the top border
	EllipseHeight	The vertical height of a curve (e.g., ellipse). A single "corner" of a paragraph with rounded corners consists of a height and a width
	EllipseWidth	The horizontal width of a curve (e.g., ellipse). A single "corner" of a paragraph with rounded corners consists of a height and a width
Indentation	Controls the distance of the paragraph content from all four sides of the paragraph frame, and the indentation of the first line of the paragraph	
	IndentationBottom	Space between the paragraph frame and the bottom border
	IndentationLeft	Space between the paragraph frame and the left border
	IndentationRight	Space between the paragraph frame and the right border

Property Category	Property	Description
	IndentationTop	Space between the paragraph frame and the top border
	IndentationType	The indentation type of the first line of text in relation to the remainder of the paragraph
	IndentationValue	The amount of indentation of the first line of text
LineSpacing		Determines the amount of vertical space between lines of text
	ExcludeExternalLeading	Whether to exclude line spacing when producing RTF
	LineSpacing	Predefined amount of blank space
	LineSpacingValue	Specific amount of space—only with Exact option
Miscellaneous	(Name)	Name of the paragraph style
	Alignment	The horizontal alignment of the text
	BasedOn	The paragraph style on which this style is based
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	PrefixText	The text preceding the content of a list member item
	Shading	The background color of the text
	TOCReference	Indicates which TOC entry format to use
	Right-To-Left	Indicates direction of paragraph. When you change the value the "Right-To-Left" property, the value of the "Alignment" property also changes to be in agreement with the paragraph direction."
Styles	CharacterStyle	Default character style. Members that refer to this Paragraph style automatically (indirectly) use this character style unless it's overridden by ■ the Member's CharacterStyle property ■ the CharacterStyle applied to a specific piece of text
	PrefixCharacterStyle	The character style of the prefix text
	TabStyle	Default tab style

To Display the Paragraph Styles

- If the Paragraph Styles view is not displayed in the Styles bar, click the **Paragraph** tab. Because you can perform several tasks in the Paragraph Styles view, this guide provides a separate topic for each task:

To	See this topic
View a Paragraph style	“To View a Style” on page 190
Add a Paragraph style	“To Add a Style” on page 190
Edit a Paragraph style	“To Edit the Value of a Property” on page 175
Delete a Paragraph style	“To Delete a Style” on page 190
Toggle the property listing	“To Toggle the Style Properties” on page 190

Using the Tab Styles View

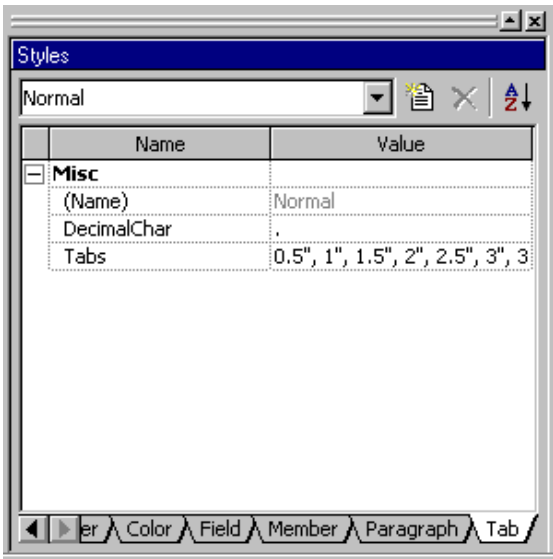
Tab styles make lining up items within a paragraph easier. With a tab style, you can specify the exact point on the line at which you want to set the tab, its alignment style, and whether you want a leading character.

Tab styles provide the means of aligning the text by incorporating the following properties:

Property Category	Property	Description
Miscellaneous	(Name)	Name of the tab style
	DecimalChar	Character separating the whole and decimal digits in a numerical value
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	Tabs	Horizontal placement position for the tab stop(s)

To Display the Tab Styles

- If the Tab Styles view is not displayed in the Styles bar, click the **Tab** tab.



Because you can perform several tasks in the Tab Styles view, this guide provides a separate topic for each task:

To	See this topic
View a Tab style	“To View a Style” on page 190
Add a Tab style	“To Add a Tab Style” on page 207
Edit a Tab style	“To Edit a Tab Stop” on page 208
Delete a Tab style	“To Delete a Tab Stop” on page 208
Toggle the property listing	“To Toggle the Style Properties” on page 190

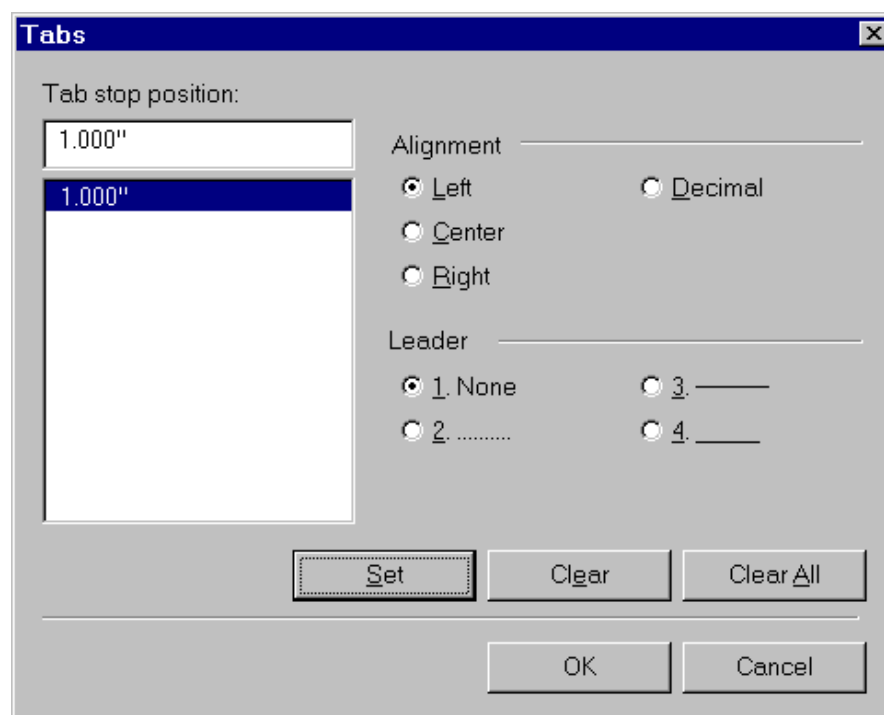
To Add a Tab Style

- 1 Click  on the Tab view of the Styles bar.

Docuflex Studio adds the style and its properties.

- 2 Click the Name cell, and then type the name you want to assign to this tab style.
- 3 Click the Tab cell, and then click .

The Tab dialog displays.



- 4 In the Tab stop position text box, type the horizontal measurement for the tab.
- 5 In the Alignment group box, click the type of tab stop you want.

CAUTION

If the number is too large to align on a decimal tab stop, Docuflex aligns the number with the previous tab stop or the left margin, whichever occurs first (e.g, if an extremely large number like 99,999,999.99 will not fit within the tab boundary, Docuflex shifts it to the previous tab).

- Left—all text is left-aligned
 - Center—all text is centered
 - Right—all text is right-aligned
 - Decimal—all numbers are lined up on the decimal character
- 6 In the Leader group box, click the type of leading character you want.
 - None
 - Dot
 - Dash
 - Underline
 - 7 Click **Set**.

- 8 Repeat “**Step 4**” through “**Step 7**” until you’ve specified all tab stops.
- 9 Click **OK**.

To Edit a Tab Stop

- 1 Select the Tab style you want to edit (see “**To View a Style**” on page 190).
- 2 Click the Tab cell, and then click .
The Tab dialog displays.
- 3 From the Tab stop position list box, select the tab stop you want to change.
- 4 Make any necessary changes to the Alignment and Leader settings, and then click **Set**.

To Delete a Tab Stop

- 1 If you want to remove a tab stop, select it from the list, and then click **Clear**. Skip to Step 3.
- 2 If you want to remove all tab stops, click **Clear All**.
- 3 Click **OK**.

Page Layout Window

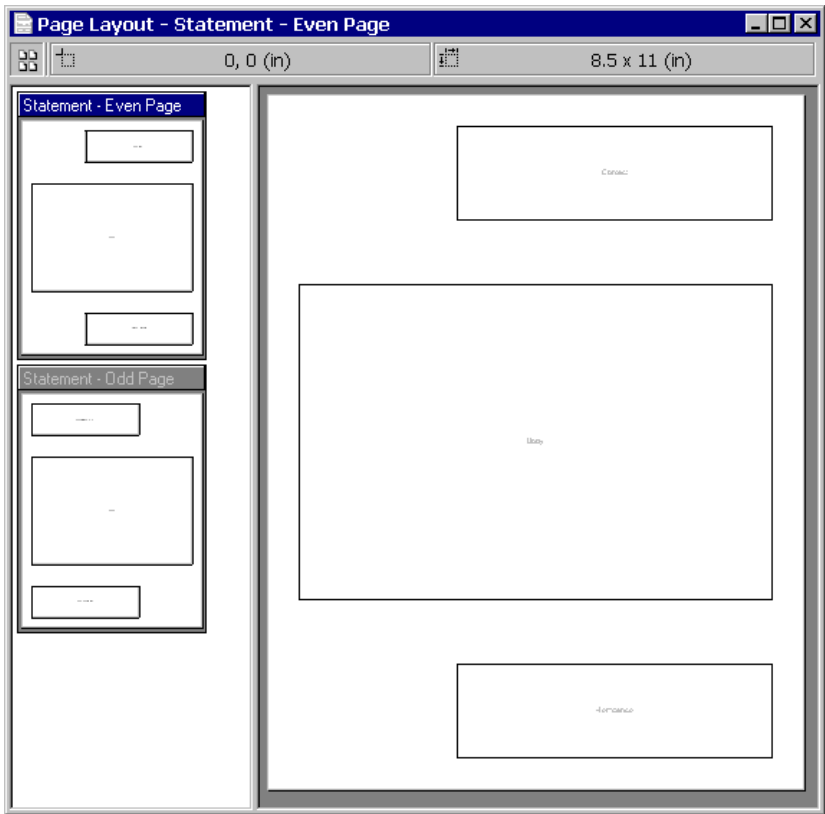
The Page Layout window is the central location for displaying and performing maintenance on pages and frames. Dimensional information about the frame is displayed at the top. Immediately next to the thumbnail icon, you'll see the values for the Left and Top starting points. Next to that, you'll see the values for the Width and Height.

In this window, you can display a page and its page frames that you've defined in your project. After you've specified the dimensions and locations of the frames on the pages, you can choose to display the page and the placement of its frames.

You can also choose to see thumbnail images of all the pages and frames.

To Display the Page Layout Window

- ▶ Select **View>Windows>Page Layout**.



Because you can perform several tasks in the Page Layout window, this guide provides a separate topic for each task:

To	See this topic
View a Page or Page Frame	“To View a Page Component” on page 210
Add a Page Definition	“Add Page Definition” on page 353
Add a Page	“Add Page” on page 354
Add a Page Frame	“Add Page Frame” on page 358
Edit a Page Definition, Page, or Page Frame	“To Edit a Page Component” on page 210
Delete a Page Definition, Page, or Page Frame	“To Delete a Page Component” on page 210
Toggle the display of the Thumbnails	“To Display Thumbnails” on page 211

To View a Page Component

- 1 Select the Page or Page Frame you want to view from the tree structure in the Component Explorer
-or-
Choose the Page or Page Frame from the thumbnail icons.
- 2 Do any of the following:

If you want to	Do this
Increase or decrease the size of the preview image	“To Adjust the Magnification of an Image” on page 289
Refresh the preview image	“To Refresh the Preview Image” on page 280

To Edit a Page Component

- 1 Select the Page or Page Frame you want to edit from the tree structure in the Component Explorer.
-or-
Choose the Page or Page Frame from the thumbnail icons.
The properties for the component are displayed in the Component Properties.

TIP

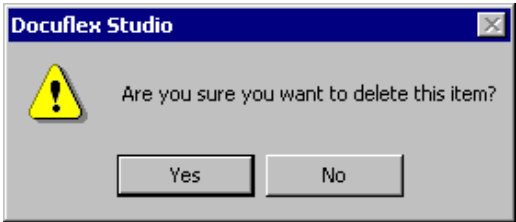
You can click-and-drag a Page Frame within this window, and then use the property fields to fine tune its placement. You can also use click-and-drag to edit the frame dimensions.

Docuflex Studio includes a “Snap to Grid” feature that increases the precision with which you can reposition and resize Page Frames (see [“To Specify the Grid Options”](#) on page 408).

- 2 Make any necessary changes to the component properties, including **Height**, **Left**, **Top**, and **Width**.

To Delete a Page Component

- 1 Select the Page or Page Frame you want to delete from tree structure in the Component Explorer.
-or-
Choose the Page or Page Frame from the thumbnail icons.
- 2 Click  on the Standard Toolbar.
-or-
Select **Edit>Delete**.
Docuflex Studio prompts you to confirm your decision.



- 3 Click **Yes** to delete the item; otherwise, click **No** to cancel.

To Display Thumbnails

- 1 Click  in the Page Layout window.
Docuflex Studio either displays or hides the thumbnails view.
- 2 Use the vertical scroll bar to navigate the pages.
- 3 Select the Page and Frame you want to view or edit and its image is displayed in the view on the right.
- 4 If necessary, you can click on the dividing bar to resize the views.

Preview Window

The Preview window is the central location for displaying your document. Docuflex displays an image of the current state of your document.

You can choose from a variety of magnification settings, from 10% to 400%, plus two automatic settings. After any changes to the project, the display is automatically “refreshed” to reflect the updated state of the document. If you don't want to see the Preview recomposed every time you make a change, simply close the Preview window.

You can opt to display thumbnail images of each page along with the full page view.

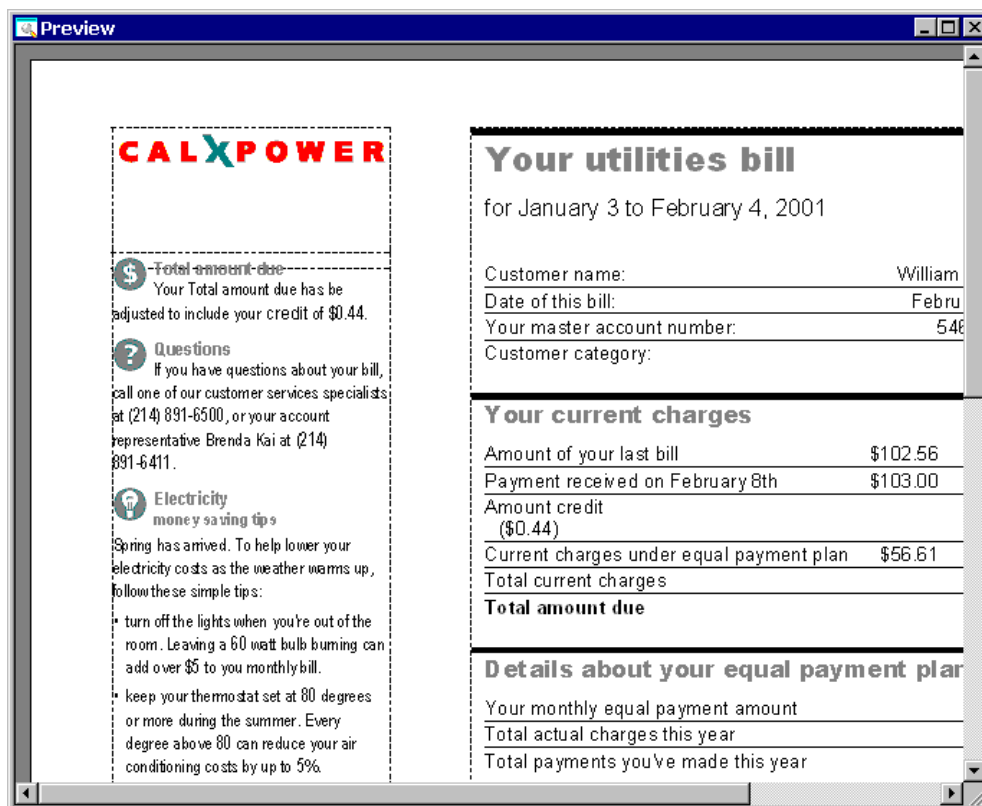
The Preview window provides the feature to display the document for particular Recipient Types and Recipient Names.

TIP

The Preview and Preview Edit windows are mutually exclusive, meaning you cannot have both windows open at the same time.

To Display the Preview Window

- Select **View>Windows>Preview**.



Because you can perform several tasks in the Preview window, this guide provides a separate topic for each task:

To	See this topic
Toggle the display of the thumbnail images	“To Display Thumbnail Images” on page 212
Select the Recipient Name and Type	“To Select Recipients” on page 212
Adjust the size of displayed graphics (i.e., graphics are too small)	“Adjusting the Display Size of Graphic Elements” on page 212
Specify the drawing order of members within a document	“Specifying the Drawing Order of Graphics” on page 213
Navigate the pages	“Go To” on page 287
Change the viewing magnification	“To Adjust the Magnification of an Image” on page 289
Refresh the displayed image to reflect any changes	“To Refresh the Preview Image” on page 280

To Display Thumbnail Images

- Select **View>Show Thumbnails**.

When the thumbnails are displayed, you can drag the center bar to adjust the width of the views.

The Preview window either splits to display the thumbnail images or hides the thumbnails.

To Select Recipients

- 1 Click  or  in the Recipient Toolbar to select the category of Recipients for whom you want to preview the document.
- 2 Click  or  in the Recipient Toolbar to select the Recipient for whom you want to preview the document.

Docuflex refreshes the display of the document (see [“Recipients”](#) on page 397).

Adjusting the Display Size of Graphic Elements

Docuflex displays most Pre-Composed Document members (e.g., BMP, EMF, JPG, PNG, TIF) according to the resolution setting stored in the *isi.ini* file. If your graphical elements are displayed at a smaller size than expected, you need to make an adjustment to this setting.

To Adjust the Display Size of Graphic Elements

- 1 Use any popular text editor to open the *isi.ini* file, which is located in the Windows folder (e.g., C:\Windows\isi.ini).
- 2 Locate the section label for the type of graphic you’re displaying.
Each graphical format contains a corresponding [PrintDef - *nnn*] section, where *nnn* is the three-letter code for the target format (e.g., [PrintDef - JPG]).

- 3 Edit the DPI= value to match the resolution of your computer monitor.

The DPI= setting within this section defaults to a value of 300, which corresponds to an acceptable printing resolution for most printers. If your displayed graphics are too small, change this value to 96, which corresponds to the screen resolution of most computer monitors. This change in DPI resolution does not adversely affect the printing results for text items.

- 4 Save the *isi.ini* file.
- 5 Stop and restart Docuflex Studio.

Specifying the Drawing Order of Graphics

Docuflex renders, or composes, text, vector graphics, and images in the order that they exist in the Component Explorer. This process is known as “drawing order” rendering, and Docuflex uses it to create documents while exerting more control over the layering of items on the page.

The drawing order of components is currently determined by the composition engine as follows:

- 1 The “Body” frame is always created first by default.
- 2 The full contents of each frame, one frame at a time.
- 3 The order for frames is determined by the order that content is first placed in that frame.
- 4 Within each frame, the drawing order is dictated by the order that content is placed in that frame.

Legacy documents might not display or print correctly if text exists in a layer other than the top one. By editing the *isi.ini* file, you can disable rendering in “drawing order.”

To Specify the Drawing Order of Graphics

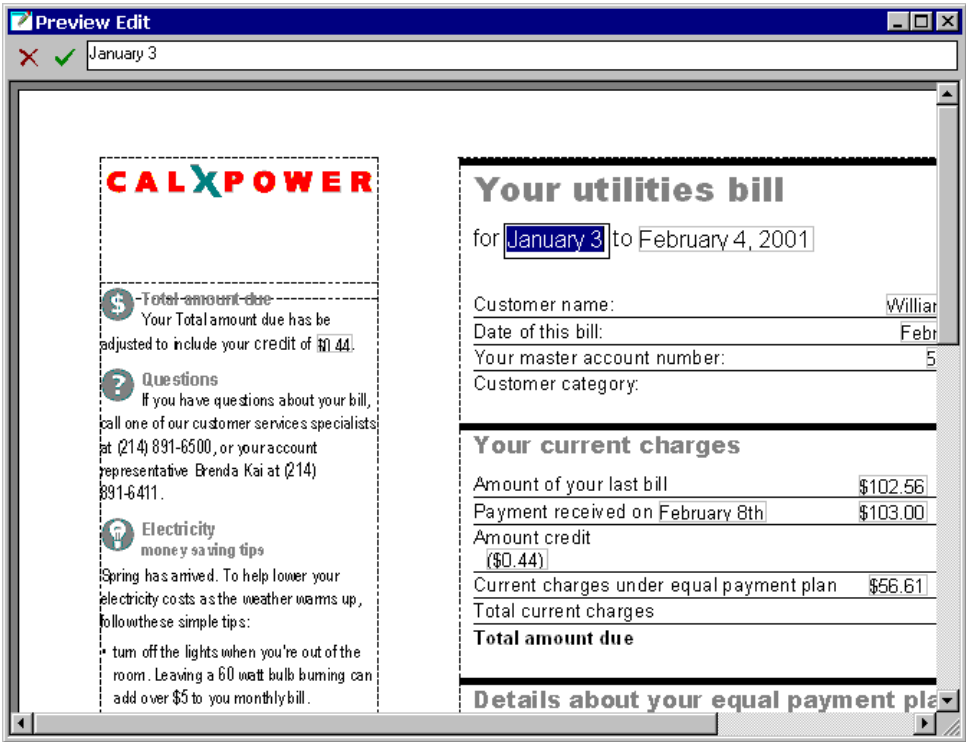
- 1 Use any popular text editor to open the *isi.ini* file, which is located in the Windows folder (e.g., C:\Windows\isi.ini).
- 2 Locate the section label for the printer you’re using with your project.
Each printer contains a corresponding [PrintDef - *nnnn*] section, where *nnnn* is the code for the target printer (e.g., [PrintDef - Meta]).
- 3 Edit the AllowDrawingOrder= value to indicate your choice of rendering:
 - 0—traditional “text on top” rendering
 - 1—“drawing order” rendering
- 4 Save the *isi.ini* file.
- 5 Stop and restart Docuflex Studio.

Preview Edit Window

The Preview Edit window displays your document as it will appear in a data entry environment (e.g., Web browser). You can use Preview Edit to correct a member that failed a validity test, or to verify the layout and functionality of the document prior to publishing it as an HTML data entry form.

TIP

The Preview and Preview Edit windows are mutually exclusive, meaning you cannot have both windows open at the same time.



You'll see the contents of your document formatted for a data entry environment. If you've enabled validation checks, any fields that fail are outlined in red and displayed in the Output bar. For more information about specifying Preview Edit settings, see "Using the Preview Edit View" on page 409.

You can enable inserting, editing, and deleting abilities to specific members so these actions are valid during Preview Edit.

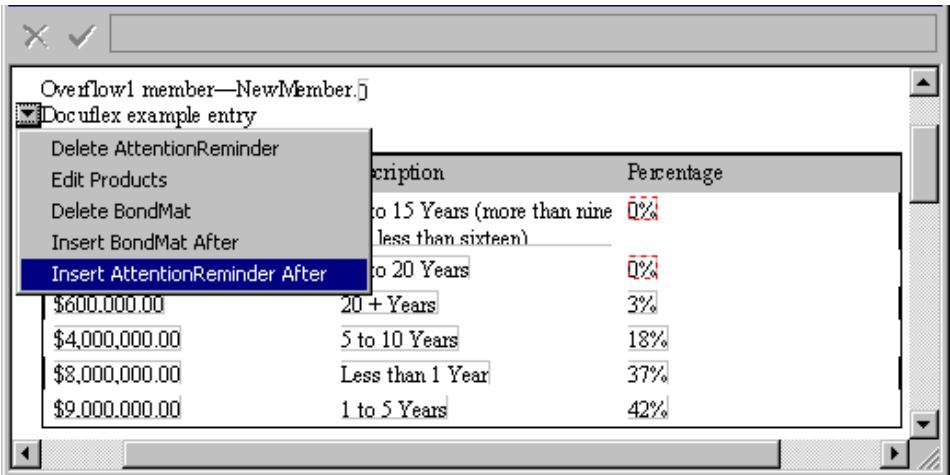
If you want to enable	Complete these properties:
Inserting table rows	DataAllowTableInsert and DataInsDelTable
Deleting table rows	DataAllowTableDelete and DataInsDelTable
Inserting members	ContentAllowInsert
Editing members	ContentAllowEdit
Deleting members	ContentAllowDelete

Since the member for which you're specifying table rows can only use a single table for its source, you can only select a single table for the DataInsDelTable.

To Display the Preview Edit Window

- 1 Select **View>Windows>Preview Edit**.

Any members that you can edit, or to which you can add optional content or table rows, will display a drop-down arrow when you place the mouse cursor on them.



For more information about optional content, see “Add Optional Content” on page 290.

- 2 Do any of the following:

To	See:
Edit a field value	“To Edit a Value” on page 215
Insert a member or table row	“To Insert a Member or Row” on page 216
Edit a member	“To Edit a Member” on page 216
Add variable data fields to a member	“To Edit a Member” on page 216
Combine multiple members into a single member	“Combining and Editing Multiple Members” on page 217
Delete a member or table row	“To Delete a Member or Row” on page 217
Enable Spell Checking for variable data	“Spell Checking Variable Data Fields” on page 218

To Edit a Value

- 1 Select the field in error and type in the correct value.
- 2 Press **ENTER** or **TAB**.
- or-
- Click .

TIP
Changing this value does not alter the member’s source (see “To Edit a Member” on page 216).

To Insert a Member or Row

- 1 Place your mouse cursor on the field so that the drop-down arrow displays.
- 2 Click on the arrow to display the pop-up menu.
- 3 Select the member or table row you want to insert.

NOTE

If you do not see the expected insertion option, it's due to the way the InsertionLocation was constructed. Docuflex Studio "filters" the options so you only see the valid ones. If an InsertionLocation was set up to be "Anywhere Before" a certain member and you're below that member in the document, you will not see that option since it does not apply (see "Add Optional Content" on page 290).

To Edit a Member

- 1 Place your mouse cursor on the field so that the drop-down arrow displays.
- 2 Click on the arrow to display the pop-up menu.
- 3 Select the edit option for the member.

Docuflex Studio displays the Source window for the current member.

TIP

If you want to add a data field to this member, you must set its ContentAllowEdit property to True.

- 4 Make any necessary changes to the member. If you add a variable data field:
 - Your choices are limited to those specified in the Transall Schema.
 - If you assigned a field style to the field, the property choices are applied.
 - Any fields you add are only valid for Preview Edit; they are not saved with the project.
- 5 Close the Source window and return to the Preview Edit window. Docuflex automatically recomposes the document and displays the results.

Combining and Editing Multiple Members

You can specify two properties, ContentAllowEdit and EditWithNext, that allow you to combine members and edit them as a single member. The eligible members must be

- of type Content Text or Text
- of StartParm Continuous or NewParagraph with SpaceAfter and SpaceBefore properties equal to zero

The new member contains all the contents of the combined members, as well as any child members. The original members are “logically” deleted, not physically.

To Combine and Edit Multiple Members

- 1 Close the Preview Edit window.
- 2 In the Component Properties of all eligible members, set the ContentAllowEdit property equal to True.
- 3 In the Component Properties of all but the last eligible member, set the EditWithNext property equal to True.

TIP

You're defining a range of members, so the last member should not have EditWithNext=True.

- 4 View the Preview Edit window.
- 5 Place your mouse cursor on any one of the fields so that the drop-down arrow displays.
- 6 Click on the arrow to display the pop-up menu.
- 7 Select the Combine & Edit Members option.
Docuflex Studio displays the Source window for the combined members.
- 8 Make any necessary changes and then return to the Preview Edit window.
Docuflex automatically recomposes the document and displays the results.

To Delete a Member or Row

- 1 Place your mouse cursor on the field so that the drop-down arrow displays.
- 2 Click on the arrow to display the pop-up menu.
- 3 Select the member or table row you want to delete.

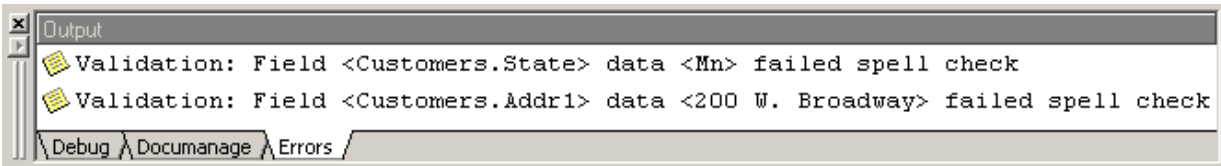
Spell Checking Variable Data Fields

Docuflex includes a spell checking tool that you can enable for variable data fields (tags) from the data file. This tool enables you to correct the spelling in the Preview Edit window or during Docuflex Data Entry in a Web browser.

To Use Spell Checking for Data Fields

- 1 In the **Document>Settings>Preview Edit** view, verify that **Show Validation Errors** is enabled (see “[To Display the Preview Edit View](#)” on page 409).
- 2 Make sure the SpellCheck property is set to True for each field for which you want to check the spelling (see “[To Enable Spell Check](#)” on page 625).

If the composition engine encounters any spelling errors, the editor displays the Output bar.



- 3 Do one of the following:

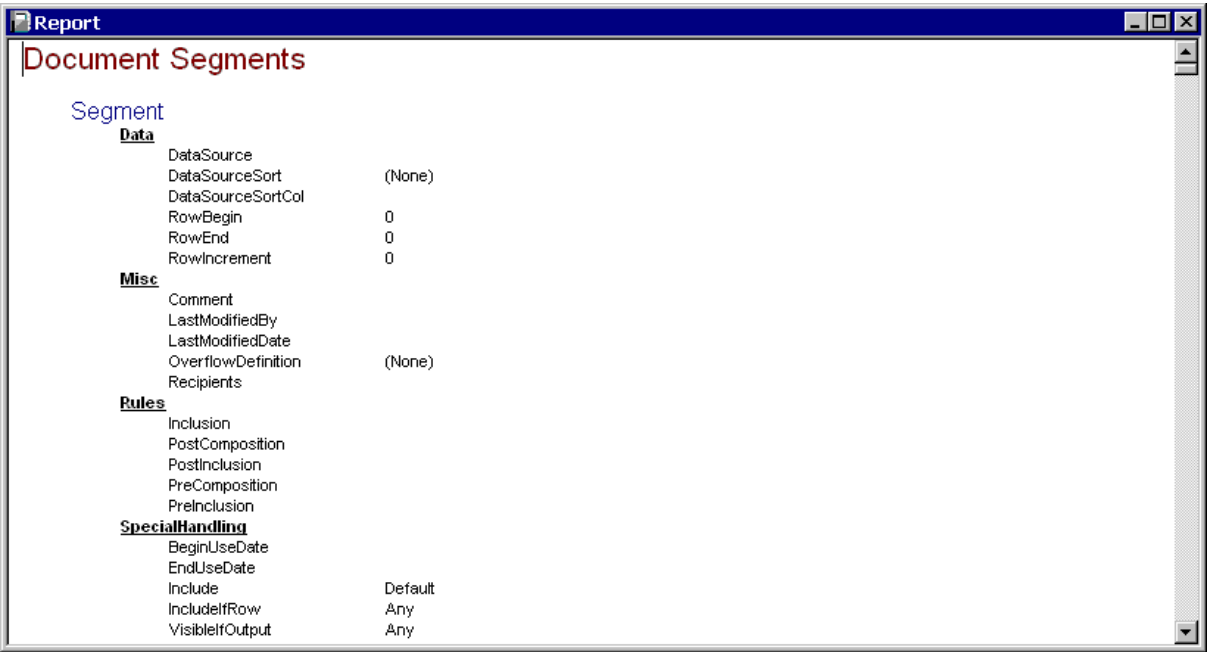
If you want to	Do this:
Manually correct the spelling	1 In the Output control bar, click a spell check error. The editor highlights the offending field. 2 Correct the spelling, and then click .
Use the automated SpellCheck feature	■ Select Tools>Check Spelling to launch the automatic spell checking feature (see “Check Spelling” on page 457).

Report Window

The Report window displays a complete listing of all the properties for each member in your document. The document components are listed in alphabetical order, not necessarily the order in which you entered them.

To Display the Report Window

- 1
- Select **View>Windows>Report**.



Each time you open the Report window, Docuflex refreshes the contents of the report to reflect any additions or changes to the report.

TIP

If you want to save the report to a file, alternate-click anywhere in the window and select **Save To File** from the pop-up context menu.

- 2
- Do any of the following:

To	Do this:
View a preview of the printed copy	See “ To Preview the Printed Document ” on page 263.
Print a copy of the report	See “ To Print a Document ” on page 262.
Change the format of the report	■ Alternate-click anywhere in the window and select the items you want to include (e.g., All Items through Customize Items) from the pop-up context menu. -or- ■ See “To Display the Report View” on page 410.
View a report of historical activity	See “ History Report ” on page 220.

History Report

Docuflex collects a historical record of changes made during a *session*, defined as the time at which you open a project in Docuflex Studio. Your user name and a date/time stamp are added to the history file.

Any time you make a change in the Component Properties grid, Docuflex adds an entry to the history file—assuming you've enabled the collection of history (see [“To Enable the History File”](#) on page 415). Docuflex also adds a history entry when you add or delete an object, such as a member, frame, or table.



The history report follows this general format:

- *session marker*—contains the date, time the session began, and the user name. The markers are listed in chronological order (i.e., the oldest session is listed at the top of the report).
- *member*—includes a parent member, if any, and the section to which it belongs in the Sections folder.
- *property*—lists the property that was changed and lists the Old and New values. If you change more than one property for the same member, the changes are also listed in chronological order.

Considerations

- If you enable history reporting, then disable it, and then re-enable it, the report probably will not be accurate. The collection of history is meant to be constantly enabled.
- If you delete a parent node, the children will not say they were deleted.
- If you change the contents of a Content Text or Content Form member, those changes will not display on the report.

Rule Editor

The Rule Editor contains the instruction code for any *processing* and *inclusion* rules you've created to affect the composition of your document. Processing rules assign a value to, or compute a value for, the member. Inclusion rules determine whether to include a member as part of your document.

In the Rule Editor, you can create three different types of rules:

- User (subroutine)—assigns a value to a variable; you do not need to specify a Return value
- User (function)—returns a value of a specific type
- Inclusion—specifies a set of qualifications that a member must satisfy before the member is included in the document

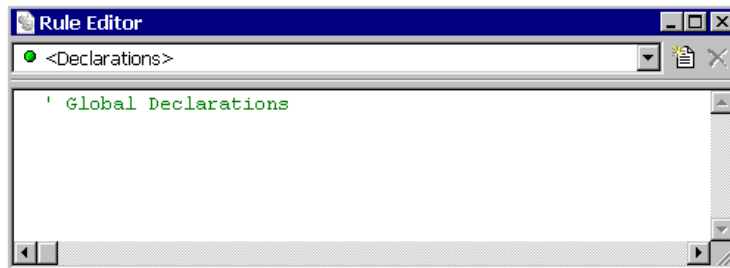
TIP

Including a comprehensive tutorial about creating functions and subroutines is beyond the scope of this guide. For specific instructions about composing these types of rules, please consult the “Working with Transall Scripts and Script Modules” chapter in the Transall documentation.

In addition, this guide lists the Docuflex-specific functions included in Docuflex (see “[Creating Subroutines](#)” on page 227).

To Display the Rule Editor

- ▶ Select **View>Windows>Rule**.



Using the Rule Editor Dialog

You can use the Rule Editor to create three different types of rules. Each type of rule requires the proper framework to operate correctly:

To create	Go to this topic
Subroutines (no return value)	“Creating Subroutines” on page 227
Functions (returns a value)	“Creating Functions” on page 230
Inclusion rules	“Creating Inclusion Rules” on page 231

TIP

In addition to the three types of rules, Docuflex includes a special class of rule called Declarations. These rules support the definition of external functions, such as those from the Windows API or other third-party tools. Declarations do not replace the functions that you can create in the Schema view of the Data bar, however.

To Create a Rule

- ▶ Click  in the Rule Editor.
- or-

See “[To Add a Rule](#)” on page 366.

For information about composing the rule, see “[To Compose a Rule](#)” on page 222.

To Compose a Rule

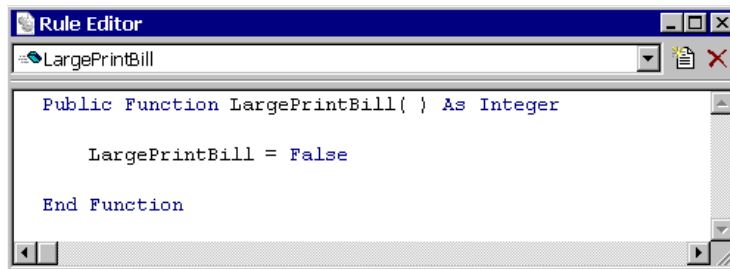
- 1 Click an insertion point in the Rule Editor and type the instruction code for your rule.

TIP

You can click-and-drag a data field from the Data Set view of the Data bar for use in your rule. These data fields are also called “variable” data fields.

For more information about composing rules, see the “Working with Transall Scripts and Script Modules” chapter in the Transall documentation.

When you’ve completed your rule, you should see something similar to the following:



- 2 Compile and save the project. See “[To Activate the Rule](#)” on page 227.

To Edit a Rule

- 1 Select the rule you want to edit from the drop-down list box.
- 2 Edit the instruction code for your rule.
- 3 Compile and save the project. See “[To Activate the Rule](#)” on page 227.

To Delete a Rule

- 1 Select the rule you want to delete from the drop-down list box.
- 2 Click  in the Rule Editor.

To Apply a Rule

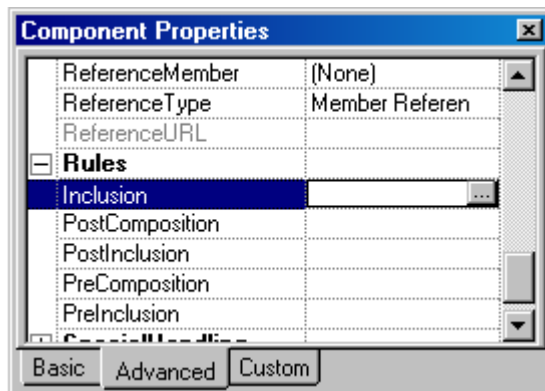
- 1 If it is not already open, activate the Component Explorer (see “[To Display the Component Explorer](#)” on page 170).
- 2 If it is not already open, you should activate the Component Properties (see “[To Display the Component Properties](#)” on page 171).
- 3 In the Component Explorer, navigate the tree listing to locate the member to which you want to apply a rule.

- 4 Select the desired member so that its properties are displayed in the Component Properties.

NOTE

You can apply an Inclusion rule to an external Reference and effect the “conditional reference inclusion” feature (see “[Conditional Reference Inclusion](#)” on page 226).

- 5 In the Component Properties, determine the point in the composition process at which you want the rule to apply (e.g., Inclusion, PostComposition, PostInclusion, PreComposition, or PreInclusion).

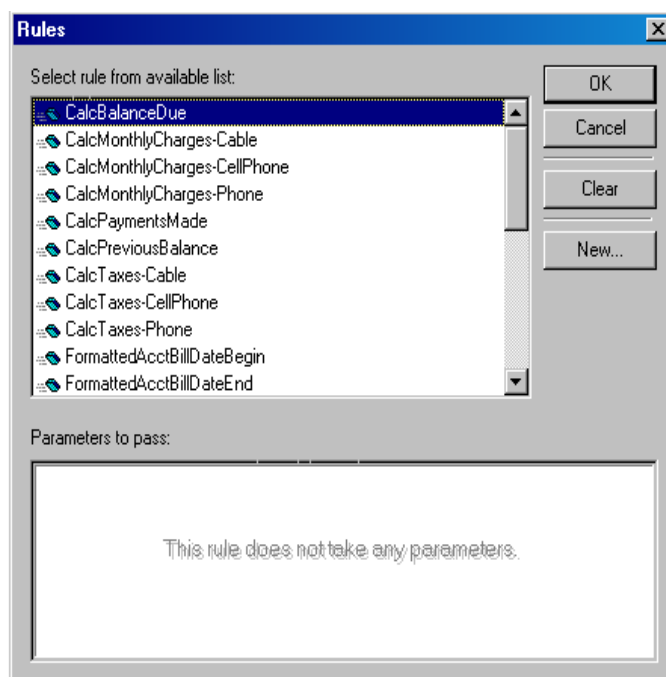


- 6 In one of the Rules fields, click .

TIP

The Rules selection box is designed to display only the applicable rules. If you’re applying inclusion rules, only those are displayed, and vice versa for processing rules.

Docuflex Studio displays the Rules selection box.



On PreInclusion, PostInclusion, PreComposition, and PostComposition properties, you can now apply User rules that incorporate parameters. On the Inclusion rule property, you can now apply User rules with return values of LONG or INTEGER incorporating parameters, plus Inclusion rules.

NOTE

If you invoke this dialog in the Inclusion rule property field, you'll see:

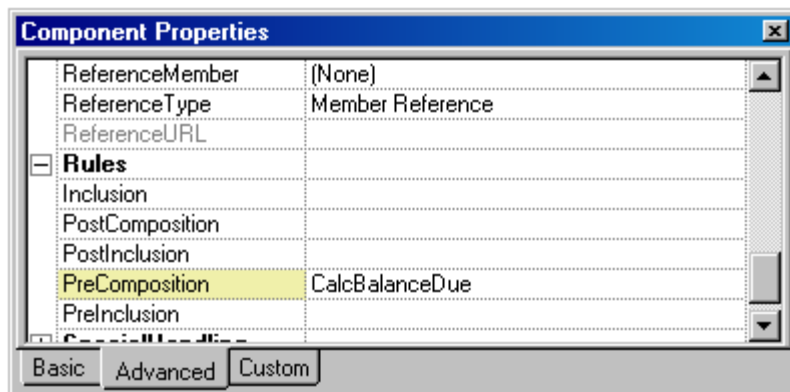
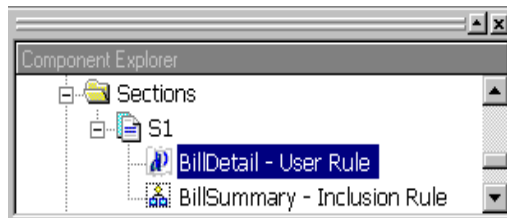
- User rules (Functions) with return types of LONG or INTEGER
- Inclusion rules

If you invoke this dialog in any of the other rule property fields, you'll see all User rules, both Functions and Subroutines.

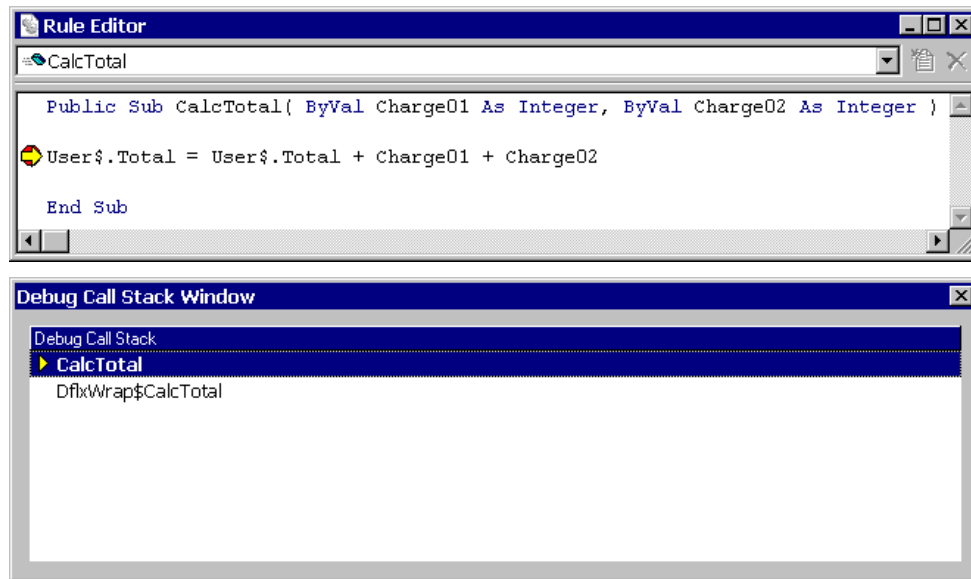
If you're going to pass parameters to a rule, you must enter a Value each time you apply the rule. You can either pass a specific value, or use the ellipsis button to invoke the Expression Builder. You must pass a value to all parameters before you can close the dialog.

- 7 Select the rule you want to apply, and then click **OK**.

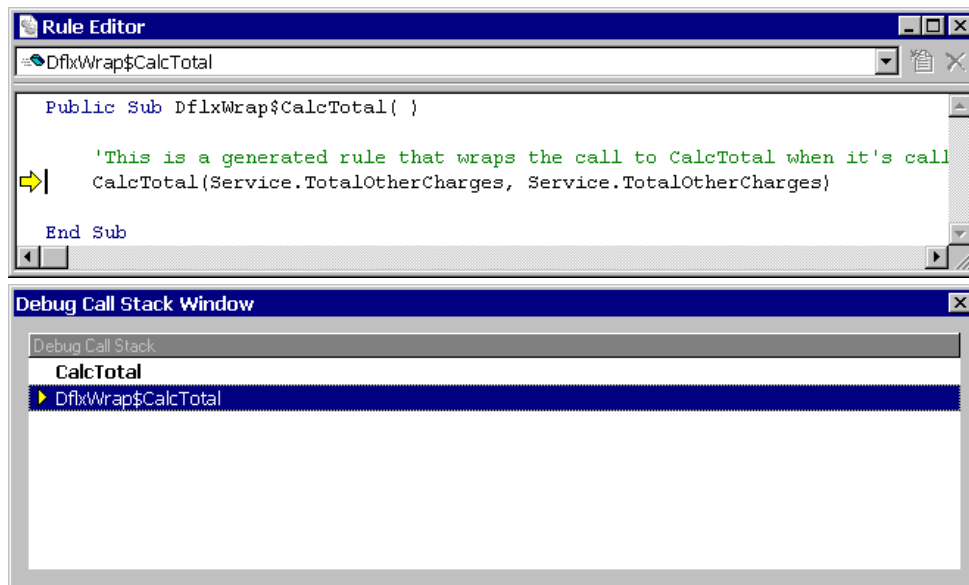
Docuflex Studio displays a unique icon on the member, depending on whether you've applied a User or Inclusion rule. Docuflex Studio also associates the rule and displays it in the appropriate Rules field in the Component Properties.



You can actually see how the rules and parameters are compiled during the debugging process. Docuflex creates a wrapper rule that calls the rule selected with the given parameter values. First, set a break point in the rule and initiate debugging. Then, notice the Call Stack and Rule Editor windows.

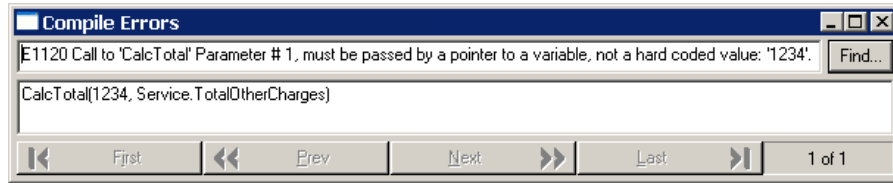


If you then double-click the name of the wrapper rule in the Call Stack window, the text for the generated rule is displayed in the Rule Editor window.



You will not ever have access to the generated rule, nor will you be able to change it; but, you can see its contents during debugging. This protection is in place so that the compiler can issue errors instead of you encountering the problem during composition.

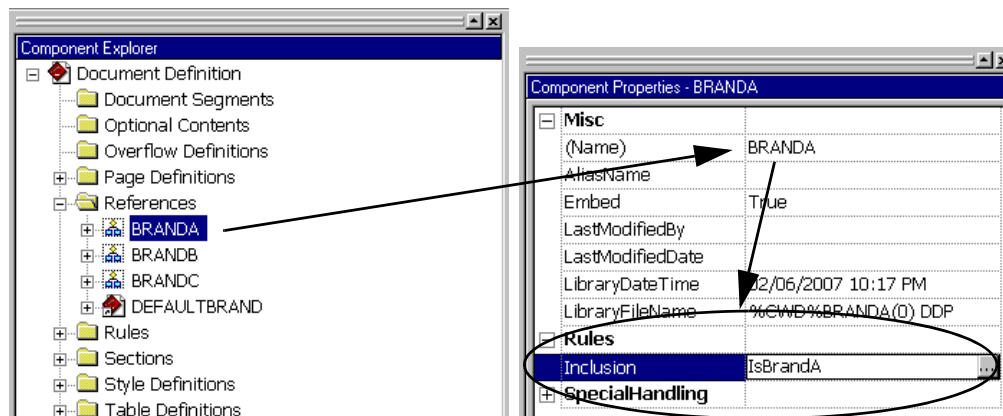
When you create a User rule with parameters, Docuflex adds the ByVal keyword to the script—allowing you to pass hardcoded values. You'll need to add this keyword manually to your current rules to pass a value like "1234." If you try passing this value to a rule that was created in an older version of Docuflex Studio, you'll receive a compiler error because ByVal did not exist in the script.



Conditional Reference Inclusion

Conditional Reference Inclusion provides the ability to dynamically change the appearance of a Docuflex document by enabling the dynamic selection of styles and content based on Inclusion rules. It is possible to choose a color and font schema (and even a logo) based on data in a dataset. A particular combination of colors, fonts, and a logo may be thought of as a "brand." The feature allows for a master project to reference multiple "brand" projects and dynamically choose one or more References that provide the desired styles and content.

References in a Docuflex project allow the selection of an Inclusion rule that determines whether the styles and content in the reference will be processed. For all practical purposes, a reference with an exclusion rule that evaluates to False will be treated as if the reference did not exist (the exception is any rules that are defined in the reference).



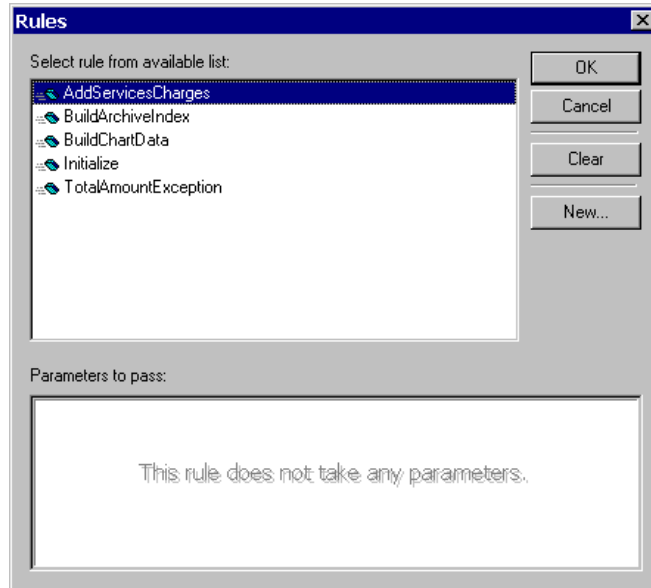
The project components affected by Inclusion rules are formatting Styles, Overflow Definitions, Segment References, and the content in Sections.

NOTE

With rules themselves, the first rule of a given name is compiled into Transall p-code at design time. There is no mechanism to dynamically recompile the rules with each transaction that may trigger the inclusion of a different set of references.

To Clear a Rule

- 1 Select the desired member so that its properties are displayed in the Component Properties.
- 2 In the Component Properties, click  in the applicable Rules field.
Docuflex Studio displays the Rules selection box.



- 3 Click **Clear**.

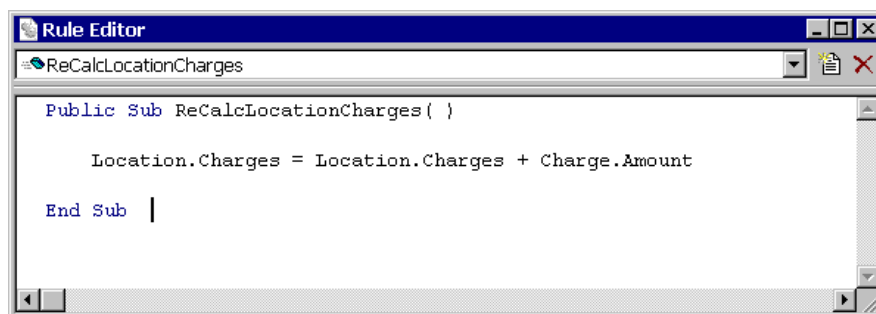
To Activate the Rule

- 1 Compile the project (see “To Compile a Project” on page 457).
- 2 Save the project (see “To Save a Project” on page 258).

Creating Subroutines

A subroutine is usually a rule that computes a value and assigns it to a variable. You then assign the rule to a member and the member uses the computed variable as its content.

The following subroutine, for example, sums the value of two variables and assigns the value to one of the variables.



Docuflex includes a set of Docuflex-specific functions that you can use when composing subroutines and functions. These functions get and set tag values, and obtain information pertaining to the data file.

Function DF\$GetFirstRow(ByVal TableName As Table) As Integer
Get the first row of a table in a schema.
Function DF\$GetLastRow(ByVal TableName As Table) As Integer
Get the last row of a table in a schema.
Function DF\$GetNextRow(ByVal TableName As Table) As Integer
Get the next row of a table in a schema.
Function DF\$GetPriorRow(ByVal TableName As Table) As Integer
Get the prior row of a table in a schema.
Function DF\$GetRowCount(ByVal TableName As Table) As Long
Get the count of rows of a table in a schema.
Function DF\$GetRowNumber(ByVal TableName As Table) As Long
Get the number of the current row, counting from the first row, in a table in a schema.
Function DF\$GetTagValue(ByVal sTagName as String) As String
Get a tag value from Docuflex
Function DF\$IsRowFirst(ByVal TableName As Table) As Integer
Test whether the current row is the first row of a table in a schema.
Function DF\$IsRowLast(ByVal TableName As Table) As Integer
Test whether the current row is the last row of a table in a schema.
Function DF\$IsRowMiddle(ByVal TableName As Table) As Integer
Test whether the current row is not the last or first row in a table in a schema.
Function DF\$IsTableEmpty(ByVal TableName As Table) As Integer
Test whether a table has rows in a schema.
Function DF\$SetCurrentRow(TableName As Table, ByVal IRowNumber As Long) As Bool
Set a table's row currency to a particular row number in a table in a schema.
Sub DF\$SortTable(ByVal ColumnName As Column [, ByVal bDesc As Integer])
Sort rows either Ascending or Descending order in a table in a schema.
Sub DF\$SortTable(ByVal ColumnName As Column)
Sort rows in Ascending order in a table in a schema.
Sub DF\$SetTagValue(ByVal sTagName as String, ByVal TagValue as Any)
Assign a tag value to Docuflex

Docuflex also includes a set of functions that you can include in processing rules to support European currency formats when formatting numeric and datetime data fields. These functions return the current override value for each symbol that can be overridden.

The following functions retrieve the values for the formatting symbol strings from the Windows registry:

Function TrnSys\$LocaleDefCurrencySym() As String
Retrieve the default Currency symbol string (e.g., \$100.90).
Function TrnSys\$LocaleDefDateSym() As String
Retrieve the default Date separator symbol string (e.g., 07/01-02).
Function TrnSys\$LocaleDefDecimalSym() As String
Retrieve the default Decimal symbol string (e.g., 100.90).
Function TrnSys\$LocaleDefDigitGroupSym() As String
Retrieve the default Digit grouping symbol string (e.g., 100,000).
Function TrnSys\$LocaleDefNegativeSym() As String
Retrieve the default Negative sign (-) symbol string (e.g., -100.90).
Function TrnSys\$LocaleDefTimeAmSym() As String
Retrieve the default AM (ante-meridian) time symbol string (e.g., 12:30 AM).
Function TrnSys\$LocaleDefTimePmSym() As String
Retrieve the default PM (post-meridian) time symbol string (e.g., 12:30 PM).
Function TrnSys\$LocaleDefTimeSym() As String
Retrieve the default Time separator symbol string (e.g., 12:30).

The following functions allow you to directly assign the values for the formatting symbol strings:

Function TrnSys\$LocaleSetCurrencySym(ByVal sValue As String) As String
Function TrnSys\$LocaleSetDateSym(ByVal sValue As String) As String
Function TrnSys\$LocaleSetDecimalSym(ByVal sValue As String) As String
Function TrnSys\$LocaleSetDigitGroupSym(ByVal sValue As String) As String
Function TrnSys\$LocaleSetNegativeSym(ByVal sValue As String) As String
Function TrnSys\$LocaleSetTimeAmSym(ByVal sValue As String) As String
Function TrnSys\$LocaleSetTimePmSym(ByVal sValue As String) As String
Function TrnSys\$LocaleSetTimeSym(ByVal sValue As String) As String

Because you can perform several tasks on a subroutine, this guide provides a separate topic for each task:

To	Go to this topic
Create a subroutine	“To Create a Rule” on page 222
Compose a subroutine	“To Compose a Rule” on page 222
Edit a subroutine	“To Edit a Rule” on page 222
Delete a subroutine	“To Delete a Rule” on page 222
Apply a subroutine	“To Apply a Rule” on page 222
Clear a subroutine	“To Clear a Rule” on page 227
Activate the subroutine	“To Activate the Rule” on page 227

Creating Functions

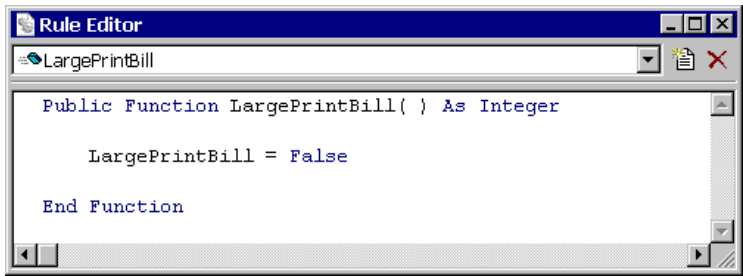
A function is a rule that assigns a value of a specific type to a variable. You then assign the rule to a member and the variable is available for use.

TIP

Functions are also available from the Add Field dialog, so you can directly use the returned value as a field in a member’s content.

Docuflex includes a set of Docuflex-specific functions that you can use when composing subroutines and functions (see “Creating Subroutines” on page 227).

The following function computes a value for the variable and returns that value in an integer format.



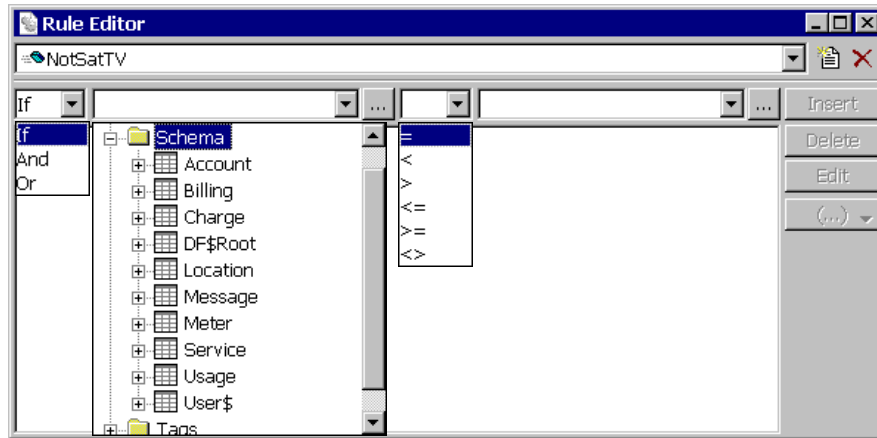
Because you can perform several tasks on a function, this guide provides a separate topic for each task:

To	Go to this topic
Create a function	“To Create a Rule” on page 222
Compose a function	“To Compose a Rule” on page 222
Edit a function	“To Edit a Rule” on page 222
Delete a function	“To Delete a Rule” on page 222
Apply a function	“To Apply a Rule” on page 222
Clear a function	“To Clear a Rule” on page 227
Save the functions and have them take effect	“To Activate the Rule” on page 227

Creating Inclusion Rules

An inclusion rule specifies one or more conditions which must be satisfied before the member, section, or page is included in your document.

The Rule Editor dialog for inclusion rules is similar to the following:



- The first box contains the logical operators (e.g., If, And, Or).
- The third box contains the *comparative operators* (e.g., =, <, >, <=, >=, <>).
- The second and fourth boxes contain the two items being compared (e.g., Expression1, Expression2).

You can specify both expressions in three different ways:

- Click on the drop-down arrow to display an expandable tree listing of available choices.
- Click in the text area and type an expression.
- Click  to the left of the combo box to display the Expression Builder dialog.

The Expression Builder displays with the content of the combo box at the time it's invoked, if any. After you complete the expression and click **OK**, the combo box displays the contents of the Expression Builder.

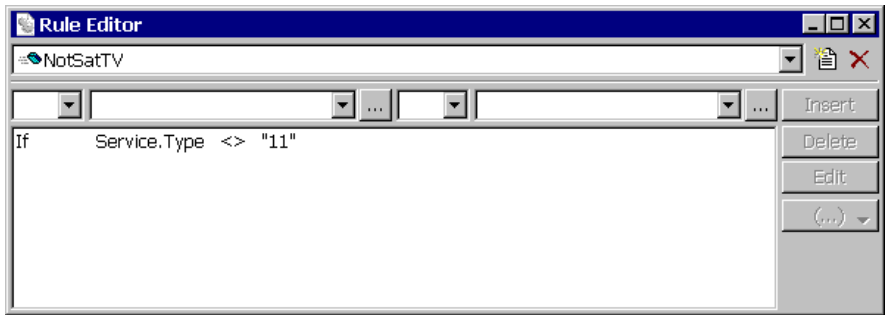
Because you can perform several tasks on an inclusion rule, this guide provides a separate topic for each task:

To	Go to this topic
Create an inclusion rule	“To Create a Rule” on page 222
Compose an inclusion rule	“To Compose an Inclusion Rule” on page 232
Edit an inclusion rule	“To Edit an Inclusion Rule” on page 232
Delete an inclusion rule	“To Delete a Rule” on page 222
Apply an inclusion rule	“To Apply a Rule” on page 222
Clear an inclusion rule	“To Clear a Rule” on page 227
Create a compound inclusion rule	“Editing Compound Rules” on page 232
Save the inclusion rules and have them take effect	“To Activate the Rule” on page 227

To Compose an Inclusion Rule

- 1 Use the drop-down list boxes, combo boxes, and **Browse** to create an inclusion rule. This rule represents a condition that the member must meet before it's considered for use in the document.

When you've built your rule, you should see something similar to the following:



- 2 Click **Insert** to save the rule.

To Edit an Inclusion Rule

- 1 In the Rule Editor, select the inclusion rule to highlight it.
- 2 Click **Edit**.
- 3 Use any of the drop-down list boxes, combo boxes, and **Browse** to make your changes.
- 4 Click **Update**.

Editing Compound Rules

Docuflex Studio contains the facility to create compound inclusion rules. Since you can only create one rule per member, you must combine rules into a compound rule if multiple criteria must be met.

- Do one of the following:

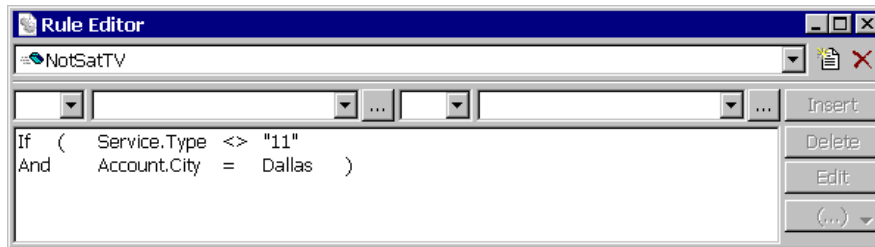
To	Do this
Assemble a compound rule	"To Assemble a Compound Rule" on page 233
Disassemble a compound rule	"To Disassemble a Compound Rule" on page 233

To Assemble a Compound Rule

- 1 Create at least two rules in the Rule Editor using the AND or OR operands (see “[To Compose an Inclusion Rule](#)” on page 232).
- 2 Use the mouse to highlight at least two rules.

- 3 Click and select **Add**.

Docuflex Studio places parentheses around the rules you’ve selected.



- 4 Compile the project to incorporate the new rule (see “[To Activate the Rule](#)” on page 227).

To Disassemble a Compound Rule

- 1 Use the mouse to highlight the rules that you want to separate.

- 2 Click and select **Remove**.

Docuflex Studio removes the parentheses from the rules.

- 3 If you need to delete one of the rules, see “[To Delete a Rule](#)” on page 222.

Source Window

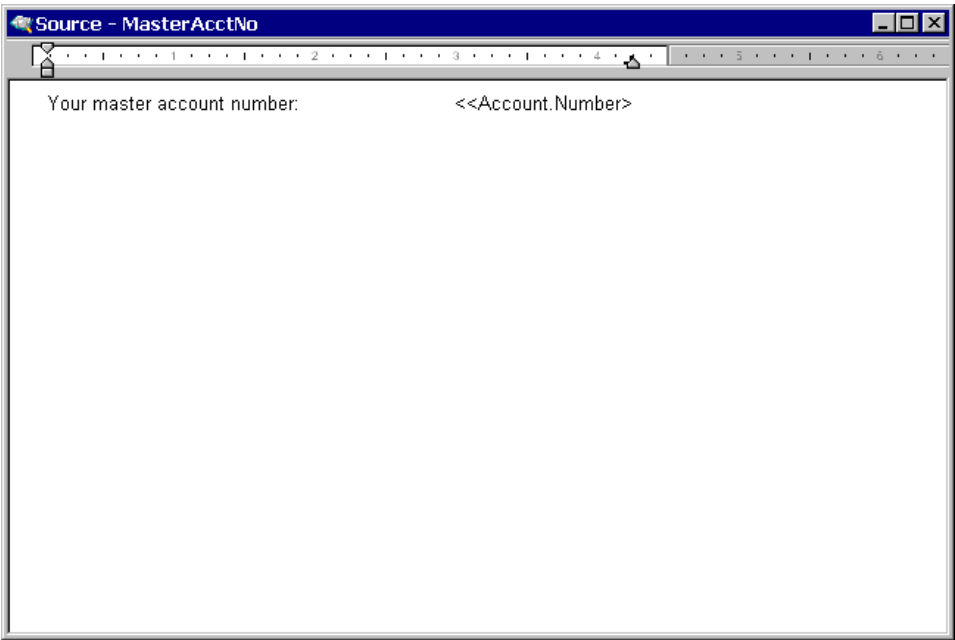
The Source window is the central location for composing and editing the content of your members. It's the location where you can type text, create a drawing object, and insert a field from the data file when you're building the contents of your member.

Another function of the Source window is to specify substitution fields from your data file that are necessary to validate the fields of a pre-composed document, such as when you include a table from Microsoft Word that you're going to populate with values from your data file.

The Source window displays a representation of the contents of a member for all ContentTypes except Segment References and Document Name From Table. You can only edit members of type Content Form, Content Text, or Text in the Source window.

To Display the Source Window

- ▶ Select **View>Windows>Source**.



Using the Source Window Dialog and Views

The Source window dialog contains two views. You specify the source for a component by completing various tasks in these views.

To specify	Go to this topic
Text, variable data fields, and formatting styles	“Using the Source View” on page 235
Replacement fields for variable data fields	“Using the Properties View” on page 241
Graphics for your documents	“Working with Drawing Objects” on page 245

Using the Source View

You can use the Source view to type text, insert variable data fields, and apply formatting styles to the contents of your document components.

TIP

If you’re viewing the source for a pre-composed document, use the page navigation icons to view additional pages (see “Go To” on page 287).

To Use the Source View

- Do any of the following:

To	Go to this topic
Enter text	“To Enter Text” on page 235
Apply a formatting style	“To Apply a Formatting Style” on page 236
Compose a Docuflex function	“Using Docuflex Functions” on page 277
Split a member at the cursor	“Split at Cursor” on page 278
Split a member at a paragraph	“Split at Paragraph” on page 278
Insert a field variable	“Field” on page 446
Perform a spelling check	“Check Spelling” on page 457

To Enter Text

- 1 Click an insertion point in the Source view.

TIP

If you need to use a tab stop while typing, you can press the Tab key. The default Tab style is applied until you select another Tab style (see “To Apply a Formatting Style” on page 236).

- 2 Type the required text.

The ruler bar, located in the top part of the view, displays an approximate rendering of your text. For a true WYSIWYG display, view the Preview window.

The Source window displays your text.

NOTE

The member’s width (i.e., the right margin of the formatting bar) is, by default, derived from the member’s frame in the Master page. Since composition has not yet taken place, Docuflex Studio can only display the frame’s width specified in the Master page because the correct Page Definition for the current member has not been determined.

To Apply a Formatting Style

- 1 Highlight the content or drawing object to which you want to apply a formatting style.
- 2 If it is not already displayed, activate the Formatting toolbar (see “[To Display the Formatting Toolbar](#)” on page 285).
- 3 Locate the appropriate drop-down list box of the formatting style you want to apply.
If necessary, you can add a style from within the Source view. First, alternate-click on the appropriate style box, then choose to add the style. The new style is “based on” the style previously displayed and is immediately applied to the highlighted content.
- 4 These list boxes are displayed from left to right, respectively; Character styles, Paragraph styles, and Tab styles.

NOTE

When you’re changing formatting styles in either a Text Box or Field Box on a member of type Content Form, the `BorderStyle`, `BorderColor`, and `BackgroundColor` are displayed on the Drawing Styles toolbar.

- 5 Select the arrow to the right of the formatting style you want to apply and choose a style from the drop-down list.

Docuflex applies the formatting style to the highlighted content. You can view the results of your action in the Preview window. Remember that you can specify the desired Character and Tab styles in the Paragraph style. Highlight the content, then select the Paragraph style and the Character and Tab styles are inherited. For more information about creating formatting styles, see “[Styles Control Bar](#)” on page 187.

TIP

You can select more than one member and choose a style to be applied to all members. If any single member contains multiple styles (e.g., multiple character styles), the application of a common style overrides any mixture of like styles.

EXAMPLE

The following table lists the paragraph and character styles for this example:

This Paragraph Style:	References this Character Style:
Normal	Normal (black text)
ParaBlue	CharBlue (blue text)
	CharRed (red text)

Suppose the text in the Source view reads as follows:

This is only a test.

Further suppose that you've applied the Normal paragraph style, which references the Normal character style.

If you change the character style of the word "only" to CharRed, you receive the following:

This is only a test.

If you then change the paragraph style to ParaBlue, you receive the following:

This is only a test.

Any part of the paragraph using the original, default character style (e.g., Normal) is changed to the new, default character style (e.g., CharBlue). The parts of the paragraph using a character style other than the default retain that character style.

If you now change the character style of the word "only" to CharBlue, you receive the following:

This is only a test.

Finally, if you change the paragraph style to Normal, you receive the following:

This is only a test.

Since all the text uses a character style of CharBlue, which is the default character style for ParaBlue, the text is changed to the Normal character style when you change the paragraph style to Normal.

The same logic illustrated by this example pertains to Tab styles.

The Character and Tab drop-down list boxes at the top of the Source view contain a **(Default)** choice. This choice resets the current style to the default style for that paragraph style.

You should be aware of the following behavior: If the cursor is at the beginning of a field, the character style drop-down list box displays the character style of the text just before the field, even though the field is highlighted. To see the character style of the field, the field must be selected (not just highlighted), or the cursor must be before any other character in the field besides the first.

Entering Unicode Text

Using locales

Locales specify a language and country pairing, such as English/Canada or French/Canada. Locales are used to help determine:

- Number formats
- Date formats
- Time formats
- Currency formats

Selecting Windows IMEs

Latin-based alphabets, such as English and Spanish, are represented by the combination of a limited set of characters, which we call letters. Because this set of letters is relatively small, for most Latin-based scripts you have a single key for each letter in the language's alphabet. For other languages, such as Chinese and Japanese, the number of characters in the language can number in the tens of thousands. To allow for users to enter these kinds of characters, typically known as East Asian (EA) characters, several Input Methods (IM) have been devised to create Input Method Editors (IME).

The source window of a Content Text member behaves similar to most word processors. To enter text of a different locale (language) just change the IME and start typing or use what entry mechanism the IME supports. If you are inserting a field, the field uses the IME currently selected. You can change the locale of the field by modifying the Locale property shown in the grid under Additional Properties. There is an item on the status bar that shows you the locale of the currently selected text. If the selected text contains multiple locales then (Unrecognized) appears on the status bar.

You can change the locale of text already been entered by choosing Format>Locale option from the menu. This option should be used sparingly since the code point of the characters will not change, only the locale. This option is mainly used to fix problems that can arise when you are copying text in from other programs. Double-clicking the locale indicator in the status bar also brings up this dialog.

Bi-directional script support

When you read this paragraph, you start at the left side of the page and read across the page to the right side. This is how English and other Latin-based writing systems are designed. These writing systems are called left-to-right (LTR) writing systems. Other writing systems, such as Arabic and Hebrew, are read in the opposite direction and are known as right-to-left (RTL) systems.

When you mix LTR and RTL text in the same paragraph, each type of text should be written in its own direction. This is known as bi-directional (BIDI) text. With bi-directional script support, you can mix scripts in the same sentence, paragraph, or on the same page, regardless of their writing direction.

The Unicode standard provides the foundation for complete BIDI support, with detailed rules as to how mixtures of left-to-right and right-to-left scripts are to be encoded and displayed. In Unicode encoding, all characters are stored in pronunciation order, and software works out which direction on the page or screen the script should be displayed.

To create a RTL paragraph, you must first set a paragraph style to RTL by changing the value of the Right-To-Left property to TRUE. Then, in the source window, choose that style for the paragraph you want to be RTL.

NOTE

Due to a limitation, consecutive LTR locales in a RTL paragraph are not displayed correctly in the source window.

For more information on the Right-To-Left property, see [“Right-To-Left”](#) on page 204.

Entering Arabic script

Arabic script is the most widely-used script formatted according to hand-written forms. Because of this, accurate formatting of text in an Arabic-based script requires correct use of both character shapes and ligatures.

The Common Objects formatter of Arabic text requires that the font selected for that text provide the full Unicode-specified values for character shapes. It also requires that any ligatures provided by the font be stored at the Unicode codepoints, as given in the Unicode 5.1 specification. Arabic shapes and ligatures are defined as Unicode codepoints from U+0600 to U+06FF, U+0750 to U+076D, U+FB50 to U+FD C7, and U+FE70 to U+FEFC.

Some Open Type fonts (or TrueType with Open Type extensions) contain shaping or ligature information in their internal OpenType tables. This information is not currently used, because of the need for device or font-implementation independence.

When Arabic-script text is formatted, all possible ligatures provided by Unicode codepoints within the active font are placed in the text. Because of this, text may change dramatically in length when its font is changed. For example, changing from Arial Unicode MS to Traditional Arabic causes changes in paragraph length because of the number and shape of ligatures provided by the Traditional Arabic font.

In paragraphs that mix right-to-left and left-to-right text, the spaces at the boundaries between the two may differ slightly between the Source and Preview windows. This can be caused by locales or fonts of the space-characters. Edit the Source window text to provide the result you want in the Preview window.

The way fonts appear in the Source and Preview windows

The Microsoft control on which the Source window is based relies on the Windows GDI to make sure no input character (if at all possible) goes unrendered. So, changing from one IME to another without changing to a character style whose font contains the characters required by the new IME will result in Windows going through the installed fonts and substituting a font in which to render those characters missing from the currently active font. Windows does not tell you it has done this. It simply outputs the character form.

On the Preview window, Docuflex tries to avoid these overrides so any character unrepresentable in the current font is shown as a rectangle.

To avoid Windows substituting fonts and the Preview window showing rectangles, create a character style whose font contains all of the characters required by the language of the new IME.

Selecting a locale in the Source window

The font-selection mechanism of the Microsoft control on which the Source window is based binds the locales of text tightly to the character sets supported by the current font. Because of this, Windows may not let you change the locale associated with some text if the locale change needed is conceptually rather wide.

For example, if the selected text is Romanian, but the displayed locale is French, the locale can be changed to Romanian; but if the selection contains CJK ideographs, its locale cannot be changed from a Far Eastern one to a Western one. Punctuation can usually have its locale changed, but this is not always allowed, because of the font/character set binding.

Formatting Differences for Specific Locales

The following topics summarize the formatting differences for various locales we have encountered.

For all locales

Text copied into the Source window that has characters outside the range supported by the font in the currently selected character style may appear with font substitutions for those particular characters.

In the Preview window, those characters appear as the missing glyph character, which is usually a rectangle. For example, if the current character style has Times New Roman selected as its font and you paste a selection of Chinese hanzi into text with that format, the Windows GDI tells the Source window to display those characters in a different font (without notifying the Source window itself), but the Preview window shows rectangles because the Times New Roman font does not contain definitions for Chinese characters and is thus unsuitable for use with Chinese text.

You should always select a character style whose font contains definitions for the characters of the language you want to use.

Korean

Line-breaking in Korean text follows the patterns documented in the Unicode Standard Annex #14 ("Line Breaking Properties"). That is, when a paragraph is designated as being in the Korean locale and its alignment is not justified, lines will be broken at space-characters, just as for Western text. When such a paragraph's alignment is justified, line-breaks are made using East Asian style rules, based on standard no-break-before and no-break-after rules for Korean.

This may or may not agree with the formatting displayed in the Source window. It also may not be in agreement with the way Microsoft Word performs line-breaks when paragraphs are set to justified alignment, although left-aligned paragraph behavior will be in agreement.

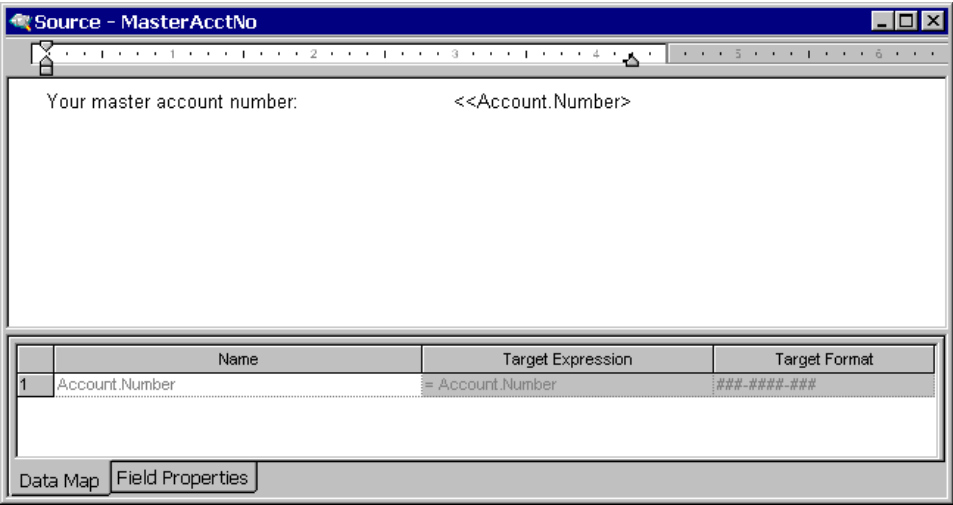
Using the Properties View

The Properties view displays at the bottom of the Source window. You can

- specify the fields from the data file that should be substituted for the merge fields of the incoming component (e.g., RTF or DCD).
- customize the Field Properties of variable data tags contained within the member

To Display the Properties View

- ▶ If the Properties view is not already displayed in the Source window, click **Show Additional Properties** on the Component menu.
-or-
Right-click anywhere in the Source view and select **Show Additional Properties** on the context menu.
- The Properties view displays.



Using the Properties View and Tabs

The Properties view contains two view. You can assign and format the fields to receive incoming data in these views.

To Use a Properties View

- ▶ Do any of the following:

To	Go to this topic
Map incoming data fields to their equivalents	“Using the Data Map View” on page 241
Specify Field Properties	“Using the Field Properties View” on page 244

Using the Data Map View

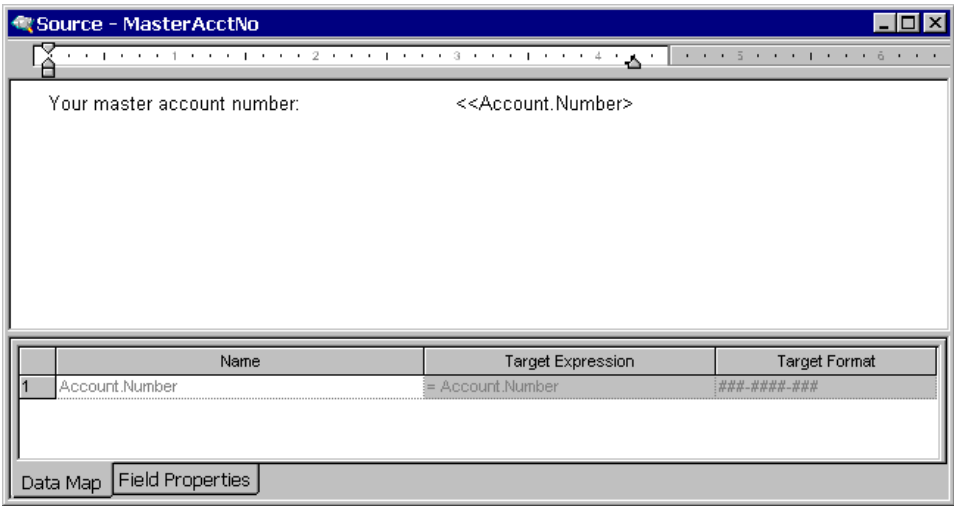
You’ll most likely use the Data Map view when you’re using an external document as a “template” for a part of your project.

EXAMPLE

Suppose you create a table with “merge” fields in Microsoft Word and you want to use that table in your document. You need to tell Docuflex which fields in your Docuflex data file to use when populating the merge fields in the table.

To Display the Data Map

- ▶ If the Data Map view is not displayed in the Properties view, click the **Data Map** tab.



Because you can specify many different fields and formats on the Data Map view, this guide provides a separate topic for each task:

If you need to	Go to
Assign a field or formula as the Target Expression	“To Specify a Data File Field or Formula as a Target Expression” on page 242
Clear or delete a Target Expression	“To Delete a Target Expression” on page 242
Specify a Target Format	“Specifying a Target Format” on page 243

To Specify a Data File Field or Formula as a Target Expression

- 1 In the Target Expression field, click  to display the Expression Builder.
-or-
Open the Data bar, navigate to the correct row in the data file, and click-and-drag the row to the Target Expression field.
- 2 If you’re using the Expression Builder, select a data file field or create a formula (see [“Expression Builder” on page 275](#)).
- 3 If you’re using the Expression Builder, click **OK** to assign the data field or formula as the Target Expression.

The value contained in this field or expression is assigned to the field named in the imported component.

To Delete a Target Expression

- ▶ Use the mouse to highlight the entire Target Expression field, and then press **DELETE**.

Specifying a Target Format

You can use the Target Format field to enter a formatting “mask” that forces Docuflex Studio to display a date or numeric field in a certain manner.

If you want this result:	Type this string:
January 1, 2000	mmm d, yyyy
01/01/2000	mm/dd/yyyy
1/1/2000	m/d/yyyy
Short Date	dddd
Long Date	dddddd
#,##0;;zero>null	#,##0;;zero>null
General	General
Standard	#,##0.00
Fixed	#0.00
Currency	\$#,##0.00 or \$@,@@0.00

You can also format string data, but not numbers nor dates, with the following masks:

If you want to:	Type this symbol:
Display a character or a space	@
Display a character or else nothing	&
Force lower case	<
Force upper case	>
Cause the string format to be filled from left to right, instead of from right to left	!

In addition, you can apply any of the included formatting styles to present better your information in the document (see “[Selecting the Field Format](#)” on page 452).

To Specify a Target Format

- 1 Click the Target Format field of the field whose output you want to format.
- 2 Type in the formatting string.

EXAMPLE

If a date field is displayed as 20000622, you can use a formatting mask of mm/dd/yy to reformat the date to be displayed as 06/22/00.

If a numeric field is displayed as 3890.7216, you can use a formatting mask of #,##0.00 to reformat the amount to be displayed as 3,890.72.

If a numeric field might be either positive or negative, depending on the situation, you can combine masks to take this result into account (e.g., ###,##0.00;(###,##0.00).

- 3 Press **ENTER**.

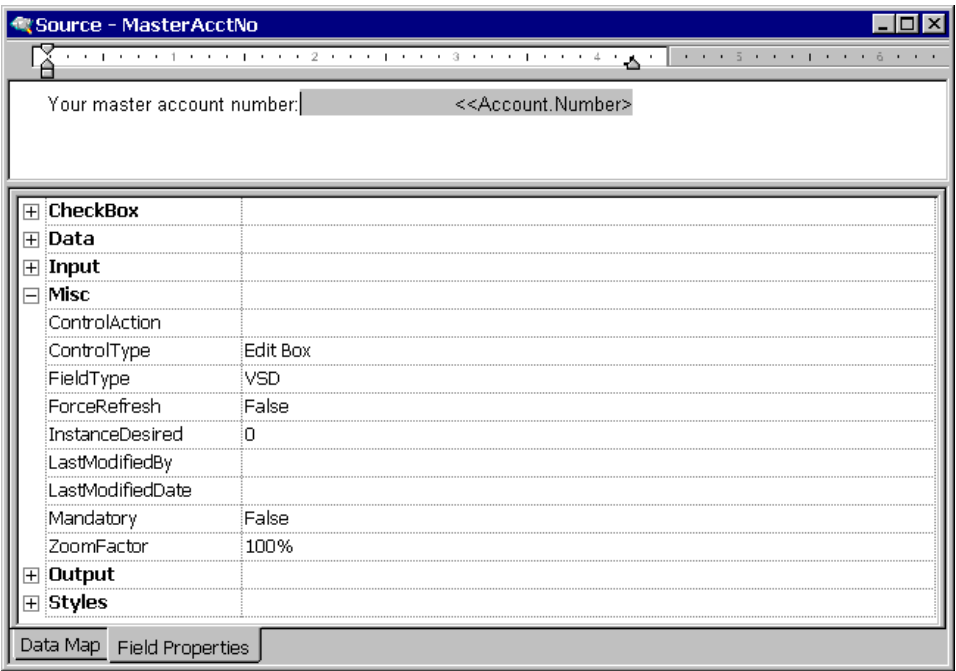
Docuflex Studio displays the field data according to the format mask you entered.

Using the Field Properties View

Use the Field Properties view to customize the behavior of the variable data tags in your member. These properties are very similar to Member properties in that you can indicate values for the properties in specific categories.

To Display the Field Properties

- ▶ If the Field Properties view is not displayed in the Properties view, click the **Field Properties** tab.



TIP

You can use the BasedOn field to set the values of the Field Properties equal to the values stored in a Field Style (a collection of Field Properties). If you change a value here, it only changes for this instance; the value stored in the Field Style remains unchanged.

Because you can specify many different categories of properties on the Field Properties view, this guide provides a separate topic for each task:

If you need to	Go to
Edit the value of a property	“To Edit the Value of a Property” on page 175
View a listing of all properties	“Using the Field Styles View” on page 193

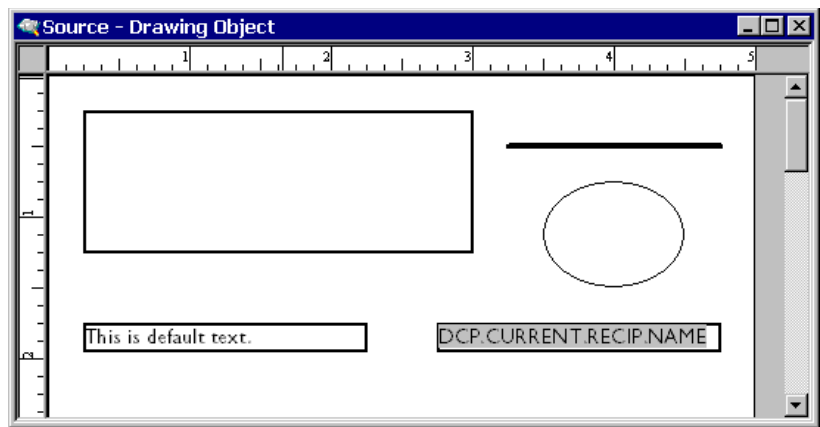
Working with Drawing Objects

WARNING!

Members including drawing objects are required to use a member type of Content Form. Docuflex Studio contains a drawing feature for incorporating graphics and text in a single member. This documentation and the on-line help system refer to graphics and text as “drawing objects.” With the Content Form member type, you can create a member containing any or all of the following drawing objects:

- Lines (horizontal, vertical, diagonal)
- Ellipses (circles, ovals)
- Rectangles (squares, rectangles, rounded rectangles)
- Text Boxes with formatted text and variable data tags
- Field Boxes with schema data fields for variable data

The Source window alters its display when the selected member is of type Content Form.



The Source window displays horizontal and vertical rulers, and the working area within the rulers is called the canvas. Each drawing object has an invisible “bounding box” surrounding it. When you select a drawing object, “handles” display on the corners and in the center of the sides of the bounding box. Handles only display at the ends of a selected line.

Because you can draw and edit drawing objects in the Source window, this guide provides a separate topic for each task:

To	Go to this topic
Create a drawing object	“To Create Drawing Objects” on page 246
Manipulating drawing objects	“Manipulating Drawing Objects” on page 248

Creating Drawing Objects

You can draw any of several drawing objects in the Source window, using the mouse as a starting point and then refining the dimensions with the Component Properties. The procedure for drawing drawing objects is similar for all types:

- Click an insertion point in the Source window.
- Select the type of drawing object you want to create from the Draw menu.
-or-
Click the desired icon on the Drawing Toolbar.
- Determine the location of the top corner of the drawing object.
- At the top corner, press and hold the left mouse button.
- Drag the mouse to the opposite bottom corner of the drawing object.
- Release the mouse button to create the drawing object.

To Create Drawing Objects

- Do any of the following:

To	Go to this topic
Draw an ellipse	“To Draw an Ellipse” on page 246
Draw a field box for inserting a variable data field	“To Draw a Field Box” on page 246
Draw a line	“To Draw a Line” on page 247
Draw a rectangle	“To Draw a Rectangle” on page 247
Draw a text box for inserting both text and variable data fields	“To Draw a Text Box” on page 247

To Draw an Ellipse

- 1 Click an insertion point anywhere in the Source window.
- 2 Select **Draw>Ellipse**.
-or-
Click  on the Drawing Toolbar.
- 3 Draw an oval or circle. The drawing feature defaults to an oval; if you want to draw a circle, depress **SHIFT** while dragging the mouse.

To Draw a Field Box

- 1 Click an insertion point anywhere in the Source window.
- 2 Select **Draw>Field Box**.
-or-
Click  on the Drawing Toolbar.
- 3 Draw the field box.
Docuflex Studio displays the Field Properties dialog.
- 4 Compose the contents of the field (see [“Field” on page 446](#)).

TIP

Double-clicking on a Field Box allows you to edit its contents.

You can set two component properties that automatically resize the box to better accommodate its contents (see [AutoSizeHorizontal](#) and [AutoSizeVertical](#)).

The Docuflex composition engine displays a true representation of what will be composed. This improved linkage between what you're keying in and what's to be composed is due to Docuflex performing the actual composition (versus the generic Windows editor). The result is more editing and display accuracy than before.

To Draw a Line

- 1 Click an insertion point anywhere in the Source window.
- 2 Select **Draw>Line**.
-or-
Click  on the Drawing Toolbar.
- 3 Draw a straight line. The drawing feature defaults to a line of any angle; if you want to draw a horizontal, vertical, or diagonal line, depress **SHIFT** while dragging the mouse.

To Draw a Rectangle

- 1 Click an insertion point anywhere in the Source window.
- 2 Select **Draw>Rectangle**.
-or-
Click  on the Drawing Toolbar.
- 3 Draw a rectangle or square. The drawing feature defaults to a rectangle; if you want to draw a square, depress **SHIFT** while dragging the mouse.

TIP

To create a rectangle with rounded corners, a “rounded rectangle,” you must edit the [EllipseHeight](#) and [EllipseWidth](#) component properties.

To Draw a Text Box

- 1 Click an insertion point in the Source window.
- 2 Select **Draw>Text Box**.
-or-
Click  on the Drawing Toolbar.
- 3 Draw the text box.
- 4 Compose the contents of the text box as you would a Content Text member (see “[Using the Source View](#)” on page 235).

TIP

Double-clicking on a Text Box allows you to edit its contents.

You can set two component properties that automatically resize the box to better accommodate its contents (see [AutoResizeHorizontal](#) and [AutoResizeVertical](#)).

The Docuflex composition engine displays a true representation of what will be composed. This improved linkage between what you're keying in and what's to be composed is due to Docuflex performing the actual composition (versus the generic Windows editor). The result is more editing and display accuracy than before.

Manipulating Drawing Objects

Once drawing objects are present on the Source window, you can perform a variety of manipulation actions, including moving, resizing, and deleting.

TIP

Where appropriate, you can select multiple drawing objects by using **SHIFT+CLICK** for additional objects.

To Manipulate Drawing Objects

► Do any of the following:

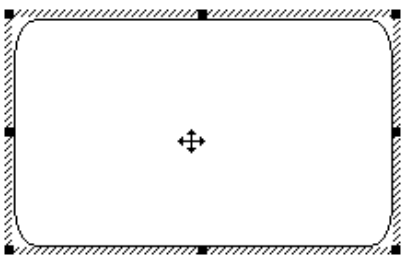
To	Go to this topic
Select a drawing object	“To Select a Drawing Object” on page 248
Move a drawing object	“To Move a Drawing Object” on page 248
Resize a drawing object	“To Resize a Drawing Object” on page 249
Duplicate a drawing object	“To Delete a Drawing Object” on page 250
Delete a drawing object	“To Delete a Drawing Object” on page 250
Edit drawing object properties	“To Edit the Value of a Property” on page 175 ■ -or- “To Apply a Formatting Style” on page 236
Select the next drawing object on a Content Form member	“To Select the Next Drawing Object” on page 250
Alter the format	“Format Menu” on page 439

To Select a Drawing Object

- 1 In the Component Explorer, select a member containing a drawing object (see [“Component Explorer”](#) on page 169).
- 2 View the Source window (see [“Source Window”](#) on page 234).
- 3 Click an insertion point anywhere in the Source window.
- 4 Select **Draw>Select**.
-or-
Click  on the Drawing Toolbar.
- 5 Click the drawing object you want to edit.

To Move a Drawing Object

- 1 Click the drawing object you want to move.
The bounding box displays and the pointer changes to a four-headed arrow.



- 2

 Anywhere inside the bounding box, press and hold the left mouse button.
- 3

 Drag the mouse to the new location.
- 4

 Release the mouse button to complete the move.

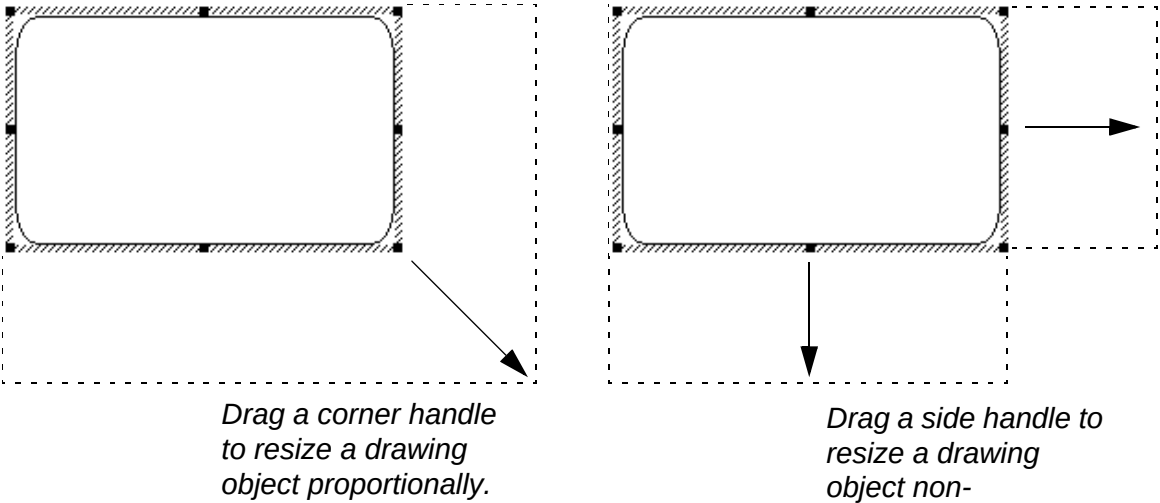
You can fine-tune the position by editing the component properties (see “To Edit the Value of a Property” on page 175).

To Resize a Drawing Object

- 1

 Click the drawing object you want to resize.

The bounding box displays with handles.



- 2

 Do one of the following:

If you want to resize the drawing object	Do this:
Proportionally	■ Place the pointer on a corner handle. The pointer changes to a double-headed diagonal arrow.
Horizontally	■ Place the pointer on a left or right side handle. The pointer changes to a double-headed horizontal arrow.
Vertically	■ Place the pointer on a top or bottom side handle. The pointer changes to a double-headed vertical arrow.

- 3

 Press and hold the left mouse button.
- 4

 Drag the mouse to the new coordinates.
- 5

 Release the mouse button to complete the action.

You can fine-tune the position by editing the component properties (see “To Edit the Value of a Property” on page 175).

To Duplicate a Drawing Object

- 1 Click the drawing object(s) you want to duplicate.
- 2 Select **Edit>Duplicate**.

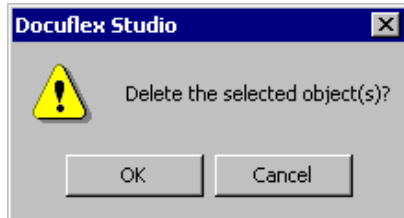
The new object is copied below and to the right of the original object. You can also use the Windows Clipboard to copy and paste drawing objects between projects, and between Docuflex Studio and the Stylized Content Editor.

TIP

You can also use press **CTRL** while dragging the object(s) to make a copy.

To Delete a Drawing Object

- 1 Click the drawing object you want to delete.
- 2 Click  on the Standard Toolbar.
-or-
Press **DELETE** and you're prompted to confirm your decision.



- 3 Click **OK** to delete the drawing object; otherwise, click **Cancel**.

To Select the Next Drawing Object

- 1 In the Component Explorer, select a member containing a drawing object (see “[Component Explorer](#)” on page 169).
- 2 View the Source window (see “[Source Window](#)” on page 234).
- 3 Select a drawing object.
- 4 Press **TAB** to select the next drawing object.
-or-
Select **Draw>Select Next Object**.

The Editor selects the next drawing object in the member. If you've select the member, but not a specific object, the first object is selected.

NOTE

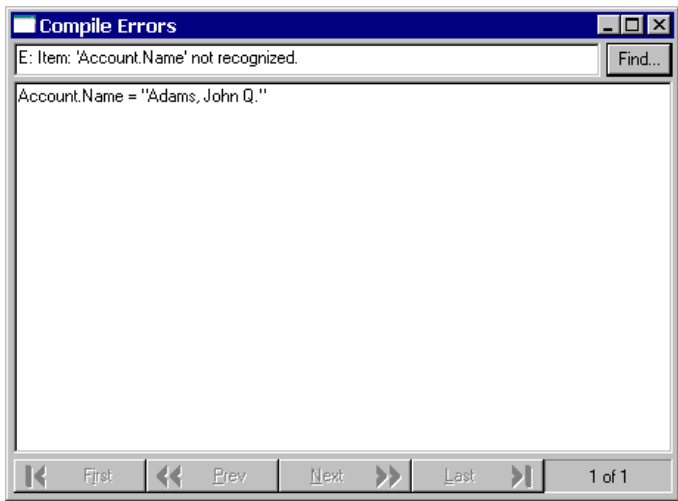
You can use the TAB key to cycle the selection through all the objects without stopping on a text box. If the next object to be selected is a text box, you cannot type any text until you click in the box. If you're currently within a text box, pressing the TAB key adds a tab stop instead of selecting the next object.

Compile Errors Window

The Compile Errors window displays any error messages generated by the composition engine as your project is compiled. When you create a new User Data variable or add a Rule, you must compile the project to incorporate the new components into your project. If the composition engine encounters a syntax error or other invalid formula, Docuflex generates an appropriate error message.

To Display the Compile Errors Window

- ▶ Select **View>Compile Errors**.



To Use the Compile Errors Window

- 1 Do any of the following:

To	Do this
View the first message in the list	Click First .
Go to the previous message	Click Prev .
View the next message in the list	Click Next .
Go to the last message	Click Last .
Find the source of the error	Click Find .

The Compile Errors window displays the appropriate error message and its position in relation to the other message(s) (e.g., 1 of 10).

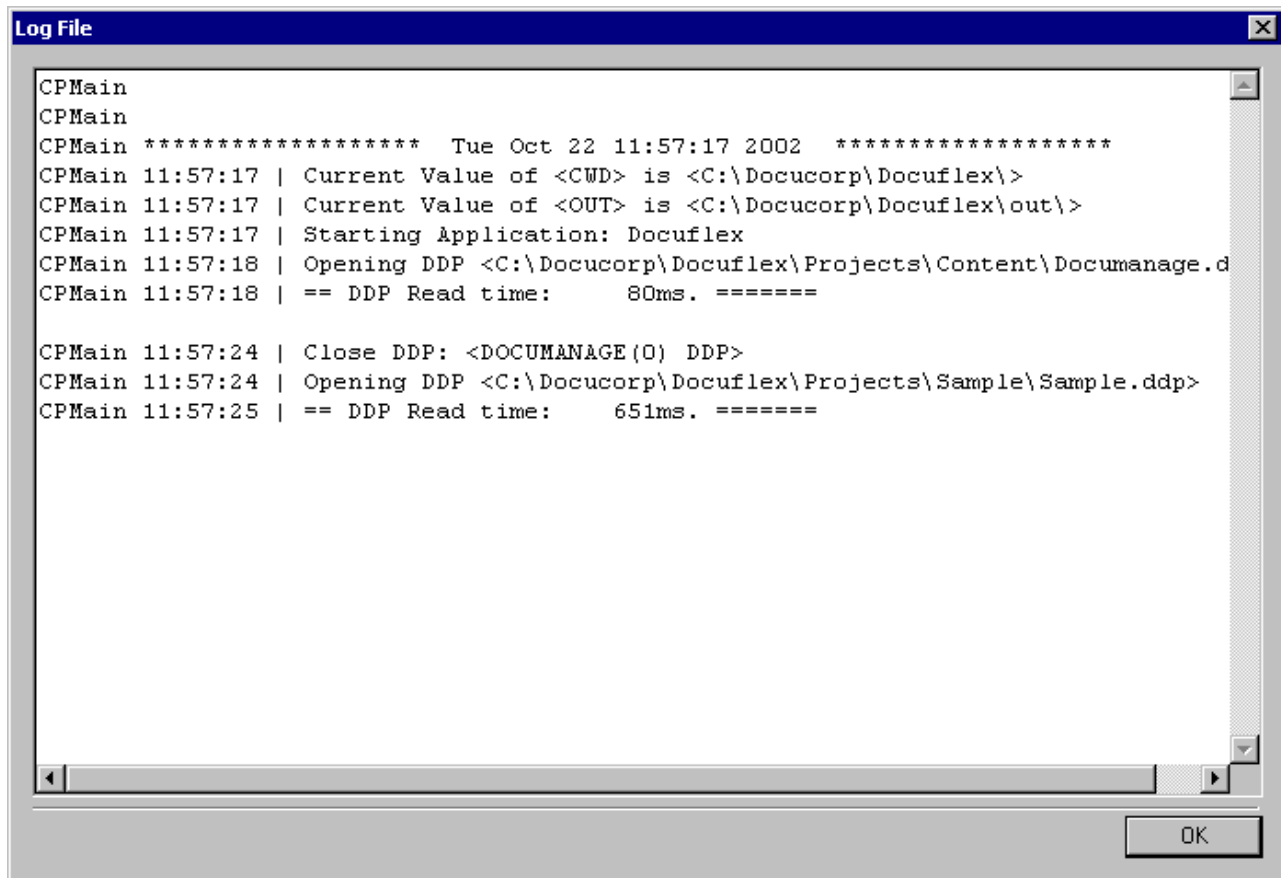
- 2 Use the error message(s) as a basis for correcting your rule (see “[To Edit an Inclusion Rule](#)” on page 232 or “[To Edit a Rule](#)” on page 222).

Log File Window

The Log File window displays a complete listing of all the processing steps that have been carried out in the course of maintaining the project. This information is helpful in troubleshooting any problems with either the document or the project in general.

To Display the Log File Window

- 1 Select **View>Log File**.



- 2 When you're finished with the Log File window, click **OK** to close the window.

The location of the Log File is specified in the LOG_FILE entry of the [Docuflex] section in the *docuflex.dde* environment file.

Menu Options

Docuflex Studio comprises the following menus:

- [“File Menu” on page 254](#)
- [“Edit Menu” on page 266](#)
- [“View Menu” on page 279](#)
- [“Document Menu” on page 289](#)
- [“Data Menu” on page 420](#)
- [“Debug Menu” on page 432](#)
- [“Draw Menu” on page 439](#)
- [“Format Menu” on page 439](#)
- [“Insert Menu” on page 446](#)
- [“Tools Menu” on page 457](#)
- [“Window Menu” on page 503](#)
- [“Help Menu” on page 505](#)

File Menu

The File menu comprises the following menu options:

If you want to	See
Create a project	“New” on page 254
Open an existing project	“Open” on page 257
Close the current project without exiting	“Close” on page 258
Save the project	“Save” on page 258
Save the project under a different name or as a document template	“Save As” on page 259
Save the document displayed in the Preview window to a file	“Save Preview As” on page 260
Export all or some of the project specifications to a comma-delimited (CSV) or XML file	“Export” on page 261
Import an XML file as the structure of the project	“Import” on page 262
Return the document, unchanged, to Documanage	“Undo Check Out” on page 262
Print the document created by the current project	“Print” on page 262
Preview the printed document	“Print Preview” on page 263
Set up the printer for the current project	“Print Setup” on page 265
Exit Docuflex Studio	“Exit” on page 265

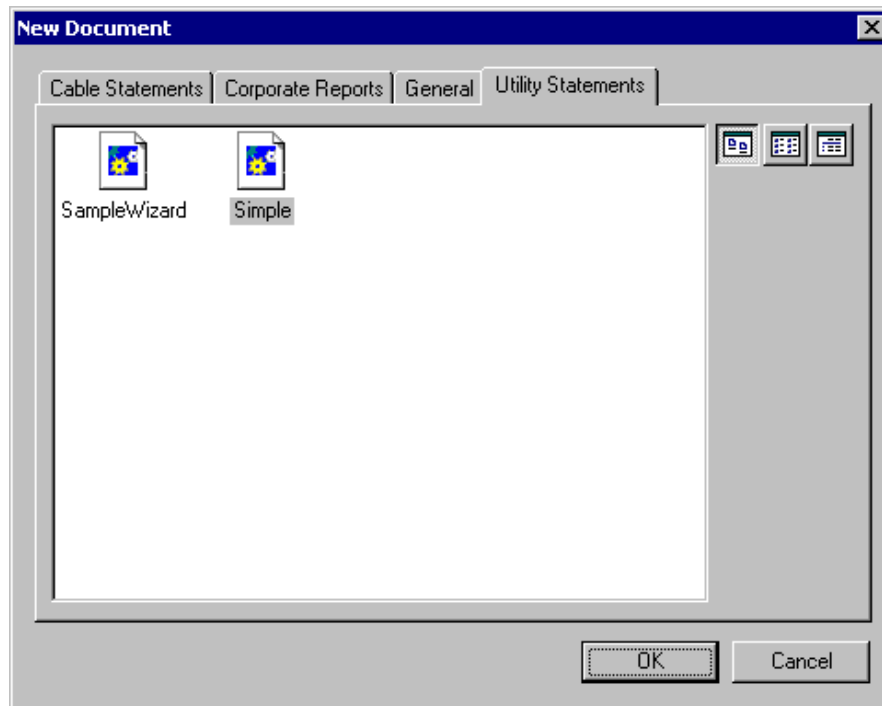
New

Use the New command to create a Docuflex Studio project.

To Create a Project

- 1 Select **File>New**.
-or-
Click  in the Standard Toolbar.

The New Document dialog box displays.

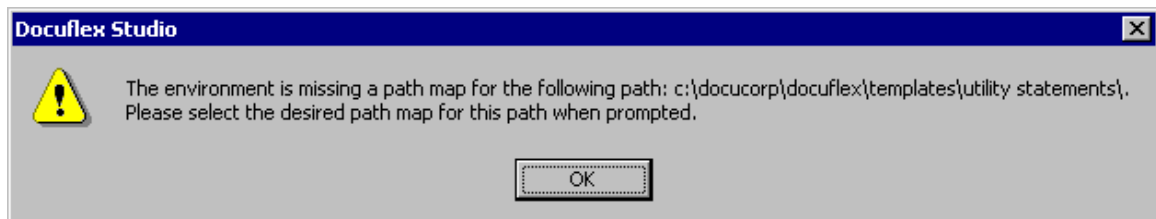


TIP

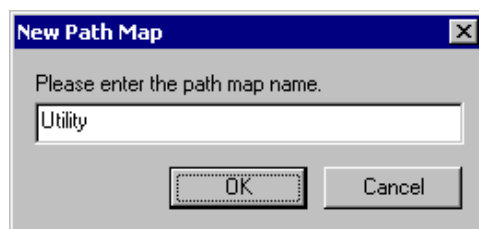
If necessary, you can create subdirectories beneath the default Templates directory to categorize special-purpose templates more effectively. The New Document dialog recognizes these unique folders (directories) and represents them with separate tabs at the top of the dialog.

- 2 Select the template icon for the type of document you want to create, and then click **OK**.

If the location of the template you select is not identified by a path map, Docuflex Studio displays an informational message to that effect.



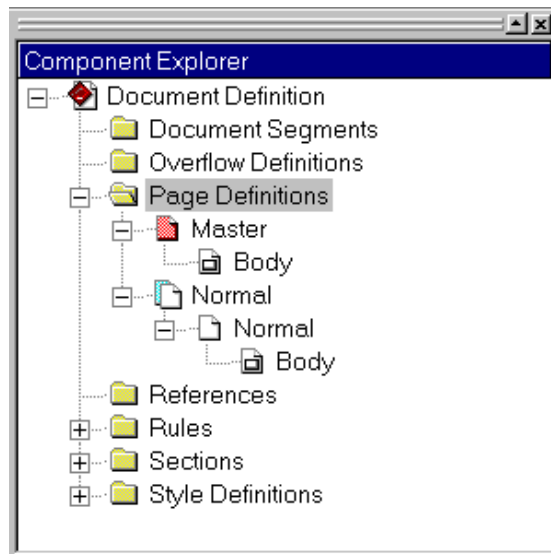
- 3 Click **OK** and the New Path Map dialog is displayed.



- 4 Type a name for this path map and click **OK**.
A new path map is added to the environment.

- 5 Click **Close** to display the new document.

By navigating the tabs of the Component Explorer, you can view the default structural components for the new document.



For more information, see “[Component Explorer](#)” on page 169.

Open

Use the Open command to open an existing Docuflex Studio project.

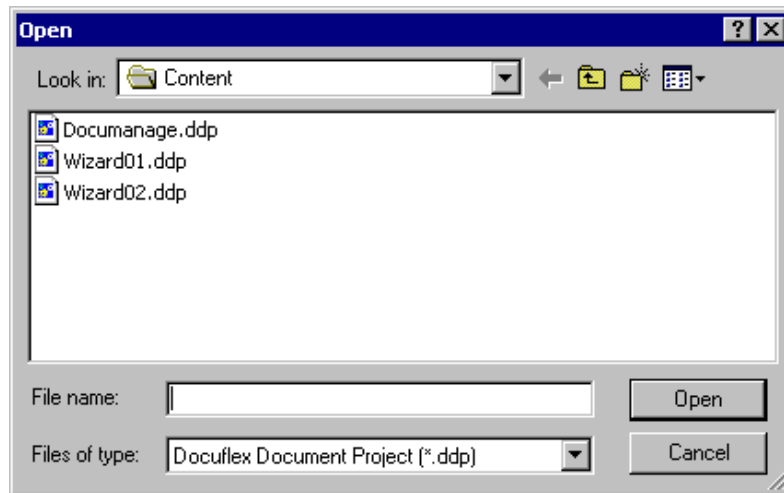
To Open a Project

- 1 Select **File>Open**.

-or-

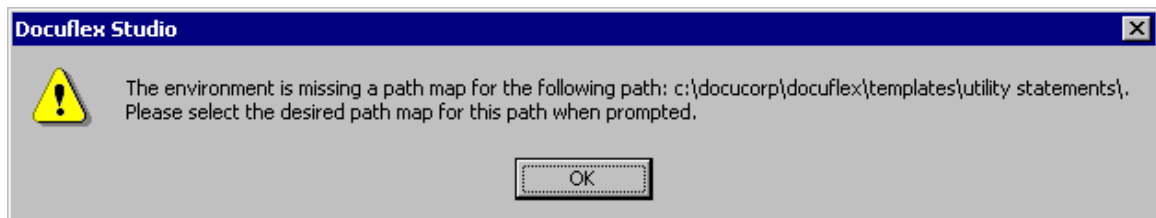
Click  in the Standard Toolbar.

The Open dialog displays.

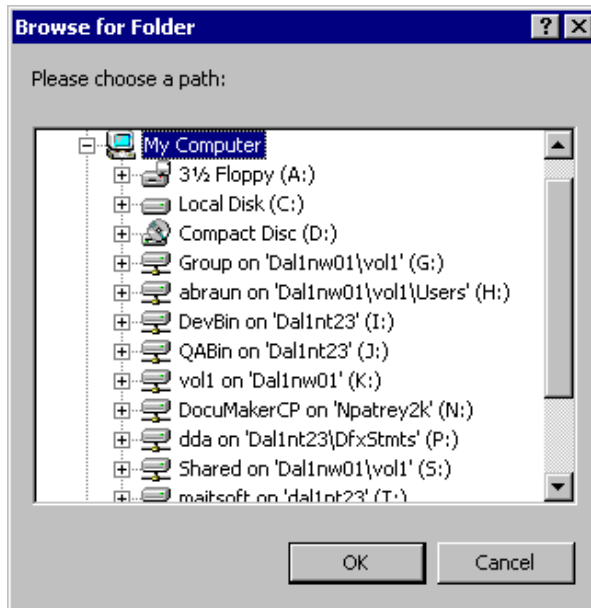


- 2 In the Look in: drop-down list box, select the directory containing the document projects.
- 3 Select the document you want to open from the list of projects.
- 4 Click **Open**.

If the location of the document you select is not identified by a path map, Docuflex Studio displays an informational message to that effect.



- 5 Click **OK** and the Browse for Folder dialog is displayed.



- 6 Select the applicable directory and click **OK**.
A new path map is added to the environment.
- 7 Click **Close** to display the document.

Close

Use the Close command to close the current Docuflex Studio project. This command expedites switching between projects.

To Close a Project

- ▶ Select **File>Close**.

Save

Use the Save command to save the current Docuflex Studio project.

To Save a Project

- ▶ Select **File>Save**.

-or-

Click  in the Standard Toolbar.

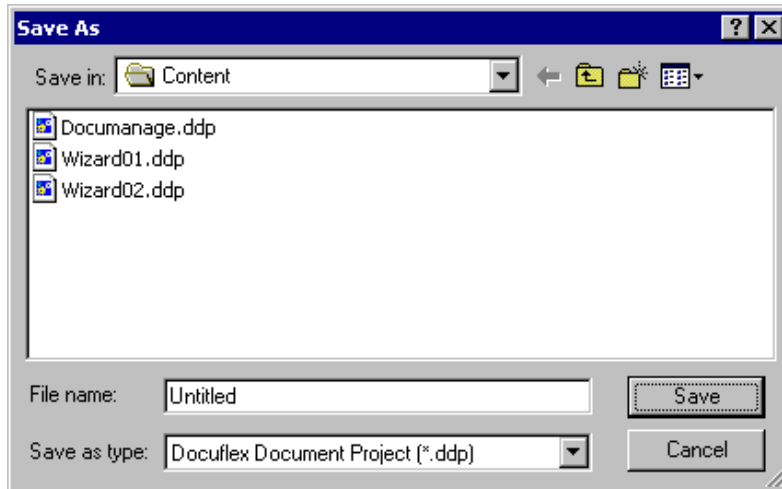
Save As

Use the Save As command to save the current Docuflex Studio project under a new name or save it as a document template.

To Save a Project with a new Name

- 1 Select **File>Save As**.

The Save As dialog displays.



- 2 In the Save in: drop-down list box, select the directory where you want to save the document project.
- 3 In the File name: list box, type the name you want to assign to the project.

WARNING!

Docuflex does NOT allow the percent (%) symbol in filenames.

- 4 In the Save as type: drop-down list box, do one of the following:

To	Do this:
Save the project under a different name	Select Docuflex Document Project .
Save the project as a document template	Select Docuflex Document Template .

- 5 Click **Save**.

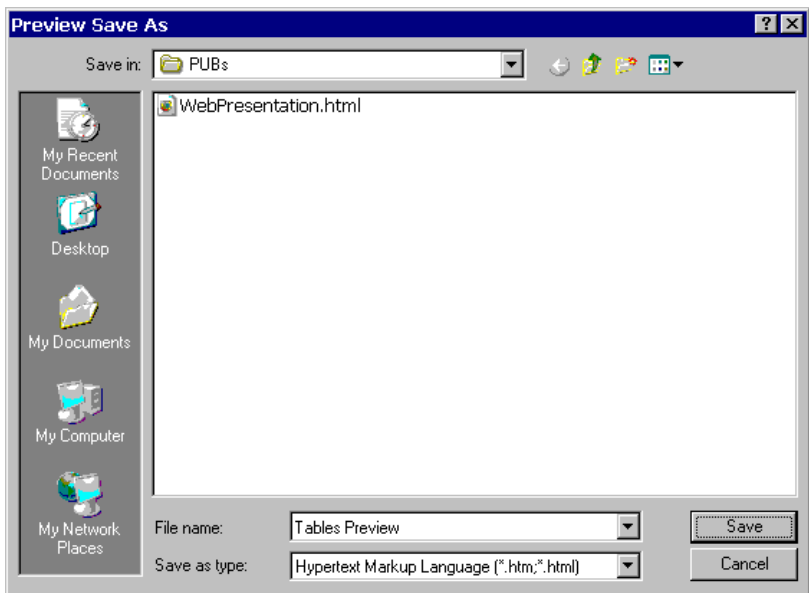
Save Preview As

Use the Save Preview As command to save the document displayed in the Preview window to an external file. This feature allows you to create document files for proofing more directly than having to define specific output channels and then executing Docuflex composition as a batch process.

NOTE
When “Show Deleted Objects” is enabled in **Document>Settings>Display**, this menu option is disabled since not all output devices can display items in strikeout text.

To Save a Preview

- 1 Select **File>Save Preview As**.
The Save Preview As dialog displays.



- 2 In the Save in: drop-down list box, select the directory where you want to save the file.
- 3 In the File name: list box, type the name you want to assign to the file.

WARNING!
Docuflex does NOT allow the percent (%) symbol in filenames.

- 4 In the Save as type: drop-down list box, select one of the file types:

To save the file as	Do this:
Docucorp Compound Document	Select DCD .
Windows Enhanced Metafile	Select EMF .
HTML	Select Hypertext Markup Language .
Portable Document Format	Select PDF .
Microsoft PowerPoint Presentation	Select PPT .
Rich Text Format	Select RTF .

- 5 Click **Save**.

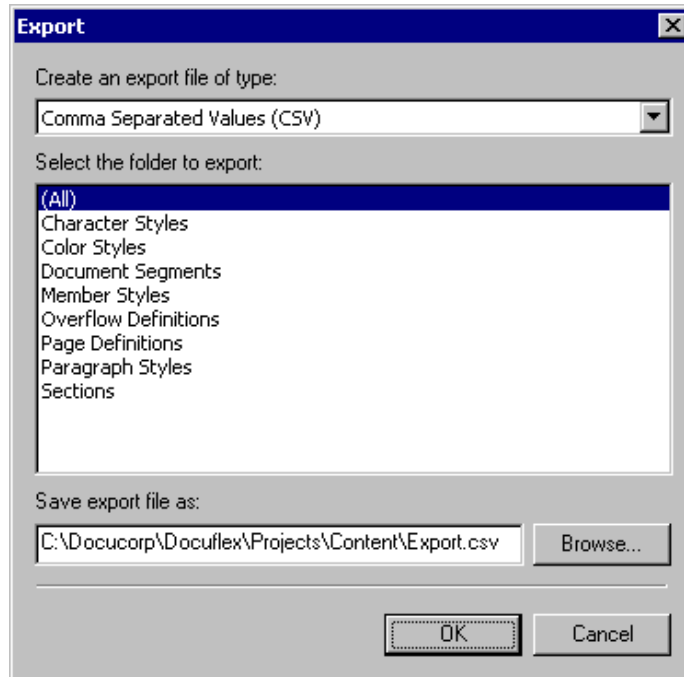
Export

Use the Export command to export portions of the project structure to an external file.

To Export the Project

- 1 Select **File>Export**.

The Export dialog displays.



- 2 In the Create an export file of type: drop-down list box, select the type of export file you want to create:
 - Comma Separated Values (CSV)—each line (record) of the file contains fields separated by commas
 - eXtensible Markup Language (XML)—the structure of the file conforms to the XML standard for formatting data.
- 3 In the Select the folder to export: list box, choose a single component category or all files to export.
- 4 In the Save export file as: text box, type the path and file name of the target file.
-or-
Click **Browse** to locate the target file.
- 5 Click **OK** to save the export file.

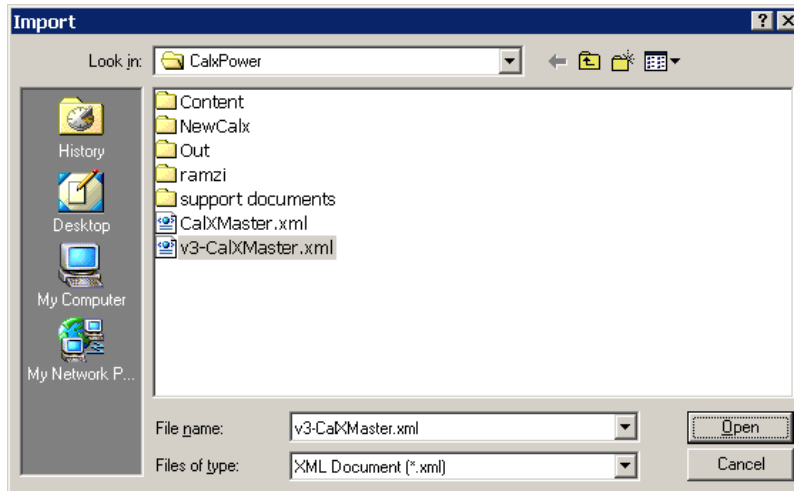
Import

Use the Import command to import the project structure from an external XML file.

To Import an XML File

- 1 Select **File>Import**.

The Import dialog displays.



- 2 In the Look in: drop-down list box, select the directory containing the import file.
- 3 Select the file you want to import from the list of files.
- 4 Click **Open**.

Undo Check Out

Use the Undo Check Out command to abandon any changes you've made to a Documange document you've checked out and are currently editing.

To Undo Check Out

- Select **File>Undo Check Out**.

Docuflex returns the document to its former version without saving any changes.

Print

Use the Print command to print a Docuflex Studio project.

NOTE

You must have the Preview window opened before you can use this feature.

You'll generate a printed copy of the project exactly as it's displayed in the Preview window; however, you will not get all of the data that your project is designed to contain. You must run the Docuflex composition engine to retrieve information from the data file (see [“The Composition Engine”](#) on page 507).

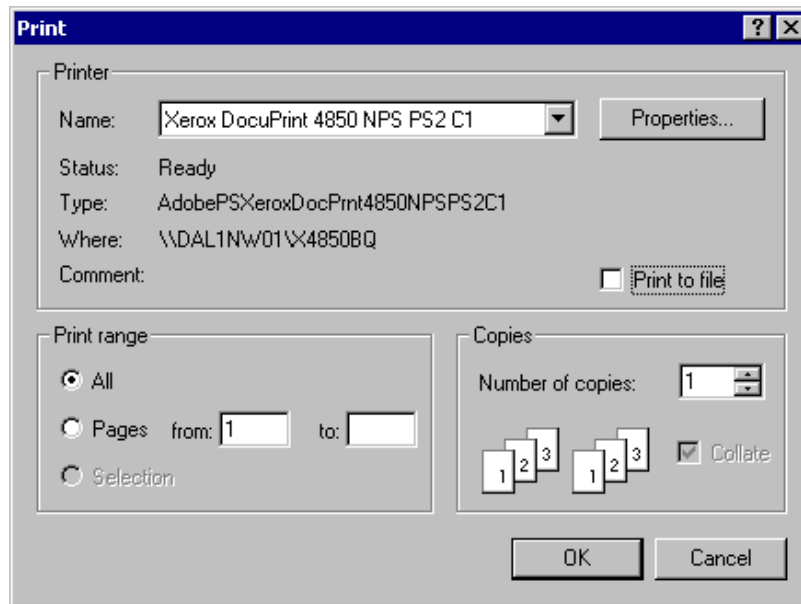
To Print a Document

- 1 Select **File>Print**.

-or-

Click  in the Standard Toolbar.

The Print dialog displays.



- 2 In the Print range group box, click the option button indicating the range of pages you want to print. If you click **Pages**, type the beginning and ending page numbers in the from: and to: boxes.
- 3 In the Number of copies: scroll box, select the number of copies you want to print.
- 4 Click **OK**.

For more information about configuring the default printer, see “[To Set Up the Printer](#)” on page 265.

Print Preview

Use the Print Preview command to preview the printed version of your project. You can use this feature to make sure your document is correct before committing the necessary printing resources.

NOTE

You must have the Preview window opened before you can use this feature.

You'll generate a printed copy of the project exactly as it's displayed in the Preview window; however, you will not get all of the data that your project is designed to contain. You must run the Docuflex composition engine to retrieve information from the data file (see “[The Composition Engine](#)” on page 507).

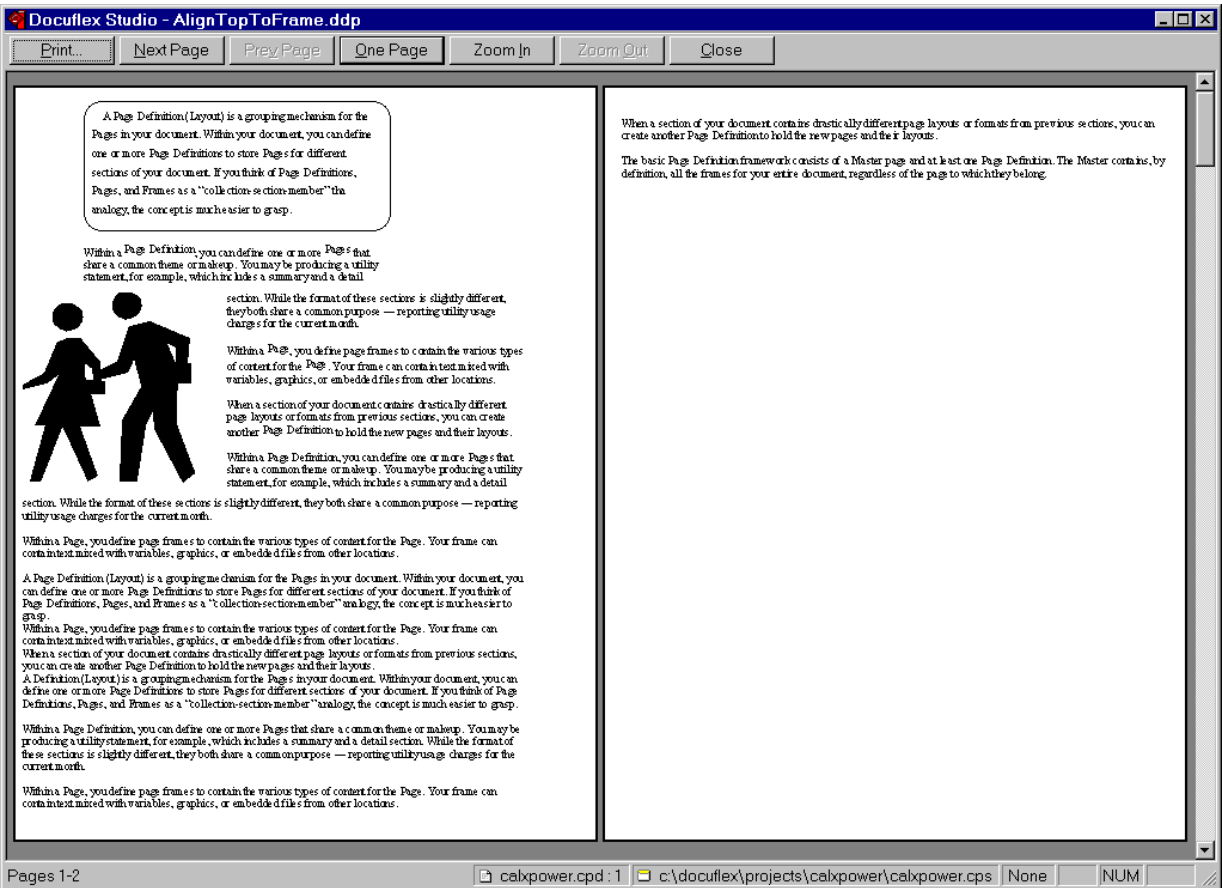
To Preview the Printed Document

- 1 Select **File>Print Preview**.

-or-

Click  in the Standard Toolbar.

The Print Preview window displays.



2 Do any of the following:

To	Do this:
Print your document to the default printer	Click Print (see “To Print a Document” on page 262).
View the next page of your document	Click Next Page .
View the previous page of your document	Click Prev Page .
View your document one page at a time	Click One Page .
View your document as a two-page spread	Click Two Page .
Magnify the view of your document	Click Zoom In .
Decrease the magnification of your document	Click Zoom Out .
Close the Page Preview window	Click Close .

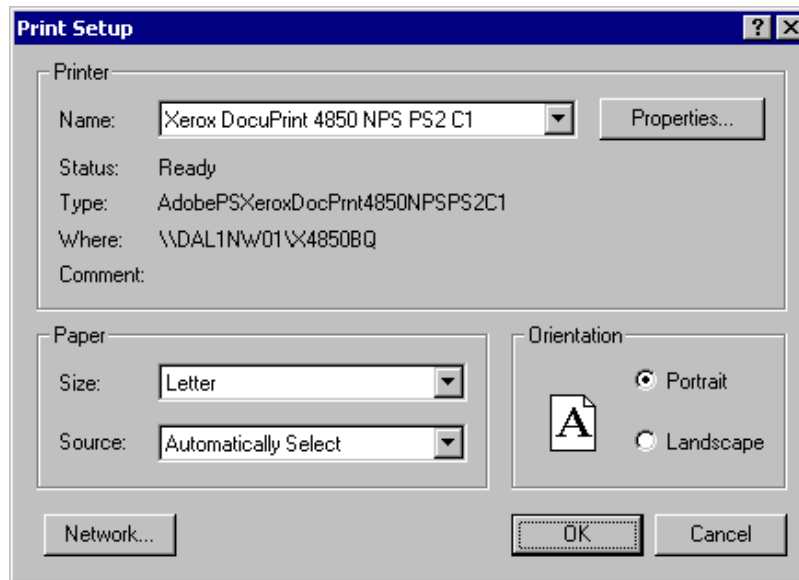
Print Setup

Use the Print Setup command to modify the settings of the printer you're using with Docuflex Studio.

To Set Up the Printer

- 1 Select **File>Print Setup**.

The Print dialog displays.



- 2 In the Name: drop-down list box, select the printer you want to use as your default printer.
- 3 If you need to verify your printer's setup information, click **Properties**.
- 4 Make any necessary changes to your printer's setup information.
- 5 Click **OK**.

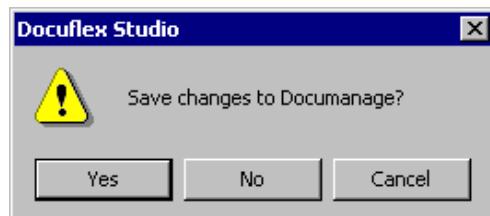
Exit

Use the Exit command to close Docuflex Studio and return to the Windows Desktop.

To Quit Docuflex Studio

- 1 Select **File>Exit**.

If you've changed the current file, a Docuflex Studio message box displays.



- 2 To save the changes, click **Yes**. Otherwise, click **No**.

Edit Menu

The Edit menu comprises the following menu options:

If you want to	See
Reverse the last action	"Undo" on page 266
Repeat the last action	"Redo" on page 267
Specify to which point you want to "Undo" actions	"Undo Advanced" on page 267
Remove the selected text and copy it to the Windows Clipboard	"Cut" on page 268
Copy the selected text to the Windows Clipboard	"Copy" on page 268
Paste the contents of the Windows Clipboard into the project	"Paste" on page 268
Create a copy of the selected objects in the Source window for ContentForm members. The duplicate objects are offset from the originals.	"To Duplicate a Drawing Object" on page 250
Delete the selected document component	"Delete" on page 269
Delete a user-defined variable	"Delete Row" on page 269
Select the entire contents of the Source window	"Select All" on page 270
Find a phrase in the Source window	"Find" on page 270
Find a component in the project	"Find in Definition" on page 271
Replace a phrase in the Source window with another phrase	"Replace" on page 272
Reset a component property to the default value	"Reset" on page 272
Reset all properties of a component to the default values	"Reset All" on page 273
Go to a referenced component	"Go To Component" on page 273
View or edit a variable within a component	"Edit Field" on page 273
Edit a conditional language filter	"Edit Verbiage Filter" on page 274
Enter text or build an expression for a component	"Expression Builder" on page 275
Divide an existing Member into two Members	"Split at Cursor" on page 278
Subdivide an existing Member at each paragraph	"Split at Paragraph" on page 278

Undo

Use the Undo command to restore the last action you performed.

NOTE

If you enable the history file, you can undo multiple items by repeating the undo command. For more information about the history file, see "Using the History View" on page 415.

To Undo Your Most Recent Editing Action

- ▶ Select **Edit>Undo**.
- or-
- Press **CTRL+Z**.

Redo

Use the Redo command to repeat the action for which you used Undo.

To Redo Your Most Recent Editing Action

- ▶ Select **Edit>Redo**.
- or-
- Press **CTRL+Y**.

Undo Advanced

Use the Undo Advanced command to specify the point to which you want to “undo” your editing actions.

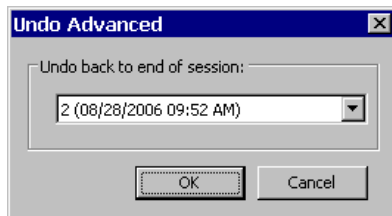
NOTE

This menu option is disabled unless you enable the history file. For more information about the history file, see “[Using the History View](#)” on page 415.

To Specify the Scope of Undo

- 1 Select **Edit>Undo Advanced**.

The Undo Advanced dialog displays.



- 2 In the drop-down list box, select the end of a previous session to which you want to revert.
- 3 Click **OK**.

NOTE

When you reference a project in your master project and you revert to a prior session, the “current” version of the referenced project remains. To revert to a prior session in the referenced project, you must open the external reference separately, revert to a prior session, and then update the “older” reference in the master.

Cut

Use the Cut command to move text you've selected onto the Windows Clipboard. Unlike the action of the Copy command, Cut removes the selected text from its original location.

To Move Text to the Clipboard

- 1 Select the text.
 - 2 Select **Edit>Cut**.
- or-

Click  in the Standard Toolbar.

Docuflex Studio places the text on the Windows Clipboard. You can now insert the text in other locations in the active document. You can also insert the text in other Windows applications. For details, see “[Paste](#)” on page 268.

Copy

Use the Copy command to place a copy of text you've selected onto the Windows Clipboard. Unlike the Cut command, Copy leaves the selected text in its original location.

To Copy Text to the Clipboard

- 1 Select the text.
 - 2 Select **Edit>Copy**.
- or-

Click  in the Standard Toolbar.

Docuflex Studio copies the text to the Windows Clipboard. You can now insert the text in other locations in the active document. You can also insert the text in other Windows applications. For details, see “[Paste](#)” on page 268.

Paste

Use the Paste command to copy text from the Clipboard to a location where you have clicked an insertion point.

To Paste Text from the Clipboard

- 1 Click an insertion point at the location where you want the text to be inserted.
 - 2 Select **Edit>Paste**.
- or-

Click  in the Standard Toolbar.

Docuflex Studio copies the text from the Windows Clipboard. The text stays on the Clipboard until you replace it with text from the next Cut or Copy operation.

Duplicate

Use the Duplicate command create a copy of the objects you have selected.

To Duplicate Selected Objects

- 1 Click an insertion point at the location where you want the text to be inserted.
- 2 Select **Edit>Duplicate**.

Docuflex Studio creates a copy of the selected objects in the Source window for ContentForm members. The duplicate objects are offset from the originals.

Delete

Use the Delete command to remove a document component from your document.

TIP

If you want to delete text in a property field, highlight the text and press **DELETE**.

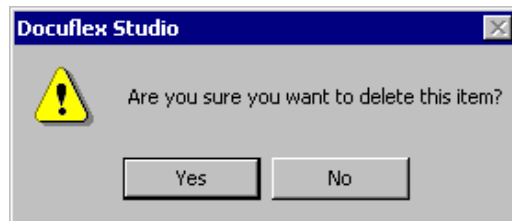
To Delete a Component

- 1 In the Component Explorer, select the component you want to delete (see “[Component Explorer](#)” on page 169).
- 2 Select **Edit>Delete**.

-or-

Click  in the Standard Toolbar.

A Docuflex Studio message box displays.



- 3 If you're certain you want to delete this component, click **Yes**; otherwise, click **No**.

WARNING!

If you delete a component upon which another component is based, or you rename a component and answer “No” to the “Do you want to update references?” prompt, Docuflex Studio issues an error message similar to the following:

```
<$CMD      >      $GOTO H:01410390 M:00001795      (From: TXTSTY:***<none>**)  
<RFNOLINK  > Error: Reference not found in FixUp      (From: TXTSTY:***<none>**)  
<RFNOLINK1>:Missing:<UNTITLED(0)DDP\Style Definitions\Character Styles\Heading2  
<RFNOLINK2>:From:<UNTITLED(0)DDP\Style Definitions\Character Styles\Heading3
```

Delete Row

Use the Delete Row command to remove a User Data variable from the schema or a table row from the data file.

To Delete a Variable or Table Row

- 1 In the Data bar, highlight the variable or row you want to delete.
 - 2 Select **Edit>Delete Row**.
- or-
- Press **DELETE**.

Select All

Use the Select All command to select the entire contents of the Source window.

To Select All of the Text

- 1 Click an insertion point in the upper half of the Source window.
- 2 Select **Edit>Select All**.

Docuflex Studio highlights the entire contents of the Source window. You can use Cut (see “To Move Text to the Clipboard” on page 268) or Copy (see “To Copy Text to the Clipboard” on page 268) to manipulate the data.

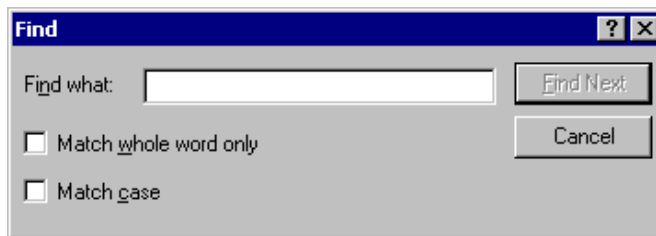
Find

Use the Find command to locate a word or phrase in the Source window.

To Find a Word or Phrase

- 1 Click an insertion point in the upper half of the Source window.
- 2 Select **Edit>Find**.

The Find dialog box displays.



- 3 In the Find what: text box, type the word or phrase you're trying to locate.
- 4 Enable the Match whole word only check box if you suspect this word might be contained in larger words (e.g., you search for *drive* and the procedure finds *driven*).
- 5 Enable the Match case check box if you want to locate the word or phrase exactly as you've typed it.
- 6 Click **Find Next** to initiate your search; otherwise, click **Cancel**.

Docuflex Studio highlights the first occurrence of your search phrase.

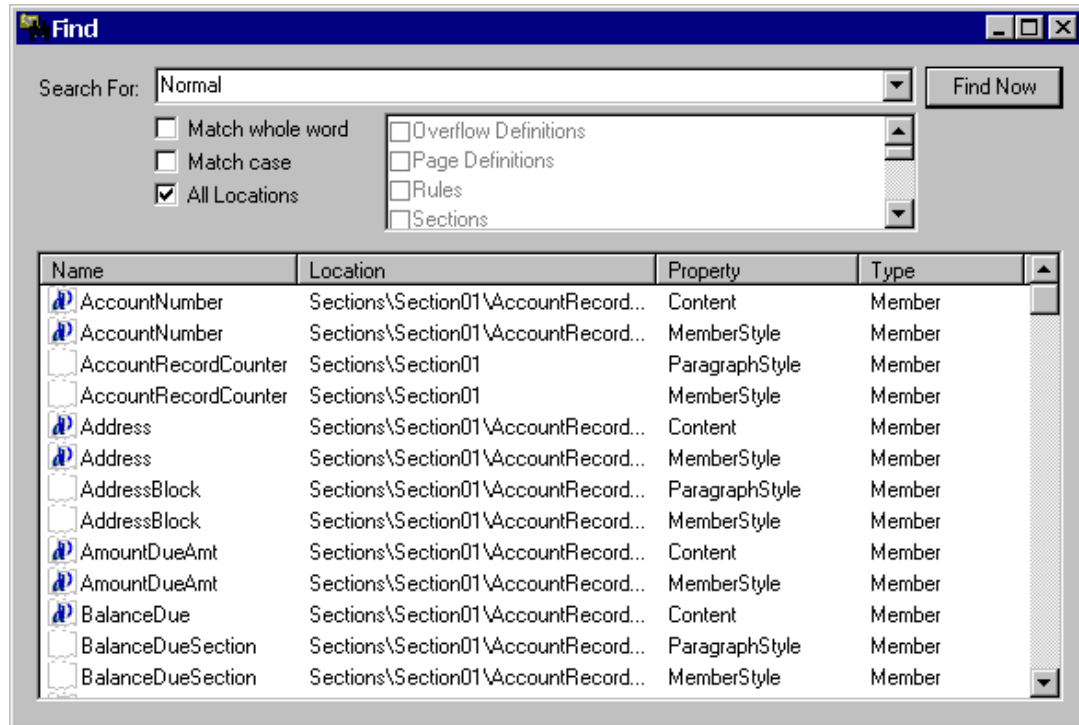
Find in Definition

Use the Find in Definition command to locate a document component within your project.

To Find a Document Component in Your Project

- 1 Select **Edit>Find in Definition**.

The Find dialog box displays.



- 2 In the **Search For:** text box, type the name of the component you're trying to locate.
- 3 Enable the **Match whole word** check box if you want to search exclusively on the name you've typed.
- 4 Enable the **Match case** check box if you want to locate the component exactly as you've typed it.
- 5 Enable the **All Locations** check box if you want to search every folder in your project. Alternately, you can selectively choose just the folders in which you want to search by using the list box to the right.
- 6 Click **Find Now**.
Docuflex Studio searches for and displays any document component containing the search phrase.
- 7 Select the component you want to view.
Docuflex Studio selects the component and displays its properties in the Component Properties or other applicable window.

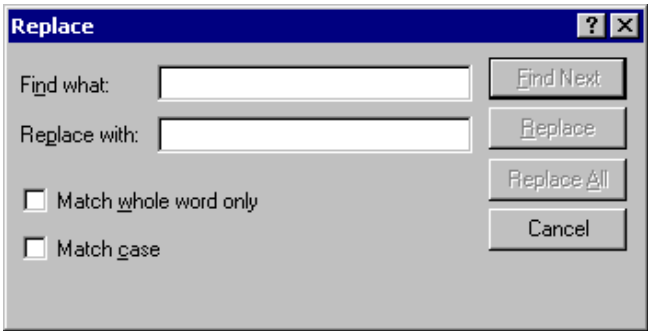
If you want to perform another search, repeat steps 2 through 6.

Replace

Use the Replace command to search for an replace one phrase with another while in the Source window.

To Replace a Search Phrase

- 1 Select **Edit>Replace**.
The Replace dialog box displays.



- 2 In the Find what: text box, type the word or phrase you're trying to locate.
- 3 In the Replace with: text box, type the word or phrase you want to replace the search phrase.
- 4 Enable the Match whole word only check box if you want to search exclusively on the word or phrase you've typed.
- 5 Enable the Match case check box if you want to locate the word or phrase exactly as you've typed it.
- 6 Click **Find Next** to initiate your search: then, do any of the following:

If you want to	Do this:
Replace only this instance of the search phrase	Click Replace .
Replace all instances of the search phrase	Click Replace All .
Cancel your search-and-replace task	Click Cancel .

Reset

Use the Reset command to change back the value of a component's property to the original default value. This feature is not available, however, if the property is disabled. You can also access this command by invoking the context menu while in the Component Properties.

To Reset a Property Value

- 1 In the Component Properties, select the property whose value you want to reset.
- 2 Select **Edit>Reset**.

Docuflex Studio reinstates the default value of the property. The "default value" is not always the value supplied with the program. A default value might revert to an inherited value from a formatting style, such as a member style (see "**BasedOn**" on page 561).

Reset All

Use the Reset All command to change back all the values of a component to the original default values. You can also access this command by invoking the context menu while in the Component Properties.

The Reset All function resets all properties regardless of their state (e.g., enabled vs. disabled).

To Reset All Property Values

- 1 In the Component Explorer, select the component whose values you want to reset.
- 2 In the Component Properties, select any property.
- 3 Select **Edit>Reset All**.

Docuflex Studio reinstates the default values of all properties. The “default value” is not always the value supplied with the program. A default value might revert to an inherited value from a formatting style, such as a member style (see “[BasedOn](#)” on page 561).

Go To Component

Use the Go To Component command to jump to a referenced document component. Within a Section, for example, you can reference an Overflow Definition and a Document Segment. This command navigates the Component Explorer and displays the referenced component.

TIP

The Go To Component command navigates among referenced document components. You should not confuse it with the Go To command located on the View menu (see “[Go To](#)” on page 287).

To Go To a Referenced Component

- 1 In the Component Explorer, select the component whose values you want to view.
- 2 In the Component Properties, select the property whose reference you want to view.
- 3 Select **Edit>Go To Component**.

Docuflex Studio navigates the Component Explorer and displays the properties of the referenced component in the Component Properties.

Edit Field

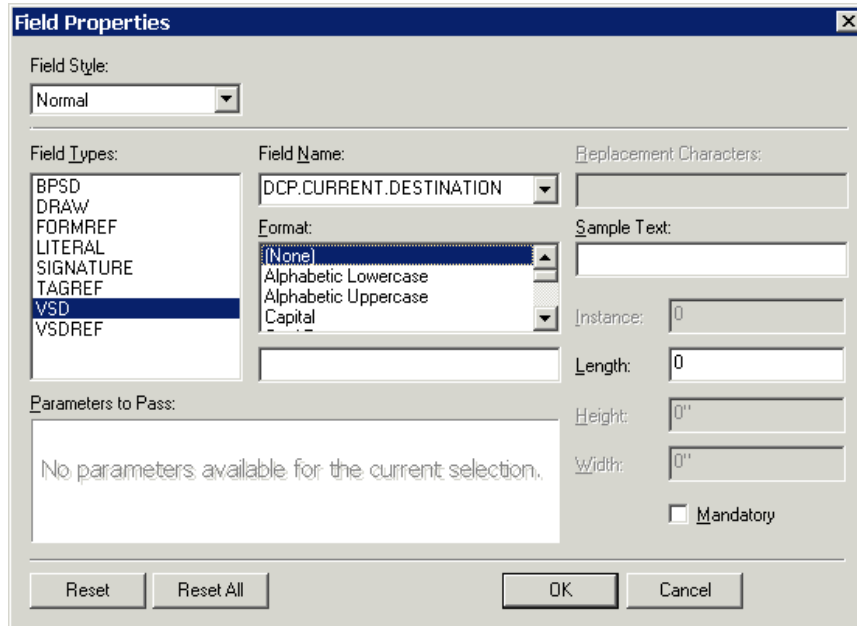
Use the Edit Field command to modify or replace a variable field within the contents of a member.

To Edit a Field

- 1 In the Component Explorer, select the component whose content you want to edit.
- 2 If it is not already displayed, open the Source window (see “[To Display the Source Window](#)” on page 234).

- 3 In the Source window, highlight the variable field you want edit.
- 4 Select **Edit>Edit Field**.

The Field Properties dialog box displays.



- 5 Follow the procedures described in “Using the Field Properties Dialog” on page 447.

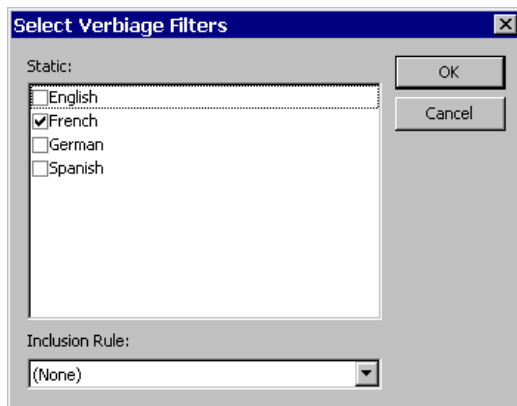
Edit Verbiage Filter

Use the Edit Verbiage Filter command to modify the filter(s) to which the message applies. You can easily add to or change the filter(s) without having to retype the text.

To Edit a Verbiage Filter

- 1 In the Source window of the member containing a filter, click an insertion point on one of the lines bracketing the filter (e.g., ----- Begin Conditional Content (English) -----).
- 2 Select **Edit>Edit Verbiage Filter**.

The Select Verbiage Filters dialog displays.



- 3 Enable the check box next to the filter(s) you want to assign to the text.

TIP

You can enable more than one filter if you want the same message to apply to multiple filters.

- 4 Click **OK** to change the filter(s); otherwise, click **Cancel**.

Expression Builder

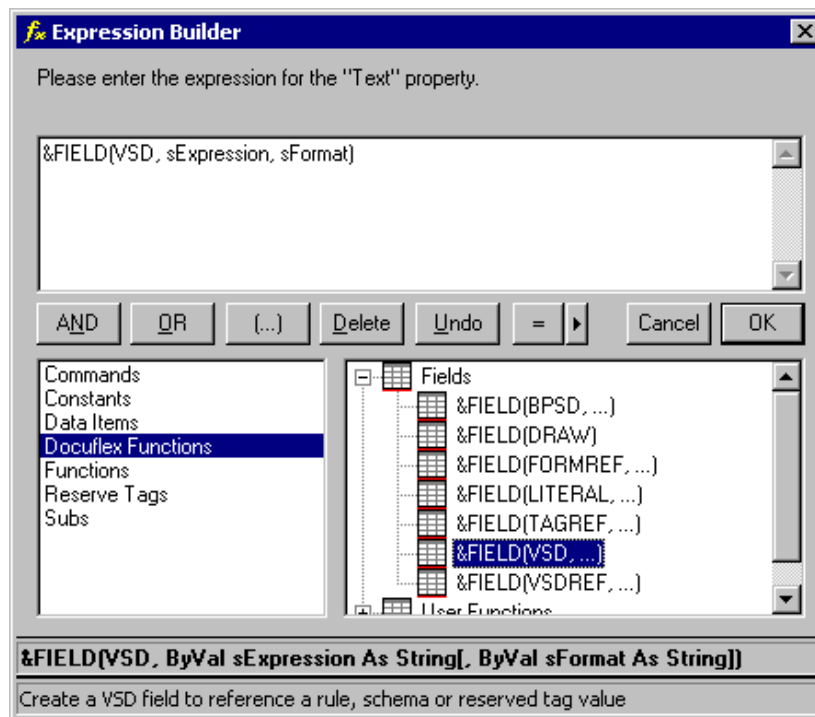
The Expression Builder dialog provides a means by which you can merge variable data (see “[What is Variable Data?](#)” on page 156) with fixed text, and integrate functions. You can then place the resulting expression into the following places:

- the BookmarkText property (see “[BookmarkText](#)” on page 563)
- the Target Expression field of a pre-composed document (see “[Using the Properties View](#)” on page 241)
- the PrefixText property (see “[PrefixText](#)” on page 592)

To Open the Expression Builder Dialog

- Click .

The Expression Builder dialog displays.



Using the Expression Builder

The Expression Builder contains several different categories of operators, some specific to Docuflex and others specific to Transall:

- **Commands**—Refer to the “Working with Transall Scripts and Script Modules” chapter in the Transall documentation.
- **Constants**—Refer to the “Working with Transall Scripts and Script Modules” chapter in the Transall documentation.
- **Data Items**—The data schema is displayed, including the tables and their rows. Navigate the tree structure and double-click the desired row name.
- **Docuflex Functions**—The syntax to create fields that access members, rules, schemas, and Reserved Tag values.
- **Functions**—Refer to the “Working with Transall Scripts and Script Modules” chapter in the Transall documentation and “[Creating Subroutines](#)” on page 227.
- **Reserved Tags**—Refer to “[Reserved Tag Variables](#)” on page 449 for a complete listing of the Reserved Tags.
- **Subs**—Refer to the “Working with Transall Scripts and Script Modules” chapter in the Transall documentation and “[Creating Subroutines](#)” on page 227.

Because the Expression Builder dialog contains several group boxes, this guide provides a separate topic for each group.

If you need to	Go to
Assign a data file field as the Target Expression	“To Assign a Data File Field” on page 276
Build an Expression for various uses	“To Build an Expression” on page 276

To Assign a Data File Field

- 1 In the lower left-hand portion of the dialog, select **Data Items**.
The data structure is displayed in the lower right-hand portion of the dialog.
- 2 From the list of available data items, double-click on a field to select it.
- 3 Click **OK**.

Docuflex Studio assigns the data field to the Target Expression field.

To Build an Expression

- 1 In the lower left-hand portion of the dialog, select the category containing the field, function, or command you want to use.

TIP

If you need to compose an expression that contains multiple lines, you can type “\n” (without the quotation marks) to generate a line feed.

Likewise, if you need to insert a Tab character into your PrefixText, press **CTRL+TAB** to generate a tab.

The available items in the chosen category are displayed in the lower right-hand portion of the dialog.

- 2 From the list of available items, double-click the one you want to use in your expression.

NOTE

You can compose an expression, for example, that computes the value for a Target Expression. If you need to build a more script-like expression, refer to the “Working with Transall Scripts and Script Modules” chapter in the Transall documentation.

In addition, this guide lists Docuflex-specific Transall functions that are included in Docuflex (see “Creating Subroutines” on page 227).

Finally, you can use Docuflex functions to access Reserved Tags and other internally-generated fields (see “Using Docuflex Functions” on page 277 for an explanation of the syntax).

- 3 Click **OK**.

Docuflex Studio assigns your formula in the Target Expression field.

Using Docuflex Functions

The internal Docuflex functions provide the means to compose fields that display a value derived from a number of different sources, including processing rules, schema rows, and reserved tag values (see “Selecting the Field Type” on page 448).

TIP

You can type these same functions into the Source window for members of type **Content Text**.

In the following syntax examples, the square brackets indicate optional parameters (e.g., [, Format]).

&FIELD(BPSD, sExpression, sReplChars[, sFormat])

&FIELD(DRAW)

&FIELD(FORMREF, “sMemberName”, sReplChars[, %Instances[, sFormat]])

&FIELD(LITERAL, “sText”[, sFormat])

&FIELD(TAGREF, “sBPSDName”, sReplChars[, %Instance[, sFormat]])

&FIELD(VSD, sExpression[, sFormat])

&FIELD(VSDREF, “sVSDName”, sReplChars[, %Instance[, sFormat]])

&VALUE(sExpression)

where:

- sExpression—the Reserved Tag or expression for the function.
- sReplChars—a placeholder for the replacement characters (see “Selecting Additional Options” on page 454).

With replacement characters, you’re reserving space for the number of digits in the page number. This placeholder must be equal to or greater than the number of digits of the page number. If it’s too short, the page number is truncated (e.g., if you only type two characters for the placeholder and you have a three-digit page number, the third digit is truncated).

- sFormat—the formatting mask to be applied to the function (see “[Selecting the Field Format](#)” on page 452).
- sMemberName—the name of the member for which you want to obtain the page number.
- %Instance—the instance of a member you want to reference (see “[Selecting Additional Options](#)” on page 454).

The default is the first instance (e.g., 1). If you specify 0, you receive the page number of the next instance from your current place in the document.

- sText—the text string you want to create. This text should be the literal character(s) in the ANSI character set.
- BPSDName, VSDName—the name of the field you’re referencing.

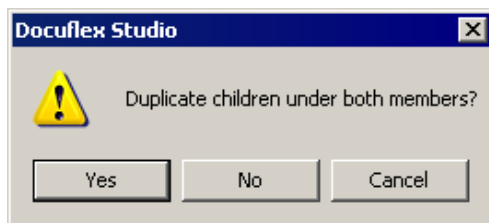
Split at Cursor

Use the Split at Cursor command to split an existing member of type Content Text into two members. The existing member contains everything located before the cursor, while the new member contains everything after the cursor.

To Split a Member at the Cursor

- 1 In the Component Explorer, select the member you want to subdivide.
- 2 Double-click the member to display the Source window.
- 3 Click an insertion point at the place where you want to split the Member.
- 4 Select **Edit>Split at Cursor**.

A dialog displays, prompting you to decide what to do with child Members.



- 5 Decide whether to duplicate children or keep them with the first member.
- 6 Click **Yes** to duplicate the children; otherwise, click **No**.

Everything to the left of the cursor remains with the current Member; all content to the right of the cursor is placed into a new member. The new Member has the same name as the original, plus a unique suffix (e.g., **Member_1**).

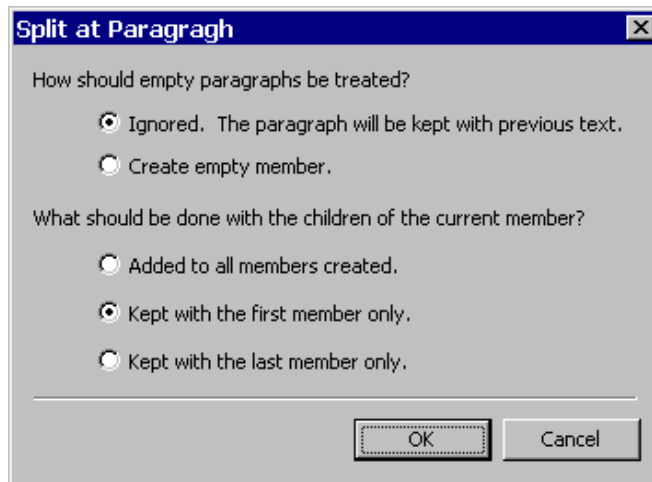
Split at Paragraph

Use the Split at Paragraph command to divide a single Member containing multiple paragraphs into multiple Members containing single paragraphs.

To Split a Member at a Paragraph

- 1 In the Component Explorer, select the member you want to subdivide.
- 2 Double-click the member to display the Source window.
- 3 Select **Edit>Split at Paragraph**.

The Split at Paragraph dialog displays.



- 4 Concerning how to treat empty paragraphs (e.g., extra line feeds), decide whether to keep them with the previous text or create empty members.
- 5 Concerning children of the current member, decide whether to duplicate them or have them kept with the first or last member.
- 6 Click **OK** to save your choices.

Docuflex Studio creates new Members with the same name as the original, plus a unique suffix (e.g., **Member1**, **Member2**).

View Menu

The View menu comprises the following menu options:

If you want to	See
Refresh the Preview window	"Refresh" on page 280
View the various Windows	"Windows" on page 280
Toggle the viewing of various Controlbars	"Controlbars" on page 283
Toggle the viewing of various Toolbars	"Toolbars" on page 285
Select a "stored" configuration of window positions and toolbar locations	"User Layouts" on page 286
Toggle the display of the Data Map and Field Properties portions of the Source window	"Show Additional Properties" on page 286
Toggle the display of thumbnails in the Layout and Preview windows	"Show Thumbnails" on page 287
Navigate the pages of the document	"Go To" on page 287
View the Compile Errors window	"Compile Errors" on page 288
View the Log File window	"Log File" on page 288
Rotate the current image in the Preview window	"Rotate View" on page 288
Manipulate the magnification of the Preview window	"Zoom" on page 289

Refresh

Use the Refresh command to display an updated image of your document in the Preview window.

To Refresh the Preview Image

- Select **View>Refresh**.

-or-

Click  in the Output Toolbar.

Docuflex Studio displays an updated image of your document in the Preview window.

Windows

Use the Windows command to either display a window or, if it's open but not active, activate it.

Composition Summary Report

NOTE

The number of entries displayed is limited to 20,000. If your report contains a large number of entries, you're asked if you want to stop after the first 5,000 due to speed issues where showing the entire report would take too long. If you want to view all of the entries, you should save the report to a comma-separated values (CSV) file and use an external application for viewing.

Use the Composition Summary Report command to display a detailed listing of every member that was considered for composition in your document. You'll see a variety of information pertaining to the members, even why they were disqualified from inclusion.

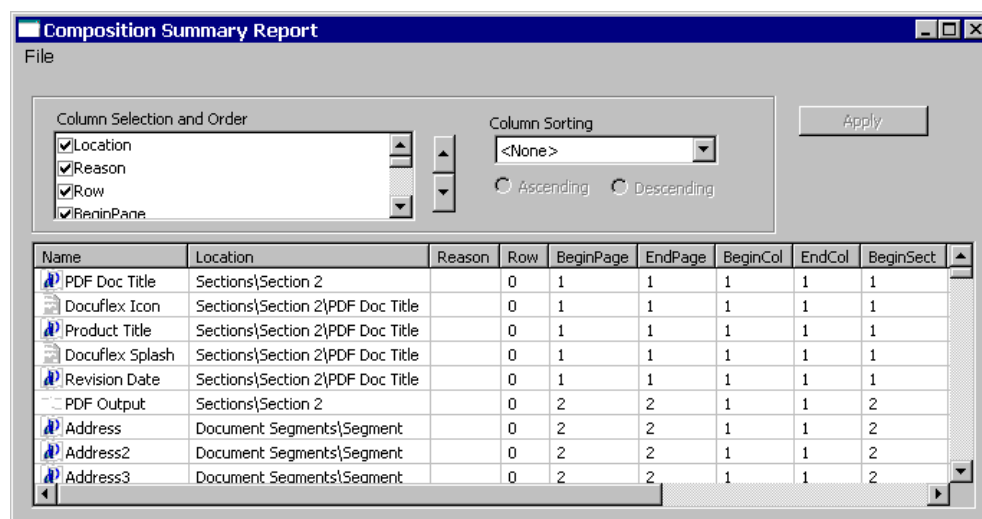
NOTE

The Composition Summary Report is only available if the Preview window is open.

To Display the Composition Summary Report

- 1 Select **View>Windows>Composition Summary Report**.

The Composition Summary Report dialog displays.



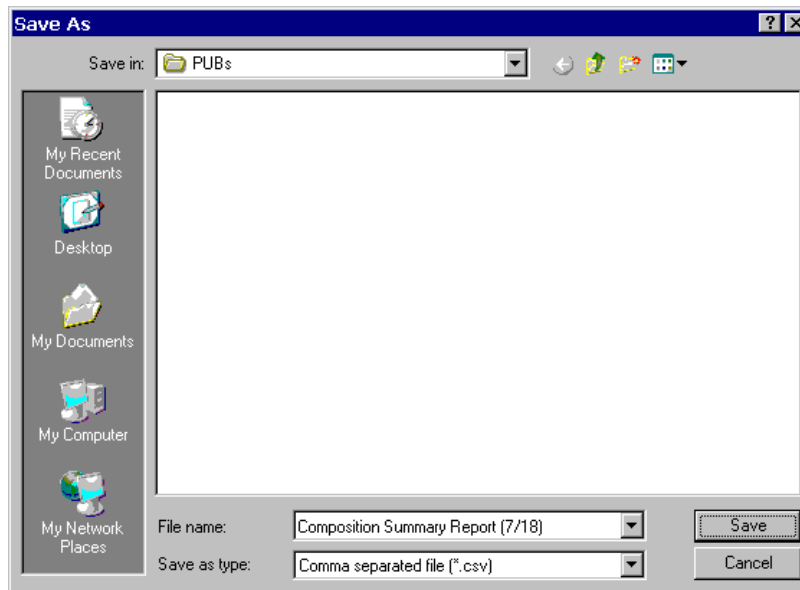
- 2 In the Column Selection and Order list box, click the check box next to the columns you want to include on the report (you can use the scroll arrows to view more columns).
- 3 If you want to rearrange the order of the columns, highlight the appropriate column and click the up or down arrow, located just to the right of the selection box itself, until the column is located where you want it.
- 4 In the Column Sorting drop-down list box, select the column on which you'd like to sort the report, followed by whether you want Ascending or Descending order.
- 5 Click **Apply** to generate the report with your preferences. (You should click Apply anytime you make a change to regenerate the report.)
- 6 Do one of the following:

If you want to	See:
save the report to a file	"To Save the Report" on page 281
close the report	"To Close the Report" on page 282

To Save the Report

- 1 Select **File>Save to Disk**.

The Save As dialog displays.



- 2 In the Save in: drop-down list box, select the directory where you want to save the report.
- 3 In the File name: list box, type the name you want to assign to the report.

WARNING!

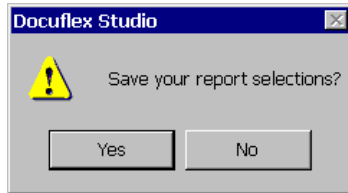
Docuflex does NOT allow the percent (%) symbol in filenames.

The Save as type: drop-down list box indicates that the report will be saved to a CSV file.

- 4 Click **Save** to save the report.

To Close the Report

- 1 Select **File>Close**.
-or-
Click  to close the dialog.
- 2 If you've made any changes to the report, you're prompted to save these changes for the next time you display the report.



- 3 Click **Yes** to save the selections; otherwise, click **No**.

Page Layout

Use the Page Layout command to display or make active the Page Layout window.

To Display the Page Layout Window

- ▶ Select **View>Windows>Page Layout**.

Docuflex Studio displays the Page Layout window if it is not already open; otherwise, it becomes the active window (see “[Page Layout Window](#)” on page 209).

Preview

Use the Preview command to display or make active the Preview window.

To Display the Preview Window

- ▶ Select **View>Windows>Preview**.

Docuflex Studio displays the Preview window if it is not already open; otherwise, it becomes the active window (see “[Preview Window](#)” on page 211).

Preview Edit

Use the Preview Edit command to display or make active the Preview Edit window.

To Display the Preview Edit Window

- ▶ Select **View>Windows>Preview Edit**.

Docuflex Studio displays the Preview Edit window if it is not already open; otherwise, it becomes the active window (see “[Preview Edit Window](#)” on page 214).

Report

Use the Report command to display or make active the Report window, which displays a detailed listing of the settings of each parameter for every member in your document.

To Display the Report Window

- ▶ Select **View>Windows>Report**.

Docuflex Studio displays the Report window if it is not already open; otherwise, it becomes the active window (see “[Report Window](#)” on page 219).

Rule

Use the Rule command to display or make active the Rule Editor.

To Display the Rule Editor

- ▶ Select **View>Windows>Rule**.

Docuflex Studio displays the Rule Editor if it is not already open; otherwise, it becomes the active window (see “Rule Editor” on page 221).

Source

Use the Source command to display or make active the Source window.

To Display the Source Window

- ▶ Select **View>Windows>Source**.

Docuflex Studio displays the Source window if it is not already open; otherwise, it becomes the active window (see “Source Window” on page 234).

Controlbars

Use the Controlbars command to toggle the view of the various Controlbars (e.g., display or hide).

Component Explorer

Use the Component Explorer command to toggle the view of the Component Explorer.

To Display the Component Explorer

- ▶ Select **View>Controlbars>Component Explorer**.
- or-

Click  in the Standard Toolbar.

Docuflex Studio displays the Component Explorer *if it is not already displayed*. If it's already displayed, the control bar is hidden (see “Component Explorer” on page 169).

Component Properties

Use the Component Properties command to toggle the view of the Component Properties.

To Display the Component Properties

- ▶ Select **View>Controlbars>Component Properties**.
- or-

Click  in the Standard Toolbar.

Docuflex Studio displays the Component Properties *if it is not already displayed*. If it's already displayed, the control bar is hidden (see “Component Properties” on page 171).

Data

Use the Data command to toggle the view of the Data control bar.

To Display the Data Bar

- ▶ Select **View>Controlbars>Data**.
- or-

Click  in the Standard Toolbar.

Docuflex Studio displays the Data bar *if it is not already displayed*. If it's already displayed, the bar is hidden (see “[Data Control Bar](#)” on page 177).

Debug

Use the Debug command to toggle the view of the various Debug bars (e.g., display or hide).

To Display the Debug Bar

- ▶ Select **View>Controlbars>Debug>Member tree**.

Docuflex Studio displays the Debug bar *if it is not already displayed*. If it's already displayed, the bar is hidden (see “[Debug Control Bar](#)” on page 184).

To Display the Debug Variables Bar

- ▶ Select **View>Controlbars>Debug>Variables**.

Docuflex Studio displays the Debug Variables bar *if it is not already displayed*. If it's already displayed, the bar is hidden (see “[Debug Variables Control Bar](#)” on page 184).

To Display the Debug Watch Bar

- ▶ Select **View>Controlbars>Debug>Watch**.

Docuflex Studio displays the Debug Watch bar *if it is not already displayed*. If it's already displayed, the bar is hidden (see “[Debug Watch Control Bar](#)” on page 185).

To Display the Debug Call Stack Bar

- ▶ Select **View>Controlbars>Debug>Stack**.

Docuflex Studio displays the Debug Call Stack bar *if it is not already displayed*. If it's already displayed, the bar is hidden (see “[Debug Call Stack Control Bar](#)” on page 184).

Member Styles

Use the Member Styles command to toggle the view of the Member Styles control bar.

To Display the Member Styles Bar

- ▶ Select **View>Controlbars>Member Styles**.

Docuflex Studio displays the Member Styles bar *if it is not already displayed*. If it's already displayed, the bar is hidden (see “[Member Styles Control Bar](#)” on page 185).

Output

Use the Output command to toggle the view of the Output control bar.

To Display the Output Bar

- ▶ Select **View>Controlbars>Output**.
- or-

Click  in the Standard Toolbar.

Docuflex Studio displays the Output bar *if it is not already displayed*. If it's already displayed, the bar is hidden (see “[Output Control Bar](#)” on page 186).

Styles

Use the Styles command to toggle the view of the Styles control bar.

To Display the Styles Bar

- ▶ Select **View>Controlbars>Styles**.
- or-

Click  in the Standard Toolbar.

Docuflex Studio displays the Styles bar *if it is not already displayed*. If it's already displayed, the bar is hidden (see “[To Display the Styles Bar](#)” on page 189).

Toolbars

Use the Toolbars command to toggle the view of the various toolbars (e.g., display or hide).

TIP

If you want to toggle the views for more than one toolbar at a time, see “[To Toggle the Display and Characteristics of Toolbars](#)” on page 492.

To Display the Data Toolbar

- ▶ Select **View>Toolbars>Data**.

To Display the Debug Toolbar

- ▶ Select **View>Toolbars>Debug**.

To Display the Drawing Toolbar

- ▶ Select **View>Toolbars>Drawing**.

To Display the Drawing Styles Toolbar

- ▶ Select **View>Toolbars>Drawing Styles**.

To Display the Formatting Toolbar

- ▶ Select **View>Toolbars>Formatting**.

To Display the Output Toolbar

- ▶ Select **View>Toolbars>Output**.

To Display the Navigate Toolbar

- ▶ Select **View>Toolbars>Navigate**.

To Display the Recipient Toolbar

- ▶ Select **View>Toolbars>Recipient**.

To Display the Standard Toolbar

- ▶ Select **View>Toolbars>Standard**.

To Display the Text Format Toolbar

- ▶ Select **View>Toolbars>Text Format**.

To Display the User Layouts Toolbar

- ▶ Select **View>Toolbars>User Layouts**.

To Display the Windows Toolbar

- ▶ Select **View>Toolbars>Windows**.

User Layouts

Use the User Layouts command to display a “stored” configuration of the User Interface, including control bar locations & sizes and toolbar placement.

You can store up to five custom interface layouts and select them as desired; however, there’s no way to display which layout you’re currently using, nor can you “edit” a layout.

NOTE

As a shortcut to storing a user layout, you can press and hold **CTRL** and then click the desired icon on the toolbar. This action stores the current layout into a user layout.

To Select a User Layout

- ▶ Select **View>User Layouts>number**.

To Store a User Layout

- 1 Arrange the graphical interface to your liking, especially the toolbars you want to display and their order.
- 2 Select **View>User Layouts>Store>number**.

Show Additional Properties

Use the Show Additional Properties command to toggle the display of the Properties view in the Source window.

NOTE

If the Source window is not active, this option is unavailable (see “[To Display the Properties View](#)” on page 241).

To Toggle the Display of the Properties View

- ▶ Select **View>Show Additional Properties**.

Show Thumbnails

Use the Show Thumbnails command to toggle the display of thumbnails in the Layout and Preview windows.

NOTE

If neither the Layout nor the Preview window is active, this option is unavailable (see “To Display the Page Layout Window” on page 209 or “To Display the Preview Window” on page 211).

To Toggle the Display of Thumbnails

- Select **View>Show Thumbnails**.

-or-

(Layout window only) Click .

Go To

Use the Go To commands to access more easily the pages of your document or skip to a specific page number.

TIP

The Go To commands are only valid when you’re Previewing your document.

This Go To commands navigate among pages in your document. You should not confuse it with the Go To Component command located on the Edit menu (see “Go To Component” on page 273).

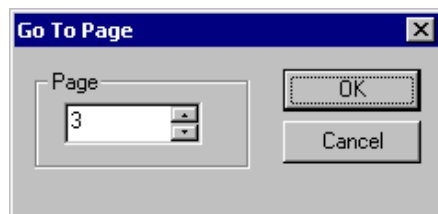
To Go to a Specific Page

- 1 Select **View>Go To>Page**.

-or-

Click  in the Navigate Toolbar.

The Go To Page dialog displays.



- 2 In the Page scroll box, select the number of the page you want to view.
- 3 Click **OK**.

To Go to the First Page

- Select **View>Go To>First Page**.

-or-

Click  in the Navigate Toolbar.

To Go to the Previous Page

- ▶ Select **View>Go To>Previous Page**.

-or-

Click  in the Navigate Toolbar.

To Go to the Next Page

- ▶ Select **View>Go To>Next Page**.

-or-

Click  in the Navigate Toolbar.

To Go to the Last Page

- ▶ Select **View>Go To>Last Page**.

-or-

Click  in the Navigate Toolbar.

Compile Errors

Use the Compile Errors command to display a list of errors encountered when you compile your project.

To Display Compile Errors

- ▶ Select **View>Compile Errors**.

Docuflex Studio displays the Compile Errors window (see “[Compile Errors Window](#)” on page 251).

Log File

Use the Log File command to view a listing of all activity the composition engine has performed in creating your document.

To Display the Log File

- ▶ Select **View>Log File**.

Docuflex Studio displays the Log File dialog box (see “[Log File Window](#)” on page 252).

Rotate View

Use the Rotate View command to rotate the image in the Preview windows so it's easily readable. You can opt to rotate the view in 90° increments either to the left or to the right.

To Rotate the View

- ▶ Select **View>Rotate View>Rotate Left** to rotate the view counterclockwise.

-or-

Select **View>Rotate View>Rotate Right** to rotate the view clockwise.

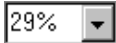
Zoom

Use the Zoom command to magnify the size of the image displayed in the Preview window.

To Adjust the Magnification of an Image

- Select **View>Zoom** and choose a magnification value.

-or-

Click  in the Output Toolbar and select a value.

-or-

Click  or  in the Output Toolbar to Zoom In and Zoom Out.

Document Menu

The Document menu comprises the following menu options:

If you want to	See
Add Optional Content	"Add Optional Content" on page 290
Add an Overflow Definition	"Add Overflow Definition" on page 294
Add a Member	"Add Member" on page 294
Add a Page Definition	"Add Page Definition" on page 353
Add a Page to a Page Layout	"Add Page" on page 354
Add a Page Frame to a Page	"Add Page Frame" on page 358
Add an external Reference	"Add Reference" on page 363
Add a business, or processing, Rule	"Add Rule" on page 366
Add a Section	"Add Section" on page 368
Add a Document Segment	"Add Segment" on page 372
Add a document Style	"Add Style" on page 373
Add a Table Definition	"Add Table Definition" on page 375
Add a Row to the Table	"Add Table Row" on page 380
Add a Cell to the Row	"Add Table Cell" on page 381
Add an entry to the Table of Contents	"Add TOC Entry" on page 381
Rearrange Components within the hierarchy	"Component" on page 383
Change the Table Row	"Change Table Row" on page 389
Including documents from Documanager	"Selecting Docuflex Files from Documanager" on page 85
Edit a member inserted via Wizard	"Edit Inserted Wizard" on page 389
Update an external Reference	"Update Reference" on page 390
Add, edit, or delete document Channels	"Channels" on page 391
Add, edit, or delete Verbiage Filters	"Filters" on page 393

If you want to	See
Add, edit, rearrange, or delete document Recipients	“Recipients” on page 397
Customize project-related document settings	“Settings” on page 400

IMPORTANT!

If your project is based on a template with specialized wizards, you can only create Members. In other words, you cannot create *any* other document components (e.g., Overflow Definitions, Page Definitions, Pages, Page Frames, External References, processing Rules, Sections, Document Segments, or Styles).

Add Optional Content

Use the Optional Content command to add miscellaneous content to your document. Optional content is usually a member or set of members that you use frequently but not at a set place in the document, such as after a value that reaches a certain limit.

The reason for creating Optional Content members is so that you can add members into your project either in the Preview Edit window or during Docuflex Data Entry in a Web browser.

After you create optional content, you must then enable specific members to which you can add optional content.

If you want to enable	Complete this property:
Inserting optional content	ContentAllowInsert
Deleting optional content	ContentAllowDelete
Editing a member’s source	ContentAllowEdit

To Add Optional Content

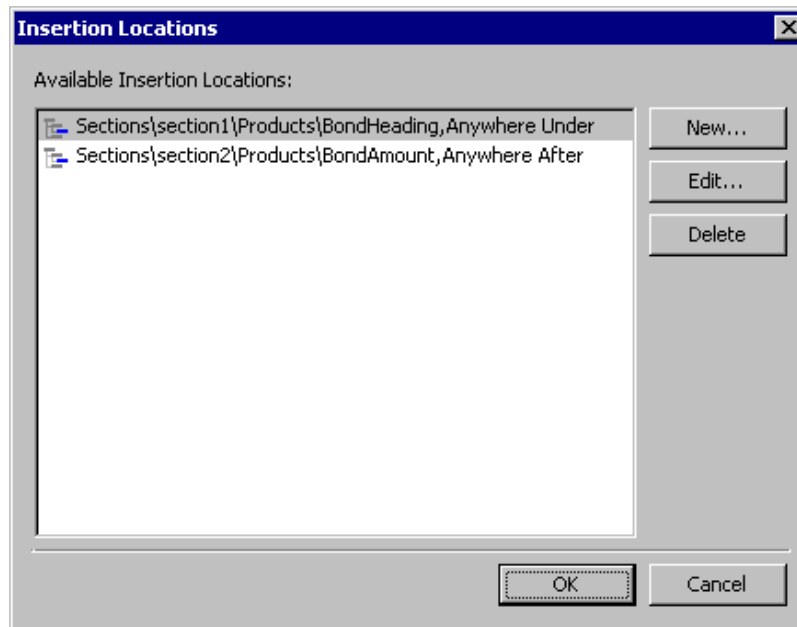
- 1 Select **Document>Optional Content**.
-or-
Select **Add>Optional Content** from the Component Explorer’s context menu.
Docuflex Studio adds an Optional Contents placeholder to the Component Explorer.
- 2 Complete the specification of the placeholder’s properties. An Optional Contents placeholder provides the grouping mechanism for optional contents by incorporating the following properties:

Property Category	Property	Description
Miscellaneous	(Name)	Name of the page definition
	InsertionLocations	The member before, after, or around which you can add optional content (see “To Specify the Insertion Location” on page 291).
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only

For more information about adding a member to the Optional Contents, see [“Add Member”](#) on page 294.

To Specify the Insertion Location

- Click in the InsertionLocation cell, and then click . The Insertion Locations dialog displays.

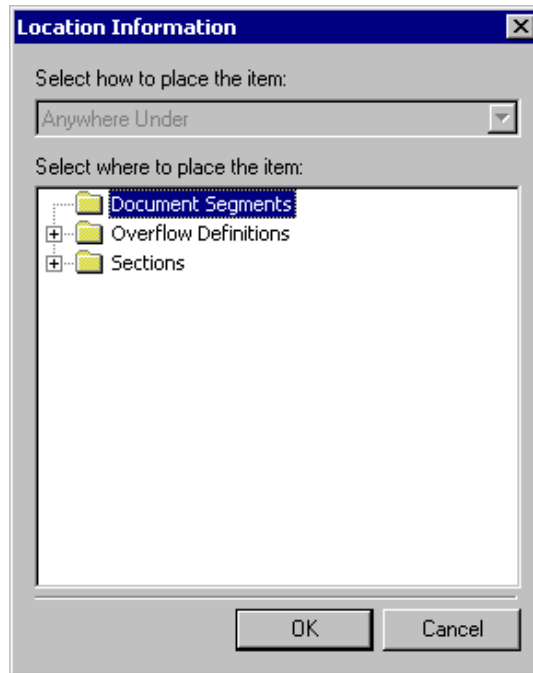


Because the Insertion Locations dialog offers several tasks, this guide provides a separate topic for each one.

If you need to	Go to
Add a location	“To Add an Insertion Location” on page 292
Edit a location	“To Edit an Insertion Location” on page 293
Delete a location	“To Delete an Insertion Location” on page 293
Save the Insertion Locations	“To Save or Close the Insertion Locations Dialog” on page 293

To Add an Insertion Location

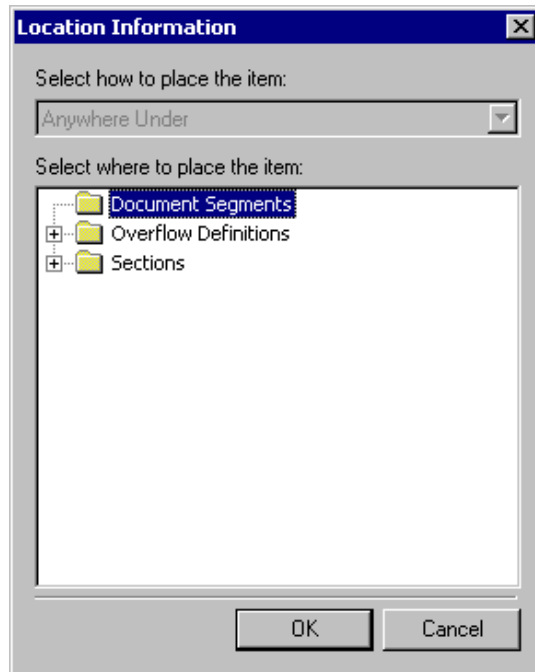
- 1 Click **New** and the Location Information dialog is displayed.



- 2 In the Select where to place the item: section list, navigate the tree listing to the location where you want to insert the optional content.
- 3 If you want to change the method for inserting the content, select another option from the Select how to place the item: drop-down list.
- 4 Click **OK**.

To Edit an Insertion Location

- 1 Select the optional contents member you want to edit from the Available Insertion Locations: list box.
- 2 Click **Edit** and the Location Information dialog is displayed.



- 3 In the Select where to place the item: section list, navigate the tree listing to the location where you want to insert the optional content.
- 4 If you want to change the method for inserting the content, select another option from the Select how to place the item: drop-down list.
- 5 Click **OK**.

To Delete an Insertion Location

- 1 Select the optional contents member you want to delete from the Available Insertion Locations: list box.
- 2 Click **Delete**.

To Save or Close the Insertion Locations Dialog

- Do one of the following:

To	Do this
Apply the specifications you've provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without applying the specifications you've provided	Click Cancel .

Add Overflow Definition

Use the Add Overflow Definition command to add an Overflow Definition to your document. This definition is usually invoked when an anticipated condition occurs, such as a member not completely fitting at the bottom of a page. The Overflow Definition can be as simple as stating that the member should be printed in its entirety at the top of the following page. An Overflow Definition is the highest member of the “collection-section-member” analogy (see “[What are Overflow Definitions?](#)” on page 155).

To Add an Overflow Definition

- Select **Document>Add Overflow Definition**.
- OR-

Select **Add>Overflow Definition** from the Component Explorer’s context menu.

For more information about adding a member to the Overflow Definition, see “[Add Member](#)” on page 294.

Add Member

Use the Add Member command to add a member quickly and easily to your project. Docuflex Studio contains shortcut routines for many different types of members, as well as a Member Definition Wizard for exceptional situations.

You can use this routine to add a member to the Document Segments, Optional Contents, Overflow Definitions, and Sections definitions. A Member is the lowest member of the “collection-section-member” analogy (see “[What is a Member?](#)” on page 149).

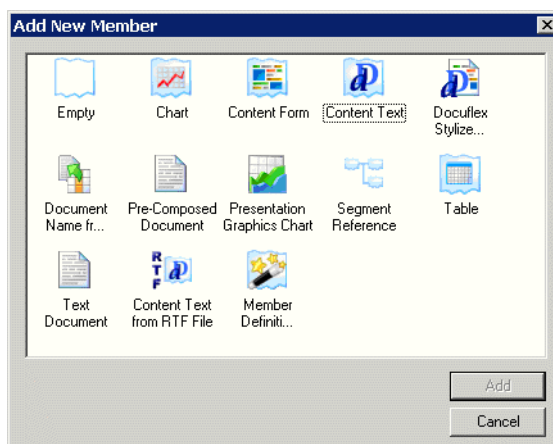
To Add a Member

- 1 In the Component Explorer, highlight the section or member to which you want to add a member or sub member.
- 2 Select **Document>Add Member**.
- OR-
- Select **Add>Member** from the Component Explorer’s context menu.

TIP

If you’re creating a member via a Member Style, click-and-drag a Member Style to the place in the Component Explorer where you want to add a member.

The Add New Member dialog box displays.



IMPORTANT!

If your project is based on a template with specialized wizards, you'll only see the wizards displayed in the Add New Member dialog. In addition, you cannot create *any* other document components (e.g., Document Segments, Optional Contents, Overflow Definitions, Page Definitions, Pages, Page Frames, external References, processing Rules, Sections, or Styles).

The Add New Member dialog contains shortcuts for creating specific types of members. When using the shortcuts, you can quickly add a new member; however, you must then manually specify property values for the member in the Component Properties.

NOTE

The Member Definition Wizard leads you through a thorough setup routine for any of the member types and ensures that you set the required properties, as well as some of the more commonly used ones. After completing the wizard, you can still change property values for a member in the Component Properties.

- 3 Select the type of member you want to add, and then click **Add**.

TIP

If you're using Member Styles, the dialog pre-selects the member type based on the ContentType property of the member style; however, you can change it if you want to add a different type of member.

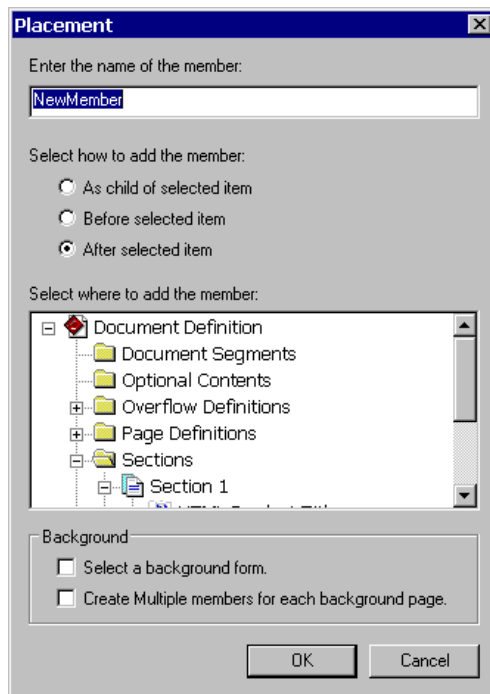
If you chose **Docuflex Stylized Content, Pre-Composed Document, Text Document, or Content Text from RTF File**, Docuflex Studio displays a selection dialog box.

- 4 Navigate to the location of the document or file you want to open, and then click **Open**.

TIP

If you're using Documanage, select the file from your Documanage File Cabinet (see [“Integrating Docuflex with Documanage”](#) on page 77).

The Placement dialog box displays.



- 5 Type a name for the member.

NOTE

If you chose to create a member from an external file, the default member name is the same as the file name; however, any invalid characters (e.g., characters disallowed by Docuflex) are changed to an underscore (_).

- 6 Click the option button designating the relationship of the new member to the existing member.

TIP

If you're using Member Styles, the placement options should already be correctly set, depending on where you released the mouse button as you were dragging the member style; however, you can change them if necessary.

- 7 Select the place in the member hierarchy where you want to insert the new member. The procedure is similar to that of "Copy To" on page 383.

NOTE

If you're creating a member of type Document Name From Table, see "Retrieving a Document Name from a Data File Table" on page 305.

The Background group box only applies to members of type Content Form and Content Text.

- 8 Enable the Select a background form check box if you want to choose a background image for the new member. (You can always add one later with the BackgroundFormName component property.)

- 9 If the background form you're choosing contains multiple pages, you can elect to create a member for each page.

NOTE

If you're only creating a single member, but you want to use, say, Page 3 of a multiple-page form, leave this check box blank and use the BackgroundFormPage member property to select the proper page after the member is created.

- 10 Click **OK** to create the member.
- 11 If you've chosen to select a background image, the Open dialog displays.
- 12 Select the background form to use, and then click **Open**.

At this point, all of the required Component Properties are filled with the default Docuflex Studio values, but the member may require additional customizing.

If you created a member of type	Do this:
Empty	Edit the value of any Component Property.*
Chart	Edit the value of any Component Property, especially in the ChartColors and ChartProperties categories.*
Presentation Graphics Chart	Edit the value of any Component Property, especially in the ChartProperties category.* -or- For a step-by-step procedure, see " Customizing Presentation Graphics Charts " on page 308.
Content Text or Content Form	- Edit the value of any Component Property.* - Type the contents of the member in the Source window.**
Segment References	- Edit the value of any Component Property, especially the Content property.* - This property specifies the name of the Document Segment you want to use.
Document Name From Table	Edit the value of any Component Property, especially the DataSource property.* This property specifies the table where the name of the external resource is located.***
Table	See " To Assign a Member to a Table " on page 304.

* For a complete listing of member properties, see below.

** For more information, see "[Source Window](#)" on page 234.

*** Docuflex does NOT allow the percent (%) symbol in filenames.

To Complete the Member Properties

- Complete the specification of the member properties. A member determines the appearance of its content by incorporating the following categories of properties:

Property Category	Property	Description
Widow/Orphan Control (Break)	Break properties ensure that members which should be kept together ARE kept together	
	KeepFirstNOccur	Keep a specified number of recurring members together at the beginning of the group
	KeepLastNOccur	Keep a specified number of recurring members together at the end of the group
	KeepPrev	Keep this member with the previous member
ChartColors (Docuflex Studio Charts)	ChartColors properties specify the various colors corresponding to the data groups on your chart. In addition, the colors control both foreground and shading colors (e.g., shading colors are only present on 3-D charts)	
	ChartColorPrimary1-8	Display this color on the corresponding data group
	ChartColorShading1-8	Display this color as a shading color on the corresponding data group in a 3-D chart
ChartProperties (Docuflex Studio Charts)	ChartProperties properties control the appearance of a chart, including the various text labels and whether the chart is 2- or 3-dimensional	
	ChartCharacterStyle1-6	The character style for text labels
	ChartDataColumns	The columns from the data file that provide the data for your chart
	ChartDataOrientationPie	Whether the data in a pie chart represents complete columns or individual rows
	ChartDataRowBegin	The beginning row in the data file that you want to chart
	ChartDataRowEnd	The ending row in the data file that you want to chart
	ChartDataSource	The table from the data file that provides the columns for your chart
	ChartDimension	Choose from two- or three-dimensional
	ChartFootingArea	Adjust the available space for the footer
	ChartFootingFont	The character style for the footer
	ChartFootingText	The text for the footer
	ChartHeadingArea	Adjust the available space for the header
	ChartHeadingFont	The character style for the header
	ChartHeadingText	The text for the header
	ChartInnerFrame	Whether to create an inner frame
	ChartLanguage	The language of the text labels
	ChartLeftMarginArea	Adjust the available space for the left margin text
	ChartLeftMarginFont	The character style for the left margin text
	ChartLeftMarginText	The text for the left margin
	ChartOuterFrame	Whether to create an outer frame

Property Category	Property	Description
	ChartRightMarginArea	Adjust the available space for the right margin text
	ChartRightMarginFont	The character style for the right margin text
	ChartRightMarginText	The text for the right margin
	ChartShadeBackground	Whether to shade the background of the chart
	ChartType	The type of chart you want to create
	ChartXTicksStart	The starting point for the X-axis labels
	ChartXTicksText	The custom labels for the X-axis
	ChartXTicksType	Choose a standard label set for the X-axis
	ChartYGridLines	Whether to create horizontal grid lines along the Y-axis
	ChartYValueMax	Maximum value on the Y-axis (vertical axis)
ChartProperties (Presentation Graphics Charts)	ChartProperties properties control the appearance of a chart, including the various text labels and whether the chart is 2- or 3-dimensional	
	ChartData	The table from your data file that provides the data for your chart
	ChartDataColumns	The columns from the data file that provide the data for your chart
	ChartDataLegend	The custom label / color for each column within the row
	ChartDataRowBegin	The row of the table on which you start collecting data
	ChartDataRowEnd	The row of the table on which you cease collecting data
	ChartDataXAxis	the column containing a custom label for each series or group
	ChartFootNote	The custom label for an additional message
	ChartGraphTitle	The custom label for the chart
	ChartLegendTitle	The custom label for the legend
	ChartSubTitle	The custom label for the chart's subtitle
	ChartXAxisTitle	The custom label for the legend
	ChartY1AxisTitle	The custom label for the primary scale of the chart
	ChartY2AxisTitle	The custom label for the secondary scale of the chart
Data (Multiple Inclusion)	Data properties control whether a member is included, based on the occurrences of rows in a Docuflex Studio schema	
	DataSource	The source table of the variable data
	DataSourceSort	Whether the data file is sorted
	DataSourceSortCol	The column in the data file by which to sort
	RowBegin	The row of the table on which you start collecting data

Property Category	Property	Description
	RowEnd	The row of the table on which you cease collecting data
	RowIncrement	Increment for reading rows in the table (e.g., a value of 2 means to read every other row)
Miscellaneous	(Name)	Name of the member style
	AspectRatio	(Pre-Composed members only) Whether to maintain the height-to-width ratio when resizing images
	BackgroundFormName	(Content Text and Content Form members only) An image to display in the background of the member.
	BackgroundFormPage	(Content Text and Content Form members only) The page number of a multiple-page image to display in the background of the member.
	Comment	Any clarifying description about the member
	Content	(Member referencing a Document Segment or external document only) The name of the file or Document Segment containing the contents
	ContentAllowDelete	Whether a user can delete a member
	ContentAllowEdit	Whether a user can edit a member
	ContentAllowInsert	Whether a user can insert Optional Contents
	ContentRetrievalType	(Documanager only) The method for retrieving a specific version of this pre-composed document
	ContentType	The type of content contained in the member
	DataAllowTableDelete	Whether a user can delete a row from a table
	DataAllowTableInsert	Whether a user can insert a row to a table
	DataInsDelTable	The table to which a user can add a row or from which a user can delete a row
	DropCache	Whether to drop the cached content after each transaction
	EditWithNext	Make this Member eligible for grouping with the next Member
	FrameOrTableCell	The frame or table cell in which this member should be placed
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	OverflowDefinition	(Not available on Overflow Definitions) Default Overflow Definition
	Recipients	Recipient for this member
	StartParm	The place within the page or document to “start” this member

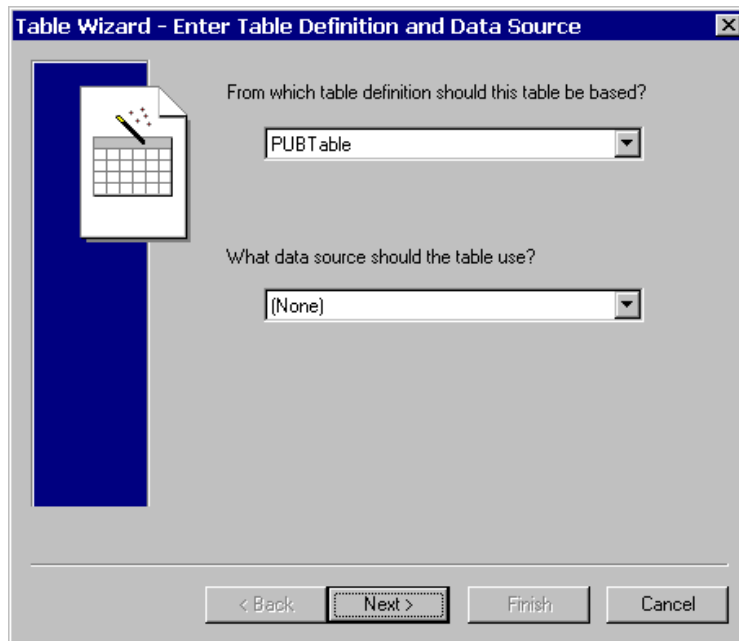
Property Category	Property	Description
	TableCell	(Members in Frames only) The table cell in which this member should be composed. If “(None)”, member is composed directly in frame
	TableDef	This property only applies to members of type Table. This property contains the table definition referred to by this member.
OrderedList	Ordered lists can consist of either Arabic or Roman numeral outline-style lists	
	HeaderLevel	Determines the level of a heading in an ordered list or outline (up to sixteen)
	HeaderStartAt	The starting number of the first heading
	OrderListLevel	Determines the level of a member in an ordered list or outline (up to sixteen)
	StartAt	The starting number of the first list item
Position (Assembly & Placement)	Position properties control the positioning of a member as related to the Frame, Column, and Page boundaries	
	Height	Member height
	Left	Member position in relation to the left side of the frame
	SpaceAfter	Vertical space after the member
	SpaceBefore	Vertical space before the member
	Top	Member position in relation to the top of the frame
	VerticalAlign	The vertical alignment of the member, or the member within a table cell or row
	Width	Member width
Rules	Rule properties control the point in the composition procedure where any processing rules are applied	
	Inclusion	The rule to be executed to qualify the member for inclusion in the document
	PostComposition	The rule to be executed after composing the document
	PostInclusion	The rule to be executed after including the member
	PreComposition	The rule to be executed before composing the document
	PreInclusion	The rule to be executed before including the member
Special Handling	BeginUseDate	The processing date on which the member is eligible for inclusion
	BookmarkLevel	The heading level (level of indention) for the bookmark
	BookmarkText	The text or wording of the bookmark
	EndUseDate	The processing date on which the member is no longer eligible for inclusion
	Include	Apply or override an inclusion rule qualifying a member

Property Category	Property	Description
	IncludelfFits	(Overflow Definition only) Whether to include a member when publishing a page
	IncludelfRow	Whether to include a member representing a multiple occurrence of data in a data file
	ProcessFirstChild	Whether to process all children of the member or process the children until reaching the first child whose inclusion rule is satisfied
	ProcessFirstNChildren	(Overflow Definition only) Use in combination with IncludelfFits to process the first n children that fit
	ReferenceIteration	Specifies the particular occurrence of a member that occurs multiple times due to looping on the table named by the member's DataSource property
	ReferenceMember	Specifies the member that is the destination for the reference
	ReferenceType	Specifies whether to use a member or a URL as the cross-reference
	ReferenceURL	Specifies the URL that is the destination for the reference
	SectionBegPage	The beginning of the valid page range for this member
	SectionEndPage	The ending of the valid page range for this member
	SuppressBlankLines	Whether to include a member if the source data for that member is blank
	TOCInsertionPoint	Specifies the member that holds the Table of Contents
	TOCReference	(Not available for Overflow Definition) Indicates which TOC entry format to use
	UseOnce	(Overflow Definition only) Use this member once and then remove it from the list of eligible candidates

Property Category	Property	Description																		
	VisibleIfOutput	Whether to include a member marked for display, print, or both Note: This property produces different results at batch processing time, depending on which PDL / Printer Definition you’re using. The following table describes how each PDL is treated as an output device: <table><tr><th>PDL</th><th>Display or Printer?</th></tr><tr><td>DCD</td><td>Both</td></tr><tr><td>HTML</td><td>Display</td></tr><tr><td>PDF</td><td>Display</td></tr><tr><td>AFP</td><td>Printer</td></tr><tr><td>Metacode</td><td>Printer</td></tr><tr><td>PCL</td><td>Printer</td></tr><tr><td>Postscript</td><td>Printer</td></tr><tr><td>HDC</td><td>Printer</td></tr></table> If you’re creating HTML output from DFLXCOMP or DFLXOUT, for example, and some members in your project are marked as VisibleIfOutput=Printer, those members will not be included in your HTML.	PDL	Display or Printer?	DCD	Both	HTML	Display	PDF	Display	AFP	Printer	Metacode	Printer	PCL	Printer	Postscript	Printer	HDC	Printer
PDL	Display or Printer?																			
DCD	Both																			
HTML	Display																			
PDF	Display																			
AFP	Printer																			
Metacode	Printer																			
PCL	Printer																			
Postscript	Printer																			
HDC	Printer																			
	WhenUsed	(Overflow Definition only) The composition event that triggers the inclusion of this member																		
	WhereUsed	Side of the physical page on which to use this member																		
	DocumentName	(Documanage only) Alias for the name of the document																		
	LastChangeDate	(Documanage only) Date on which the document was last changed																		
	Status	(Documanage only) Current status of the document (see “Step 10” on page 84).																		
Styles	CharacterStyle	(Text & Text Document only) Default character style. Members that refer to this Member style automatically (indirectly) use this character style unless it’s overridden by the CharacterStyle applied to a specific piece of text																		
	MemberStyle	Default member style																		
	ParagraphStyle	(Empty Member, Text, Text Document, Tables, and Table Rows only) Default paragraph style																		
	TabStyle	(Text & Text Document only) Default tab style																		

To Assign a Member to a Table

Docuflex Studio displays the Table Wizard.



- 1 In the Table Definition drop-down list box, select the table definition on which this table is based.

NOTE

The drop-down list also includes an option called **** New Table ****. By choosing this option, you can create a Table Definition and a Table at the same time.

- 2 In the Data Source drop-down list box, select the data source you want to use (from the list of available choices).

3 Do one of the following:

If you're adding a	Do this:
table based on an existing Table Definition	Click Finish . Docuflex Studio assigns the Table to the member.
new table	1 Click Next . 2 Continue with "Step 3" on page 375.

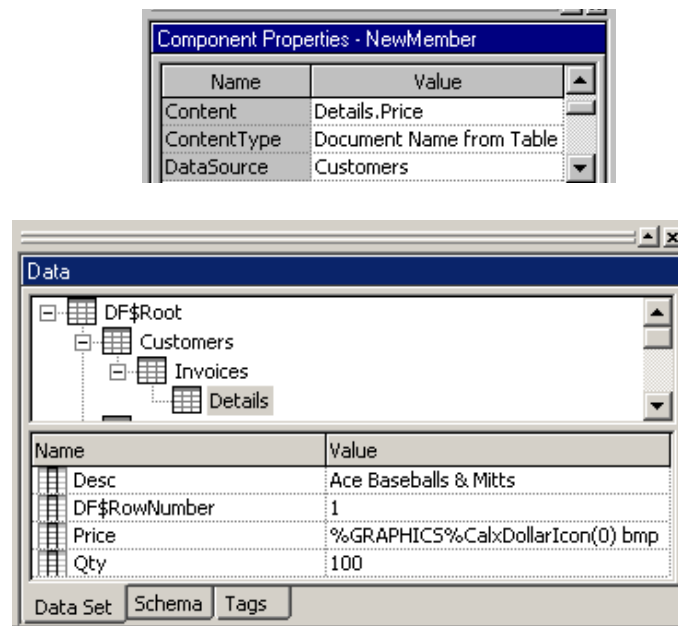
For more information about using a table in your document, see "Building Tables" on page 64.

Retrieving a Document Name from a Data File Table

The Document Name From Table member type provides you with a way to retrieve external resources for your project. The benefits of using external resources include:

- Not having to change your project if you add more resources, since they're not actually stored in the project.
- Not having to create a processing rule to retrieve the resource. Instead, you can include the logic for building your schema and data file in Transall.

Implementing document names in a table is best illustrated by the following example:



As part of creating a Document Name From Table member, you must specify the column in the Schema file that contains the document name. Looking at the Component Properties in the example, the Content component property indicates that the document name resides in the Price column of the Details table (e.g., Details.Price). Looking at the Data bar in the example, you can easily see that the Price column of the Details table does indeed contain the document name of an external graphics file.

In order for Docuflex Studio to locate the resource, the document name *must* include the location of the document. You can use any of the following syntax examples of the document name specification:

Pathname\filename.filename_extension

-or-

Pathname\filename(version) filename_extension

-or-

%Path_Maps key%filename.filename_extension

-or-

%Path_Maps key%filename(version) filename_extension

where:

Parameter	Value
Path_Maps key	You must add this statement to your environment (see “ To Add a Path Map ” on page 483). You can use any name to indicate the storage location of external document names (e.g., <i>Graphics=C:\Docucorp\Docuflex\Projects\Content\</i>).
filename(revision)	Type the filename of the external file, but not the filename extension, followed by the version number of the file (e.g., <i>CalxDollarIcon(0)</i>). Use a version of 0 if you do not use version numbers.
filename_extension	Type the filename extension, usually three characters (e.g., <i>bmp</i> , <i>emf</i> , <i>jpg</i> , <i>png</i>).

If the files are in the “current” directory, you can shorten the document name specification as follows:

Pathname\filename.filename_extension

-or-

Pathname\filename(version) filename_extension

WARNING!

If any of the following situations can occur:

- Paths are likely to change over time (e.g., .dwp files, which include .ddf data, that are archived).
- Processing is to be performed on several platforms with different directory structures.
- The format of the paths are different on different processing platforms (e.g., **C:\documents** in Windows and **/home/Docucorp/documents** in UNIX).
- The files are archived in Documanage (see “[To Select a Document Name From Table](#)” on page 95).

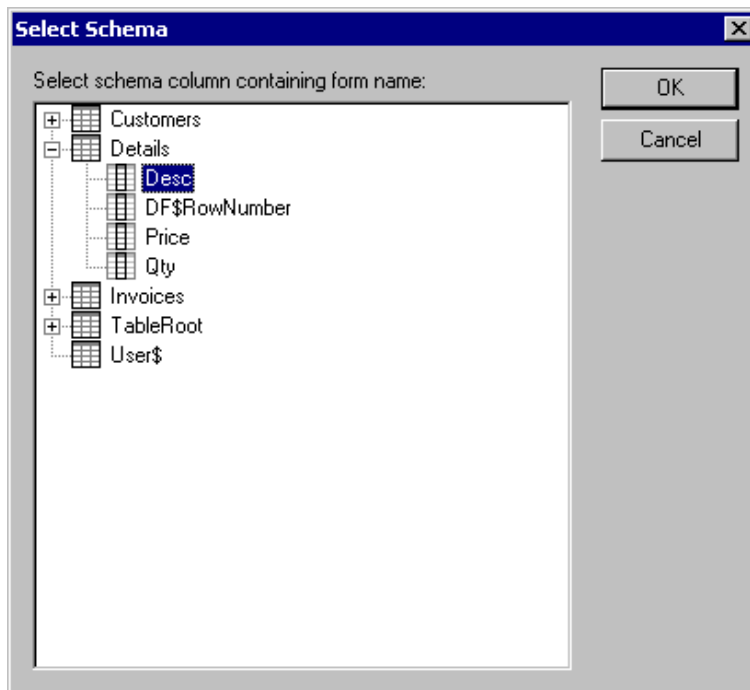
then you should use **%Path_Maps key%filename(version) filename_extension**

The filename shown in the Price field of the previous example illustrates the *logical* location of the external resources, since the storage folder is defined by the path map key. If you want to type in a specific folder and filename, Docuflex Studio accepts the data, but you’re limited by the syntax of the operating system on which the resource is stored. By using the logical location, your environment could contain path map key statements for multiple operating systems (e.g., *C:\Docucorp\Docuflex\Projects\Content* for Windows or */users/home/Projects/Content/* for UNIX).

To Use a Document Name From Table Member

- 1 Click **OK**.

The Select Schema dialog box displays.



- 2 Select the column containing the name of the external resource, then click **OK**.
- 3 Skip to “[Step 10](#)” on page 297.

Creating Content Text Members from RTF Files

Docuflex Studio now allows you to select an RTF file to import into your project. The necessary Context Text member(s) are automatically created based on the contents of the file. If the RTF file contains a table, Docuflex creates a Table Definition in the project and correctly references it so that the table composes along with the text.

Additionally, if the RTF file contains font (Character), Paragraph, or Tab styles that do not already exist in the Style Definitions folder of the Docuflex project, new styles are created as needed. Also be aware of the following:

- A newly-created member has StartParm=NewParagraph, so either put it into a separate section or set StartParm=NewPage.
- Only text, variable fields, and tables are imported, but not headers, footers, and images.
- If you want Docuflex to control the page margins of the RTF file (typically equal to the size and position of the Body Page Frame), you must specify which margins you want to ignore in the RTF Printer Definitions. See “[To Specify Advanced Options for RTF Output](#)” on page 60 of the Docucorp Control Panel for more information.
- If the RTF file contains a variable field, the field is converted to a Docuflex field with the same name as the incoming variable. Since the field name most likely will not match any field in the schema, you’ll receive a “not a data item or script subroutine” error if the Preview window is open. Visit the variable field in the Source window and select an existing field from the data schema.

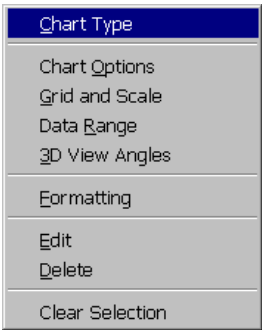
Customizing Presentation Graphics Charts

All Presentation Graphics chart member functions are accessible by alternate-clicking in the Source window. Presentation Graphics charts are “publication-quality” and use advanced 3D rendering techniques to create truly stunning charts.

To Customize a Presentation Graphics Chart

- 1 Alternate-click a Presentation Graphics Chart member anywhere in the Source window.

The context menu displays.



- 2 Do one of the following:

To	See:
Select the Chart Type and choose basic settings	“Chart Type” on page 309
Alter the presentation layout	“Chart Options” on page 313
Adjust the background grid and scale	“Grid and Scale” on page 324
Determine the numbers of series and groups	“Data Range” on page 333
Change the viewing angle on True 3D charts	“3D View Angles” on page 333
Modify the series characteristics	“Series” on page 338
Customize the font, line, and fill	“Formatting” on page 344
Edit a static chart label	“Edit” on page 352
Delete a label or series	“Delete” on page 352
Clear multiple selections and start over	“Clear Selection” on page 352

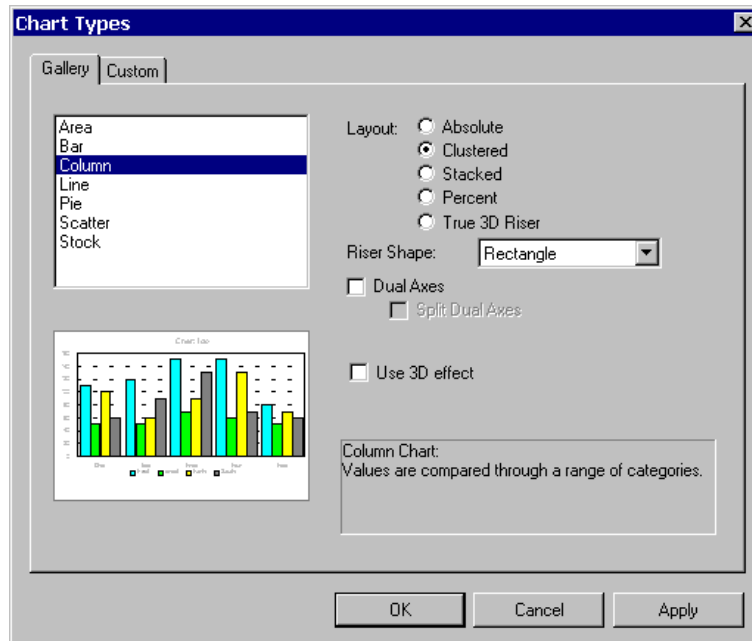
Chart Type

Use the Chart Type command to select the type of chart you want to compose and some basic structure settings for the chart.

To Choose the Chart Type

- 1 Select **Chart Type** from the context menu.

The Chart Types dialog displays.



NOTE

The available options change depending on the type of chart you choose from the list box. The effects of the options you select are displayed in a “preview” located in the lower left-hand corner of the dialog.

- 2 Do any of the following:

To specify	Go to this topic
The type of chart you want, along with basic structure requirements	“Using the Gallery View” on page 310
A specific chart from a varied collection of pre-composed charts	“Using the Custom View” on page 312

To Save or Close the Chart Types Dialog

- Do one of the following:

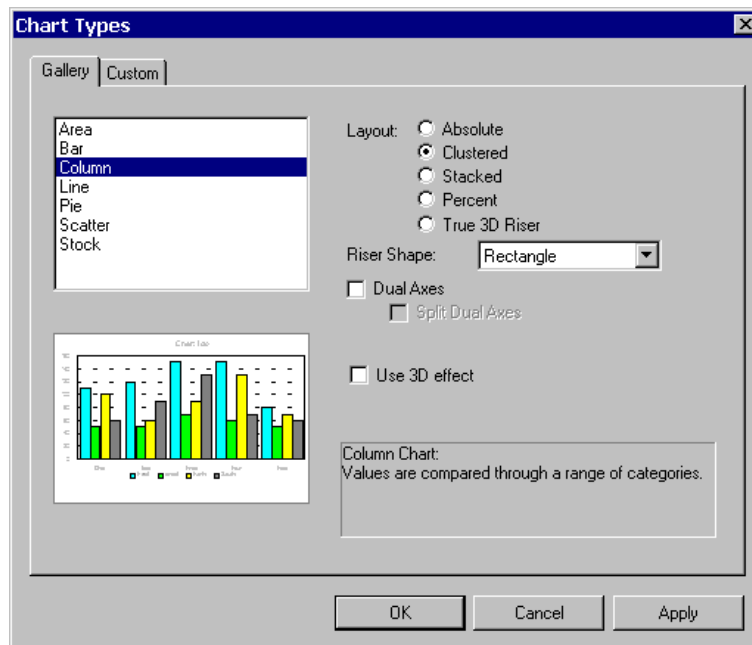
To	Do this
Use the specifications you’ve provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without using the specifications you’ve provided	Click Cancel .
Apply the specifications you’ve provided, see the results in Docuflex Studio (in the background), and remain in the charting engine	Click Apply .

Using the Gallery View

Use the first view in the Chart Types dialog box to customize the settings of the chart, including its layout, riser shape, number of axes, and whether it's rendered in three dimensions.

To Use the Gallery View

- 1 If the Gallery view is not already showing in the Chart Types dialog box, click on the **Gallery** tab.



- 2 Select the type of chart you want to use from the list box.

3 Choose from the available options, as applicable:

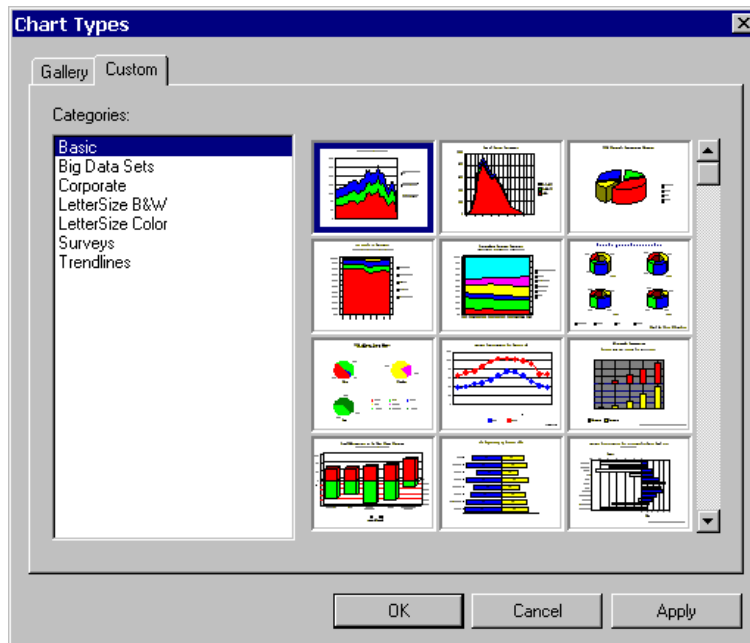
Option	Meaning
Layout	The overall “look and feel” of the chart. Select from Absolute, Clustered, Stacked, Percent, Pie, Ring Pie, or True 3D (<i>chart type</i>), where <i>chart type</i> reflects the selected chart.
Show Lines	Select this checkbox if you want lines to be drawn. Note: You must choose either Show Lines or Show Markers on Lines.
Show Markers on Lines	For Absolute, Stacked, and Percent charts, select this checkbox if you want markers to be drawn. Note: You must choose either Show Lines or Show Markers on Lines.
Marker Shape	When the Show Markers on Lines checkbox is selected, select this list box to choose a different marker shape, including: ■ Rectangle ■ X-Shape ■ Plus Symbol Thin ■ Circle ■ Diamond ■ Triangle ■ Plus Symbol Thick ■ Square ■ Star The standard configuration draws rectangular markers for all risers. After the chart is created, you can select different marker shapes for all or individual series in the chart.
Riser Shape	Click this drop-down list box to select from a list of riser shapes, including Rectangle, Beveled Box, and Reverse Beveled Box. For True 3D Riser Column charts, the list includes: ■ Rectangular Riser ■ Round Column ■ Cone / Pyramid ■ Floating Cube ■ Floating Sphere
Connect Data Points with Lines	Select this checkbox if you want the scatter markers in the chart to be connected with lines.
Dual Axes	For Absolute, Clustered, and Stacked charts, select this checkbox if you want to make a chart with two numeric axes. This allows you to chart some of the series on one axis and some on another. When the Dual Axes checkbox is selected, use the Split Dual Axes checkbox to divide the series between two physical axes in the chart.
Use 3D effect	Select this checkbox if you want a 3D-depth effect applied to the chart frame and risers. Do not select this checkbox if you want a flat, 2D chart. This option is not available for True 3D charts.
2D Circular Pie	Select this checkbox if you want a flat (2D) chart. By default, all charts are presented with a 3D-depth effect applied to the chart frame and risers. Select this checkbox if you do not want this 3D-depth applied.

Using the Custom View

Use the second view in the Chart Types dialog box to select from a number of pre-composed charts in several categories.

To Use the Custom View

- 1 If the Custom view is not already showing in the Chart Types dialog box, click on the **Custom** tab.



- 2 In the Categories list box, select the category that most closely matches the type of chart you want to create.

The pre-composed charts for that category are displayed on the right. These charts are completely customized, including some of the settings you'd have to adjust separately for other charts
- 3 Using the scroll bar, if necessary, select the chart you want to create.

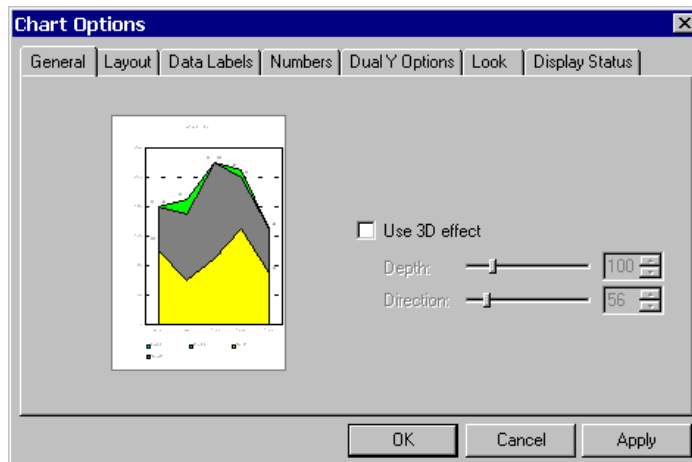
Chart Options

Use the Chart Options command to change the general format, layout, and look of a chart. You can also show or hide and format data labels for all series in the chart and show or hide chart objects.

To Modify the Chart Options

- 1 Select **Chart Options** from the context menu.

The Chart Options dialog displays.



NOTE

The available options change depending on the type of chart you're editing (i.e., the chart that's currently displayed in the Source window). The effects of the options you select are displayed in a "preview" located in the lower left-hand corner of the dialog.

- 2 Do any of the following:

To specify	Go to this topic
General formatting options	"Using the General View" on page 315
Chart layout options	"Using the Layout View" on page 317
Formatting and display options for data labels	"Using the Data Labels View" on page 318
Formatting options for data label numbers	"Using the Numbers View" on page 320
Formatting options for dual axes	"Using the Dual Y Options View" on page 321
Options for changing the "look"	"Using the Look View" on page 322
Options for showing and hiding objects	"Using the Display Status View" on page 323

To Save or Close the Chart Options Dialog

► Do one of the following:

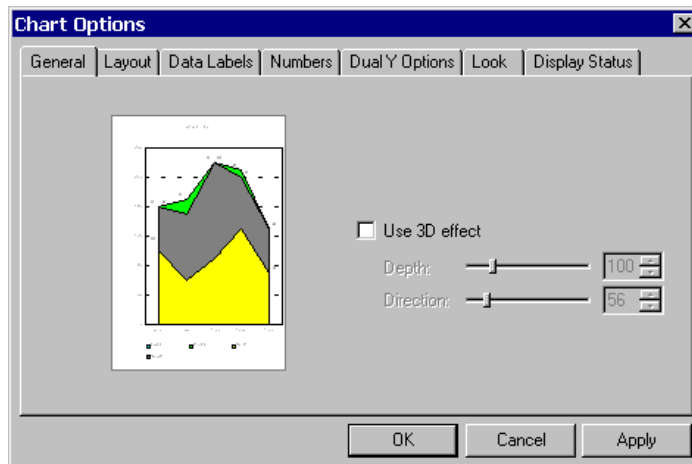
To	Do this
Use the specifications you've provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without using the specifications you've provided	Click Cancel .
Apply the specifications you've provided, see the results in Docuflex Studio (in the background), and remain in the charting engine	Click Apply .

Using the General View

Use this view in the Chart Options dialog box to specify general formatting options for each chart type.

To Use the General View

- 1 If the General view is not already showing in the Chart Options dialog box, click on the **General** tab.



- 2 Choose from the available options, as applicable:

Option	Meaning
Overlap	Use this slider or spin control to change how much risers within each category overlap each other. At -100, the bars within each group will overlap each other. At +100, the bars will be as far apart as possible without overlapping the next category.
Gap Width	Use this slider or spin control to change the gap between each group of bar risers in each category. Larger values increase the distance between each group of bars, smaller values decrease the gap between each group.
Riser Shape	Click this drop-down list box to select from a list of riser shapes, including Rectangle, Beveled Box, and Reverse Beveled Box. For True 3D Riser Column charts, the list includes: ■ Rectangular Riser ■ Round Column ■ Cone / Pyramid ■ Floating Cube ■ Floating Sphere You can also change the shape of risers for an individual series (see “Series” on page 338). Note: This field is deactivated/grayed-out if the Use 3D effect checkbox is selected.
Show Markers on Lines	Use this check box to show or hide markers on the line risers in a line chart. A marker will be drawn on each line at locations representing the values in the data sheet. Then, choose the size and shape of the markers: ■ Size—use this slider or spin control to change the size of the markers. ■ Shape—choose an item from this list box to change the shape of markers from rectangular to such shapes as circle, star, and plus symbol. Note: This selection is not available if the Use 3D effect check box is selected.

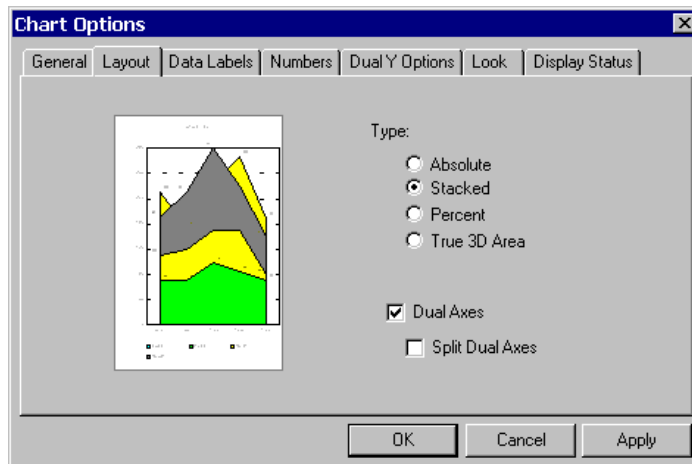
Option	Meaning
Show Lines	Select this checkbox if you want lines to be drawn. Note: You must choose either Show Lines or Show Markers on Lines.
Display Series Lines	Select this checkbox if you want to display a line connecting the series across columns.
Use 3D effect	By default, all 2D-charts are presented with a depth effect applied to the chart frame and risers. Use this check box specify whether to apply a depth effect or to make a completely flat chart. When enabled, use the sliders or spin controls to specify ■ the amount of Depth to be applied to the chart risers and frame ■ the Direction in which the depth is applied Note: This selection is not available for True 3D charts.
Pie Tilt	Use this slider or spin control to tilt the pie chart(s). Smaller values make the pie(s) more flat (facing the viewer), the maximum value will tilt the pie such that only the pie edge is shown.
Pie Depth	Use this slider or spin control to change the thickness of the pie(s).
Pie Rotation	Use this slider or spin control to rotate the pie(s).
Explode Pie	Use this slider or spin control to detach all slices from the pie. Exploding a pie or donut chart detaches all slices away from its center. See “ Series ” on page 338 if you want to extract/detach an individual slice from a pie or donut chart.
Hole Size	Use this slider or spin control to specify the size of the hole in the middle of your ring pie.
Restore All Slices	When slices have been detached or removed from a pie chart, select this button to restore all slices to their original settings.
Size	Use this slider or spin control to change the size of the markers in the scatter chart.
Shape	Choose a selection from this list box to change the shape of the markers in a scatter chart from rectangular to such shapes as circle, star, and plus symbol. This selection will also change the shape of the markers in the legend area if it is shown.
Connect Data Points with Lines	Use this check box to show or hide a connecting line between each marker in a series.

Using the Layout View

Use this view in the Chart Options dialog box to change the chart type, select a dual-axes chart, and to apply or remove 3D depth effect to the chart risers and frame.

To Use the Layout View

- 1 If the Layout view is not already showing in the Chart Options dialog box, click on the **Layout** tab.



- 2 Choose from the available options, as applicable:

Option	Meaning
Type	To change the chart layout, select one of the available option buttons—Absolute, Clustered, Stacked, Percent, Pie, Ring Pie, or True 3D. The True 3D option is not available for Bar charts. See “ Chart Type ” on page 309 for a complete description of each chart layout type.
Dual Axes	Select this checkbox if you want to make a chart with two numeric axes. This allows you to chart some of the series on one axis and some on another. See “ Using the Dual Y Options View ” on page 321 if you want to change the series that are assigned to each axis. When the Dual Axes checkbox is selected, use the Split Dual Axes checkbox to divide the series between two physical axes in the chart.
2D Circular Pie	Select this checkbox if you want a flat (2D) chart. By default, all charts are presented with a 3D-depth effect applied to the chart frame and risers. Select this checkbox if you do not want this 3D-depth applied.

Using the Data Labels View

Use this view in the Chart Options dialog box to show the labels for the chart.

For Pie charts, you can show the value associated with each pie slice, the series label only, or the value and the series label. You can position this information on the pie slice or outside each slice.

NOTE

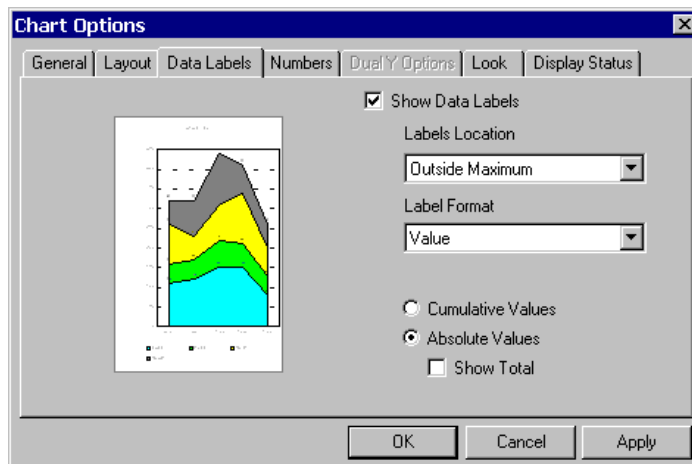
When you enable data labels, you can select different kinds of information to display:

- For all charts *except* Scatter charts, you can select Value, Label, or Label and Value. If you selected Label, the chart will show series labels only and you cannot format them as numeric values even if the series labels are numbers. If you selected Value or Label and Value, you can format these values using the Numbers view.
- For Scatter charts, the Number view is not included in the Chart Options dialog. The data labels use the same format and the X- and Y-axis labels.

The Numbers view is used to select the format of data label numbers—not numeric axis labels. See “[Grid and Scale](#)” on page 324 if you want to format numbers that appear on a numeric axis (Y1, Y2, or X).

To Use the Data Labels View

- 1 If the Data Labels view is not already showing in the Chart Options dialog box, click on the **Data Labels** tab.



- 2 Choose from the available options, as applicable:

Option

Meaning

Show Values

Select this check box to show or hide data label values for each slice in the pie chart. Next, select one of the following options:

- **Show Values as percentage**—select the checkbox to show the data values as a percentage of the total. Do not select this checkbox to show the absolute value that defines each slice.
- **Values on Slices / Values outside Slices**—select one of these option buttons to display the data values either on or outside each pie slice.

Show Labels

Select this check box to show or hide the series label associated with each pie slice. Then, determine the placement of the labels:

- **Labels on Slices / Labels outside Slices**—select one of these option buttons to display the series labels either on or outside each pie slice.

Option	Meaning
Show Leader Lines	If either the “Values outside Slices” or “Labels outside Slices” option button is selected, use this checkbox to show or hide leader lines from each pie slice to the data value and/or series label displayed next to it.
Labels on Sides	If either the “Values outside Slices” or “Labels outside Slices” option button is selected, use this checkbox to display the data value and/or series label on the side of the chart (i.e., away from the slice).
Show Data Labels	You can show or hide data labels for all series in a chart or for a single series in a chart. Select this check box to show or hide data labels for all series in the chart. See “Using the Data Labels View” on page 341 if you want to show or hide data labels for a single series. Then, select the format and location of the label: ■ Labels Location—choose an option from this list box to select where the data labels are displayed next to their associated riser in the chart. ■ Label Format—choose from Value, Label, or Label & Value. The Value selection shows the values from the data sheet at the corresponding location on each riser. If Label is selected, the series labels are drawn. If Label & Value is selected, the series labels and the value from the data sheet will be shown. ■ Show as a Percentage—If you selected a Label Format of “Value” or “Label & Value” in a percent or stacked chart, select this checkbox to display the values as a percentage of the total. ■ Cumulative Values—If you selected a Label Format of “Value” or “Label & Value” in a percent or stacked chart, select this option button to show the cumulative value of each riser. ■ Absolute Values—If you selected a Label Format of “Value” or “Label & Value” in a percent or stacked chart, select this option button to show the absolute value of each riser. ■ Show Total—If you selected Absolute Values, select this check box to show the total value of each category of risers. This option is not available for True 3D charts.

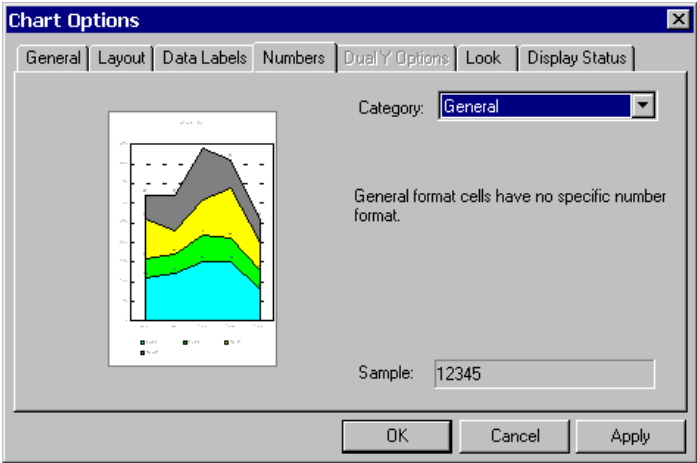
Using the Numbers View

NOTE
This view is only activated when data labels are enabled on the Data Labels view.

Use this view in the Chart Options dialog box to enable the display of data labels and select a label format that includes numeric values. If you want to change the number format of numeric axis labels, see “To Adjust Number Formats” on page 331.

To Use the Numbers View

- 1 If the Numbers view is not already showing in the Chart Options dialog box, click on the **Numbers** tab.



- 2 Choose from the available options, as applicable:

Option	Meaning
Category	Choose an option from this list box to select the format of data labels numbers—General, Number, Currency, Percentage, Scientific, etc. The remaining fields in this dialog will be different depending on the selected category.
Decimal Places	If you selected Number, Currency, Percentage, or Scientific in the Category field, enter the number of decimal places that you want to appear in the data label numbers.
Symbol	If you selected Currency in the Category field, choose a currency symbol from this list box. Domestic and international currency symbols are provided.
Use Thousand Separator (,)	If you selected Number in the Category field, select this check box if you wish to have a comma separating thousands of values (e.g., 123456789 or 123,456,789).
Abbreviation	Displays an abbreviation for large numbers (e.g., K = 1000).
Negative Numbers	If you selected Currency in the Category field, choose an item from this list box to identify how you want negative data label numbers to be formatted.
Type	If you selected Special in the Category field, choose an item from this list box to identify the format of special numbers to be used.

Using the Dual Y Options View

NOTE

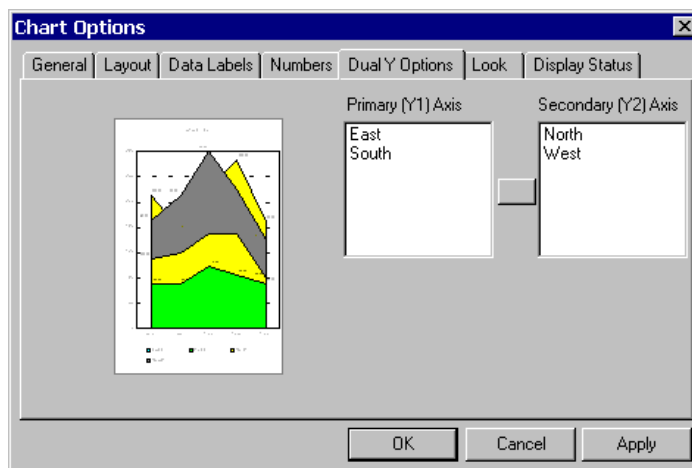
This view is only activated when a Dual Axes chart is selected on the Layout view.

Use this view in the Chart Options dialog box to assign individual series to each axis and to define the location of an axis split line.

You can change the layout of any chart, except Pie, Stock, and 3D charts, to include two numeric axes—a Primary (Y1) axis and a Secondary (Y2) axis. When a dual-axes layout is chosen, you can split the two axis to be drawn from separate physical base lines or have all risers drawn from a single base line. In either case, the number of series in your data sheet are divided and half of them are assigned to the Y1 axis and the other half to the Y2 axis. You can use the configuration options to assign any series to either the Y1 or Y2 axis.

To Use the Dual Y Options View

- 1 If the Dual Y Options view is not already showing in the Chart Options dialog box, click on the **Dual Y Options** tab.



- 2 Choose from the available options, as applicable:

Option

Meaning

Primary (Y1) Axis
Secondary (Y2) Axis

When the Dual Axes check box is selected in the Layout view, the number of series in half are automatically divided and half of the series are assigned to one axis and the other half to the second axis. Select a series label in the Primary (Y1) Axis list box and click the [>>] tab to move the series to the Secondary (Y2) Axis. Select a series label in the Secondary (Y2) Axis list box and click the [<<] tab to move the series to the Primary [Y1] axis.

Split Position

When the Dual Axes and Split Dual Axes check boxes are selected in the Layout view, use this slider or spin control to select the location where the two halves of the chart will be physically split.

Show Axis Split

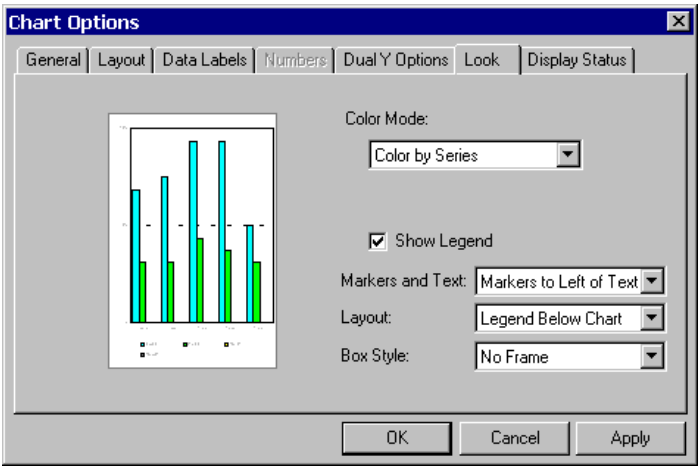
Select this check box to show or hide the dual axes split line.

Using the Look View

Use this view in the Chart Options dialog box to select the Color Mode (how risers/markers are colored) and the Legends (show or hide and format).

To Use the Look View

- 1 If the Look view is not already showing in the Chart Options dialog box, click on the **Look** tab.



- 2 Choose from the available options, as applicable:

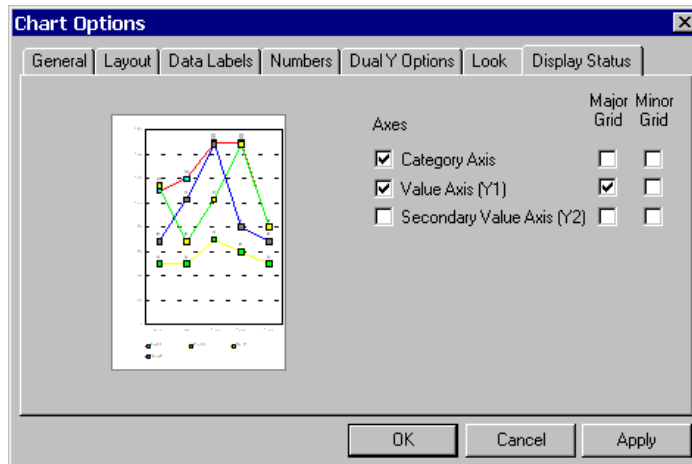
Option	Meaning
Color Mode	Choose an option from this list box. In the normal configuration, a different color riser or marker is used for each series that is defined in the data sheet. However, you may choose that all risers in a category use the same color or that risers be colored according to their height (or their associated value in the data sheet).
Show Legend	Select this checkbox to show or hide the chart legend. If this checkbox is not selected, all other selections in this dialog will be grayed out. ■ Markers and Text—select one of these option buttons to define the content and format of the legend area. ■ Layout—choose an item from this list box to define where the legend area (markers and text) should be drawn within the chart frame: Legend on Right Side, Legend on Left Side, or Legend Below Chart. ■ Box Style—select an item from this list box to draw text box around the entire legend area: No Frame, Single Line Frame, Double Line Frame, Beveled Frame, or Reverse Beveled Frame. This option is unavailable for True 3D charts.
Link Wall Colors to Floor Color	Select this checkbox if you want both wall colors to be the same as the floor color.

Using the Display Status View

Use this view in the Chart Options dialog box to show or hide chart objects.

To Use the Display Status View

- 1 If the Display Status view is not already showing in the Chart Options dialog box, click on the **Display Status** tab.



- 2 Choose from the available options, as applicable:

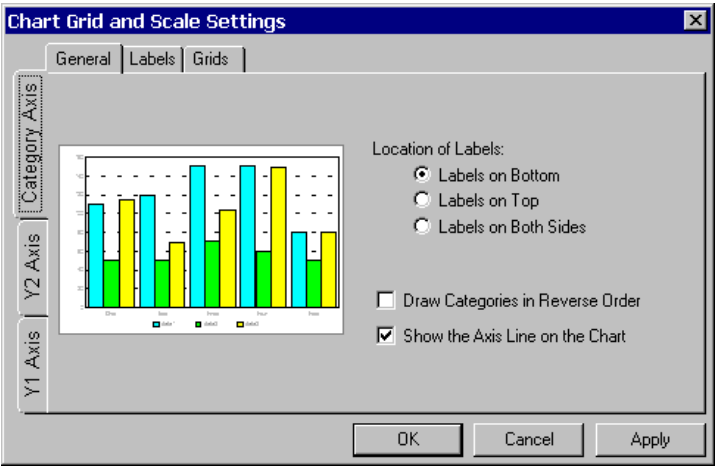
Option	Meaning
Category Axis	Select this check box to show or hide the category axis and its labels.
Value Axis (Y1)	Select this check box to show or hide the value axis and its labels.
Secondary Value Axis (Y2)	If the Dual Axes check box was selected in the Layout view, use this check box to show or hide the secondary numeric axis and its labels.
Series Axis	If a True 3D chart is selected in the Layout view, use this check box to show or hide the series axis and its labels.
X-Axis	In Scatter charts, select this check box to show or hide the X-axis and its labels.
Major Grid	For each axis in the chart (Category, Value Axis, Secondary Value Axis, X-axis), select these check boxes to show or hide the major grid lines on each axis.
Minor Grid	For each axis in the chart (Category, Value Axis, Secondary Value Axis, X-axis), select these check boxes to show or hide minor major grid lines on each axis.
Left Wall	In 3D charts, select this check box to show or hide the left wall of the cube.
Right Wall	In 3D charts, select this check box to show or hide the right wall of the cube.
Floor	In 3D charts, select this check box to show or hide the floor of the cube.
Show Pie Name	In pie charts, the category label(s) are drawn below each pie. Select this check box to show or hide the pie name.
Show Pie Total	In ring pie charts, select this checkbox to display (inside the ring) the total of all data values.

Grid and Scale

Use the Grid and Scale command to format chart axes, grid lines, and scaling. You can format all of the axes in your chart. The tabs on the left of the dialog show the available axes in the chart: Category Axis, Y1 Axis, Y2 Axis (for dual-axes charts), X Axis (for scatter charts), and Series Axis (for True 3D charts). When you select an axis tab, the tabs at the top of the dialog will also change to represent the formatting options for each axis. The dialog contains different options depending on which axis and formatting tab is selected.

To Adjust the Chart Grid and Scale Settings

- 1 Select **Grid and Scale** from the context menu.
The Chart Grid and Scale Settings dialog displays.



NOTE
The available options change depending on the type of chart you’re editing (i.e., the chart that’s currently displayed in the Source window). The effects of the options you select are displayed in a “preview” located in the lower left-hand corner of the dialog.

- 2 Do any of the following:

To specify formatting for	Go to this topic
the Numeric chart axis	“Using the Category Axis View” on page 325
the Data axes (X, Y1, and Y2)	“Using the Data Axis Views” on page 328
the Series axis (True 3D only)	“Using the Series Axis View” on page 332

To Save or Close the Chart Grid and Scales Settings Dialog

- Do one of the following:

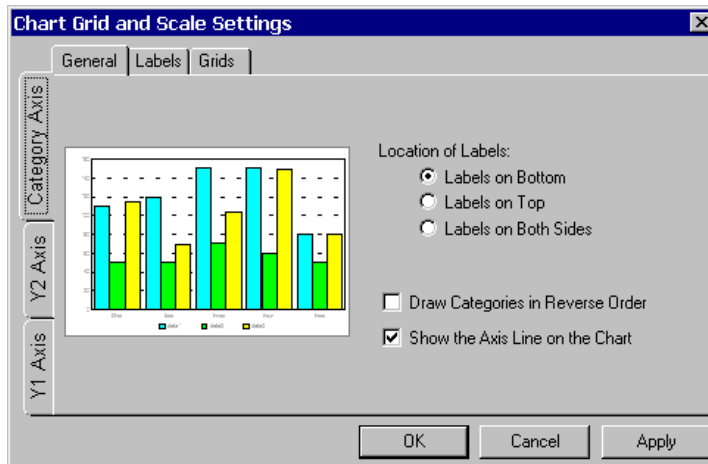
To	Do this
Use the specifications you’ve provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without using the specifications you’ve provided	Click Cancel .
Apply the specifications you’ve provided, see the results in Docuflex Studio (in the background), and remain in the charting engine	Click Apply .

Using the Category Axis View

Use this view in the Chart Grid and Scales Settings dialog box to format all of the axes in your chart.

To Use the Category Axis View

- If the Category Axis view is not already showing in the Chart Grid and Scales Settings dialog box, click on the **Category Axis** tab.



Because you can adjust the grid and scale settings for a wide variety of charts, this guide provides a separate topic for each chart.

To	Go to this topic
Adjust general formatting options	"To Adjust General Formatting Options" on page 325
Show or hide and format category axis labels	"To Adjust the Labels" on page 326
Show/hide and format major and minor grid lines for a category axis	"To Adjust the Grid Lines" on page 327

To Adjust General Formatting Options

- 1 Click the **General** tab.
- 2 Choose from the available options, as applicable:

Option	Meaning
Location of Labels	The default group axis base line and category labels are drawn at the bottom of the chart. In bar charts, the default group axis base line and value labels are drawn on the left side of the chart. In 3D charts, the group axis is drawn on the lower right side of the 3D cube and cannot be changed. Select an option in this list box to select a different location. For all charts except Bar charts, select one of these options—Labels on Bottom, Labels on Top, or Labels on Both Sides. For Bar charts, select one of these options—Labels on Left, Labels on Right, or Labels on Both Sides.
Value Axis Crosses Between Categories	Select this check box if you want the value axis to cross between categories. If you want the edges of a chart to meet the edges of the plot area, do not select this field.

Option	Meaning
Draw Categories in Reverse Order	Groups are drawn from left-to-right at the bottom of the chart in the same order they are defined in the first row of your data sheet. In bar charts, the categories are drawn from top to bottom on the left side of the chart in the same order they are defined in the first row of your data sheet. You can reverse the order of categories displayed on your chart's group axis.
Show the Axis Line on the Chart	Enable this checkbox to display the axis line on the chart.

To Adjust the Labels

For all chart types except Scatter charts, the labels for the category are taken from the values defined in the first row of your data sheet. For area, column, line, pie, and stock charts, the category axis labels are drawn immediately below the chart frame. For bar charts, the category axis labels are drawn immediately to the left of the chart frame. For 3D charts, the category labels are drawn on the lower right side of the 3D cube.

- 1 Click the **Labels** tab.
- 2 Choose from the available options, as applicable:

Option	Meaning
Show Labels for this Axis	Enable this checkbox to display category axis labels. The category axis labels show how data in the chart is grouped or categorized and they're taken from the information defined in the first row of your data sheet. Then, select how you want the labels displayed: ■ Automatic—Determines how many data labels can fit on your chart and automatically calculates the proper number of categories between labels. ■ Stagger Labels—By default, labels on the category axis are drawn on a single line. If labels are too long to fit on a single line, labels will be wrapped at word breaks and drawn on multiple lines. You can stagger category axis labels so that they weave in and out in a zig-zag fashion. Staggered labels are useful when a very long label is needed to define each category and you do not want individual labels to be wrapped. ■ Use Manual Number of Categories—If you want to draw only some of the labels in the first row of your data sheet, enter a number in the Between Labels field that defines the interval of category labels to be drawn.

To Adjust the Grid Lines

A chart's category axis can include major and minor grid lines. By default, major grid lines are displayed and minor grid lines are not. If you choose to draw both major and minor grid lines, you can choose a different style for each group of grid lines so you can easily determine the difference between the two. By default, major grid lines are drawn across the full length of the chart (Regular Grid) and minor grid lines are drawn as spanned tick marks across the axis base line. You can also choose the number of major and minor grid lines that are drawn on the category axis. Select the Major Gridlines tab inside the dialog to define major grid lines. Select the Minor Gridlines tab inside the dialog to define minor grid lines.

- 1 Click the **Grids** tab.
- 2 Choose from the available options, as applicable:

Option	Meaning
Show Gridlines (Major / Minor)	Enable the appropriate check box to show major/minor grid lines for the chart. ■ Grid Style—Select this list box to choose the style of gridlines: Regular Grids, Grids and Ticks, Inner Ticks, Outer Ticks, and Spanning Ticks. Note that you may also change the format, width, and color of a gridline by selecting it in the chart and choosing the Formatting option from the Chart menu or the line width, format, and color buttons in the formatting toolbar. ■ Use Manual Number of Categories—(Minor grid lines only) If you do not want to automatically calculate the number of minor grid lines, select this checkbox to choose a manual number of minor grid lines. When this checkbox is NOT selected, one minor grid line is drawn between each major grid line. When this checkbox is selected, enter a number in the Between Gridlines field that defines the interval of minor grid lines to be drawn. Note: Minor grid lines are not available for True 3D charts.

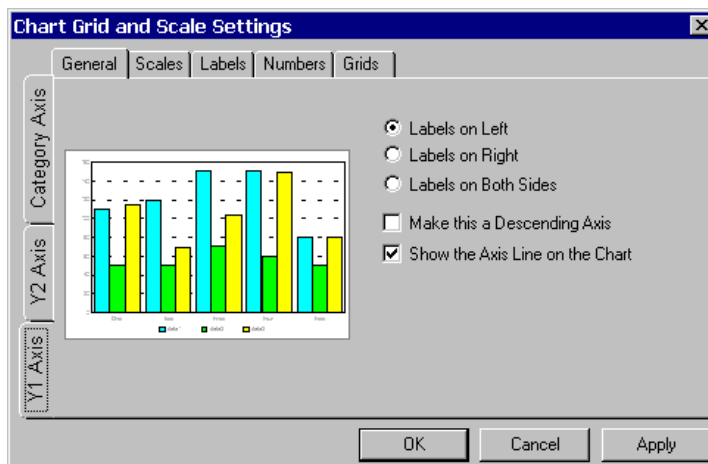
Using the Data Axis Views

Use these views in the Chart Grid and Scales Settings dialog box to format the three possible axes in your charts:

- **Primary Data Axis (Y1)**—All chart types except Pie charts include a primary data axis. The primary data axis plots the values from the rows and columns in your data sheet.
- **Secondary Data Axis (Y2)**—Area, bar, column, line, and scatter charts can be drawn on two data (Y1 and Y2) axes. When a dual axes chart is selected, the number of series is automatically divided in half and half of the series is assigned to one axis and the other half to the second axis. The two axes can be drawn up or out from the same plane/base line or physically split into two separate sections on the chart.
- **X Axis**—Only scatter charts include an X axis. This chart includes two data axes—a Y1 axis that is drawn on the left side of the chart and an X axis that is drawn on the bottom of the chart frame.

To Display the Data Axes Views

- If the desired Data Axis view is not already showing in the Chart Grid and Scales Settings dialog box, click on the desired Data Axis tab (e.g., **Y1 Axis**).



Because you can adjust the grid and scale settings for a wide variety of charts, this guide provides a separate topic for each chart.

To	Go to this topic
Adjust general formatting options	“To Adjust General Formatting Options” on page 329
Adjust the scaling parameters for a data axis	“To Adjust Scale Parameters” on page 330
Show or hide and format data axis labels	“To Adjust the Labels” on page 330
Specify number formats for data axis labels	“To Adjust Number Formats” on page 331
Show/hide and format major and minor grid lines for a data axis	“To Adjust the Grid Lines” on page 331

To Adjust General Formatting Options

- 1 Click the **General** tab.
- 2 Choose from the available options, as applicable:

Option	Meaning
Labels*	By default, the value labels on the primary data (Y1) axis are drawn on the left side of a vertical chart or the bottom of a horizontal chart. A secondary data (Y2) axis is only available in Dual-Y charts. The data X-axis is only available in scatter charts. Select one of these option buttons to change the location of the Y1, Y2, or X axis. *Note: For Bar charts, select one of these options—Labels on Bottom, Labels on Top, or Labels on Both Sides. For all charts except Bar charts, select one of these options—Labels on Left (Wall), Labels on Right (Wall), or Labels on Both Sides.
Make this a Descending Axis	Values on the Y1 axis are taken from the rows and columns of cells in your data sheet. You can draw these values and their associated risers and grid lines in ascending or descending order. Select this checkbox if you want to draw the data axis in descending order. Axis value labels and risers will be drawn in ascending or descending order depending on this selection.
Show the Axis Line on the Chart	Enable this checkbox to display the axis line on the chart.

To Adjust Scale Parameters

- 1 Click the **Scales** tab.
- 2 Choose from the available options, as applicable:

Option	Meaning
Use Logarithmic Scale on this Axis	Select this checkbox to use the logarithmic scale. DO NOT select this checkbox to use linear scaling on this axis. If the data that defines the data axis includes zero or negative values, a message box appears. You must choose manual scaling and set minimum and maximum values to greater than zero to choose the logarithmic scale.
Always include Zero on this Scale	Use this check box to include or exclude a zero on a data axis. If you specify a Use Manual Scaling for Minimum Value, this check box will be disabled.
Use Manual Setting for Maximum Value	The data you select determines the range of value labels that is charted on a data axis. This value will become the largest value label on this axis and the chart risers will be adjusted accordingly. If the values of your data extend beyond the maximum value, a red triangle symbol displays at the top of the value labels on the Y1 axis.
Use Manual Setting for Minimum Value	Select the Use Manual Setting for checkbox if you want to define a minimum value to be charted. If you select this checkbox, enter a number in the Minimum Value field. This value will become the smallest value label on this axis and the chart risers will be adjusted accordingly.

To Adjust the Labels

- 1 Click the **Labels** tab.
- 2 Choose from the available options, as applicable:

Option	Meaning
Show Labels for this Axis	Select this checkbox to show/hide data axis labels. Labels on a data axis identify the range of data values that are being charted. If the risers in the chart are drawn vertically from bottom-to-top or top-to-bottom, Y1-axis labels are typically drawn on the left side of the chart. If the risers in the chart are drawn horizontally from left-to-right or right-to-left, the Y1-axis labels are typically drawn on the bottom of the chart. A secondary data axis is only available in Dual-Y charts. The data X-axis is only available in scatter charts. Then, select the labels to exclude: ■ Don't Show Maximum Value Label ■ Don't Show Minimum Value Label

To Adjust Number Formats

- 1 Click the **Numbers** tab.
- 2 Choose from the available options, as applicable:

Option	Meaning
Category	Choose an option from this list box to select the format of data labels numbers—General, Number, Currency, Percentage, Scientific, etc. The remaining fields in this dialog will be different depending on the selected category.
Decimal Places	If you selected Number, Currency, Percentage, or Scientific in the Category field, enter the number of decimal places that you want to appear in the data label numbers.
Symbol	If you selected Currency in the Category field, choose a currency symbol from this list box. Domestic and international currency symbols are provided.
Use Thousand Separator (,)	If you selected Number in the Category field, select this check box if you wish to have a comma separating thousands of values (e.g., 123456789 or 123,456,789).
Abbreviation	Displays an abbreviation for large numbers (e.g., K = 1000).
Negative Numbers	If you selected Currency in the Category field, choose an item from this list box to identify how you want negative data label numbers to be formatted.
Type	If you selected Special in the Category field, choose an item from this list box to identify the format of special numbers to be used.

To Adjust the Grid Lines

- 1 Click the **Grids** tab.
- 2 Choose from the available options, as applicable:

Option	Meaning
Show Gridlines (Major / Minor)	Enable the appropriate check box to show major/minor gridlines for the chart. ■ Grid Style—Select this list box to choose the style of gridlines: Regular Grids, Grids and Ticks, Inner Ticks, Outer Ticks, and Spanning Ticks. Note that you may also change the format, width, and color of a grid line by selecting it in the chart and choosing the Formatting option from the Chart menu or the line width, format, and color buttons in the formatting toolbar. ■ Use Manual Grid • Interval Value (Major)—When you enable drawing of major grid lines, you can let the program automatically calculate the number of grid lines or specify a number of grid lines on a data axis. To use a manual number of grid lines, specify a number in the Interval Value field. • Count Value (Minor)—When you enable the display of minor grid lines, one minor grid line is drawn between each major grid line. To specify a different number of minor grid lines between each major grid line, enter a value in the Count Value field. The specified number of minor grid lines will be drawn between each major grid line.

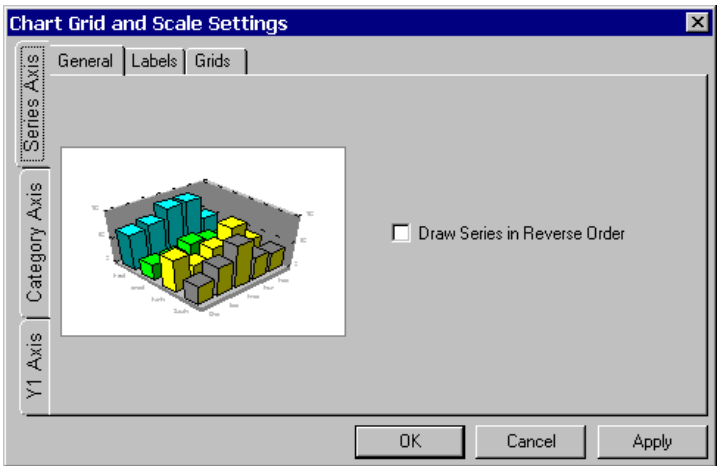
Note: Minor grid lines are not available for True 3D charts.

Using the Series Axis View

Use this view in the Chart Grid and Scales Settings dialog box to specify the placement of the series axis. A series axis is only included in True 3D charts. In 2D charts, the series or rows of objects being charted are shown in the legend area of the chart. In True 3D charts, these objects are shown on the series axis.

To Display the Series Axis View

- ▶ If the Series Axis view is not already showing in the Chart Grid and Scales Settings dialog box, click on the **Series Axis** tab.



Because you can adjust the grid and scale settings for a wide variety of charts, this guide provides a separate topic for each chart.

To	Go to this topic
Adjust general formatting options	“To Adjust General Formatting Options” on page 332
Show or hide and format data axis labels	“To Adjust the Labels” on page 332
Show/hide and format major and minor grid lines for a data axis	“To Adjust the Grid Lines” on page 333

To Adjust General Formatting Options

- 1 Click the **General** tab.
- 2 Enable the **Draw Series in Reverse Order** checkbox to reverse the order of series displayed on your chart's series axis.

To Adjust the Labels

- 1 Click the **Labels** tab.
- 2 Enable the **Show Labels for this Axis** checkbox to show series axis labels. The series axis labels are taken from the information defined in the first column of your data sheet. Then, select how you want the labels displayed:
 - **Automatic**—Determines how many series labels can fit on your chart and automatically calculates the proper number of categories between labels.
 - **Use Manual Number of Series**—If you want to draw only some of the labels in the first column of your data sheet, enter a number in the Between Labels field that defines the interval of series labels to be drawn.

To Adjust the Grid Lines

- 1 Click the **Grids** tab.
- 2 Select the **Show Gridlines** checkbox to show major grid lines on the series axis.

Data Range

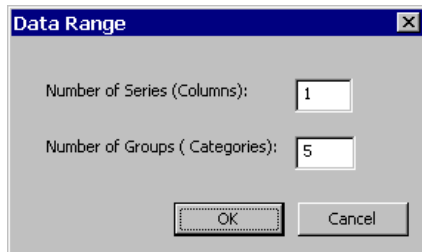
Use the Data Range command to override the display limitations of the sample data included with Docuflex Studio.

When you insert a chart, Docuflex Studio displays in the Source window an example of that chart using the sample data. The sample data, which attempts to display a “good-looking” chart for all the different types, only contains a small amount of data. As a result, the chart you’re designing might not display your chart in what you consider to be its “final” form (i.e., including all your data). You can use this command to expand the number of series and groups defined for your chart.

To Specify the Data Range

- 1 Select **Data Range** from the context menu.

The Data Range dialog displays.



- 2 Type the number of series and groups you want to use for your chart.
- 3 Click **OK** to save your changes; otherwise, click **Cancel** to exit without saving.

Docuflex Studio refreshes the Source window to update the display.

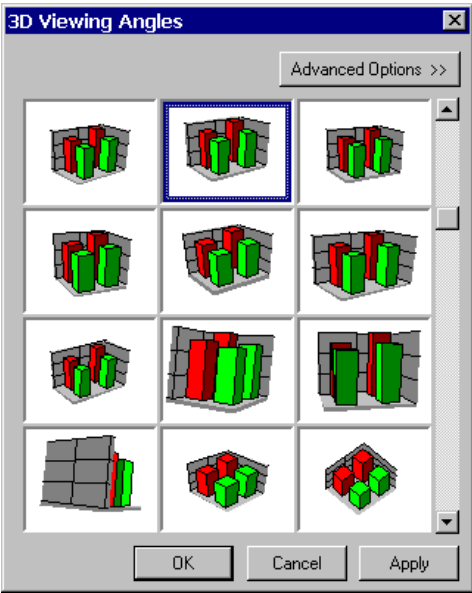
3D View Angles

Use the 3D View Angles command to choose from a variety of preset angle options, plus a wide array of possibilities to place your 3D chart at any angle you can dream up. Not only can you Pan, Rotate, or Move your 3D chart to anywhere on the screen, but you can also adjust the thickness of the frame walls as well as stretch and shrink them. The 3D View Angles enables you to get really creative with the presentation of your 3D chart. In addition to the viewing angles for a 3D chart, you also use these features in an Advanced 3D chart.

To Adjust the Viewing Angle

- 1 Select **3D View Angles** from the context menu.

The 3D Viewing Angles dialog displays.



2 Do any of the following:

To	Go to this topic
Select from a list of preset angles	“Using the Preset View” on page 335
Create a viewing angle	“Using the Advanced Options View” on page 336

To Save or Close the 3D Viewing Angles Dialog

► Do one of the following:

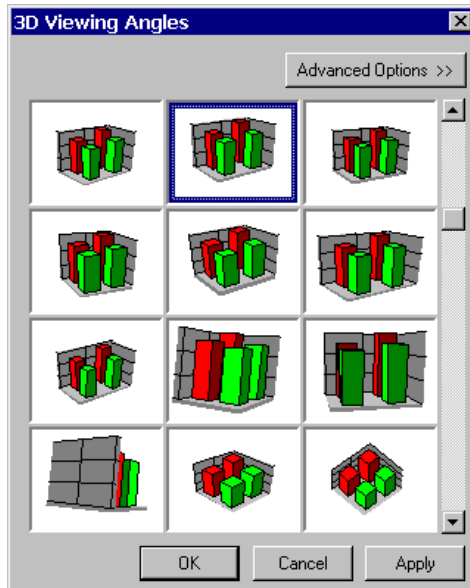
To	Do this
Use the specifications you’ve provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without using the specifications you’ve provided	Click Cancel .
Apply the specifications you’ve provided, see the results in Docuflex Studio (in the background), and remain in the charting engine	Click Apply .

Using the Preset View

Use this view in the 3D Viewing Angles dialog box to select from an extensive list of preset viewing angles.

To Use the Preset View

- 1 If the Preset view is not already showing in the 3D Viewing Angles dialog box, click on the **Presets Only** button.



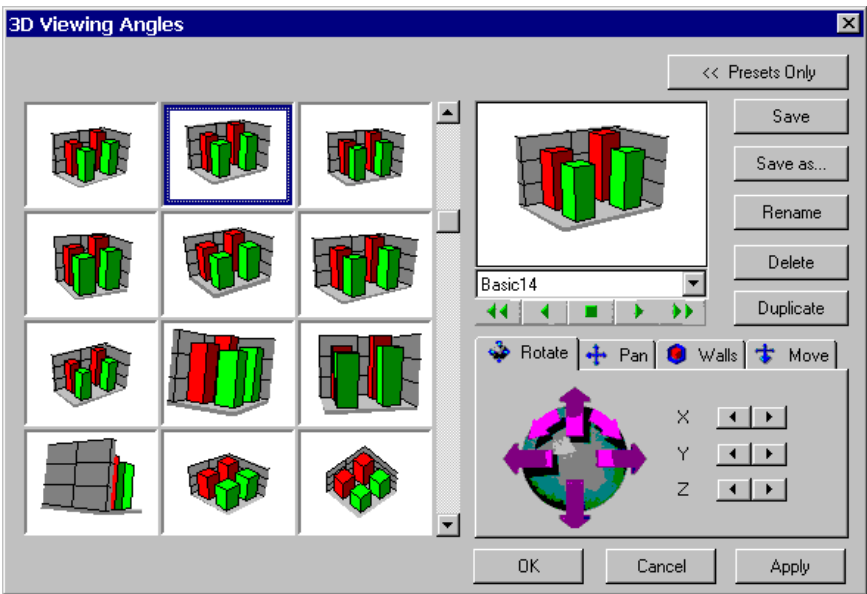
- 2 Select a preset 3D viewing angle from the scroll box.

Using the Advanced Options View

Use this view in the 3D Viewing Angles dialog box to create your own viewing angle.

To Use the Advanced Options View

- If the Advanced Options view is not already showing in the 3D Viewing Angles dialog box, click on the **Advanced Options** button.



Because you can specify a wide variety of options, this guide provides a separate topic for each option.

To	Go to this topic
Create an advanced viewing angle	“To Choose an Advanced Angle” on page 336
Rotate a 3D cube	“To Rotate a 3D Cube” on page 337
Pan a 3D cube	“To Pan a 3D Cube” on page 337
Adjust the walls of a 3D cube	“To Adjust the Walls of a 3D Cube” on page 338
Move a 3D cube	“To Move a 3D Cube” on page 338

To Choose an Advanced Angle

- 1 Select a 3D viewing angle from the scroll box.
-or-
Use the arrow buttons underneath the viewing angle picture to scroll through and select from the different viewing angles on the left side of the dialog. The double left-arrow [<<] and right arrow [>>] buttons scroll through the list of viewing angles continuously. The single left-arrow [<] and right-arrow [>] buttons scroll to the next viewing angle in the list. The square button in the center of the arrow buttons stops continuous scrolling.
-or-
Select the name of a viewing angle from the drop-down list box beneath the viewing angle picture.

- 2 Do one of the following:

To	Do this:
Save an existing or new viewing angle using the existing viewing angle file name	Click Save .
Save the new viewing angle after you have changed an existing or created a new viewing angle	Click Save as .
Change the name of a viewing angle file name	Click Rename .
Delete an existing viewing angle file	Click Delete .
Create a duplicate viewing angle file based on the current one	Click Duplicate .

To Rotate a 3D Cube

- 1 Click the **Rotate** tab.
 - 2 Click on the X, Y, and Z arrow tabs. **X** rotates the cube from left to right or right to left, **Y** rotates from top to bottom or bottom to top, and **Z** rotates the chart from side to side.
As you rotate a chart with the X, Y, or Z, notice that the arrows on the rotation orb light up. The arrows on the rotation orb corresponds to the X, Y, and Z rotation. The left and right arrows correspond to the X direction. The up and down arrows correspond to the Y direction. The middle arrows correspond to the Z direction.
- or-
- 3 Click the arrows on the rotation orb to rotate a chart.
The arrows rotate the cube in the same way as the X, Y, Z left-right arrow buttons.
- or-
- 4 Rotate a chart using the Display window. Click and drag your mouse inside this window to rotate the 3D cube.

To Pan a 3D Cube

- 1 Click the **Pan** tab.
 - 2 Click on the X, Y, and Zoom arrow tabs. **X** pans from left to right or right to left, **Y** pans from top to bottom or bottom to top, and **Zoom** pans nearer or further away.
- or-
- 3 Click the arrows on the rotation orb to pan the 3D cube in the X and Y direction.
- or-
- 4 Pan the cube in the X and Y direction using the Display window. Click and drag your mouse inside this window to pan the 3D cube.

To Adjust the Walls of a 3D Cube

- 1 Click the **Walls** tab.
- 2 Click on the X, Y, and Z arrow tabs for Length and Thickness to increase and decrease the length and thickness of the walls. **X** controls length and thickness along the X-axis, **Y** controls length and thickness along the Y-axis, and **Z** controls length and thickness along the Z-axis.

-or-

- 3 Click the arrows on the rotation orb to adjust the wall thickness.

The upper left arrows correspond to the **X** wall thickness. The bottom center arrows correspond to the **Y** wall thickness. The upper right arrows correspond to the **Z** wall thickness. The bottom right arrows correspond to the **X** wall length. The top center arrows correspond to the **Y** wall length. The bottom left arrows correspond to the **Z** wall length.

-or-

- 4 Change the length and width of 3D cube walls using the Display window. Click and drag your mouse inside this window to change the length and thickness of the 3D cube walls.

To Move a 3D Cube

- 1 Click the **Move** tab.
- 2 Click on the X, Y, and Z arrow tabs to move and change the perspective of the cube. **X** moves the 3D cube from bottom right to top left, **Y** moves the cube up and down, and **Z** moves the cube from top right to bottom left.

-or-

- 3 Click the arrows to move the cube in the X, Y, and Z directions.

The left and right arrows correspond to **X**. The up and down arrows correspond to **Y**, and the shorter middle arrows correspond to **Z**.

-or-

- 4 Move the 3D cube inside the chart frame using the Display window. Click and drag your mouse inside this window to move the 3D cube inside the chart frame.

Series

Use the Series command to apply formatting options to one or more series in a chart.

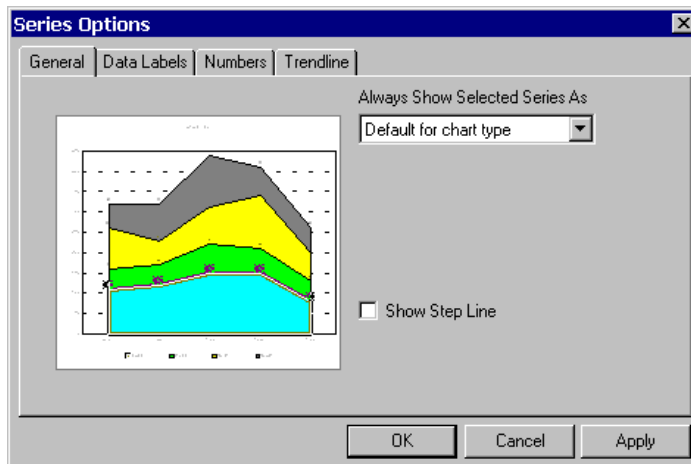
TIP

Use **SHIFT+CLICK** to select more than one element (e.g., risers on a column chart or slices in a pie chart).

To Modify the Series

- 1 Select **Series** from the context menu.

The Series Options dialog displays.



NOTE

The available options change depending on the type of chart you're editing (i.e., the chart that's currently displayed in the Source window). The effects of the options you select are displayed in a "preview" located in the lower left-hand corner of the dialog.

- 2 Do any of the following:

To specify	Go to this topic
General formatting options for a series for each chart type	"Using the General View" on page 340
Formatting and display options for data labels for the currently-selected series	"Using the Data Labels View" on page 341
Formatting options for data label numbers (only available if you've enabled Data Labels)	"Using the Numbers View" on page 342
Formatting and display options for trendlines (not available in 3D and pie charts)	"Using the Trendline View" on page 343

To Save or Close the Series Options Dialog

- Do one of the following:

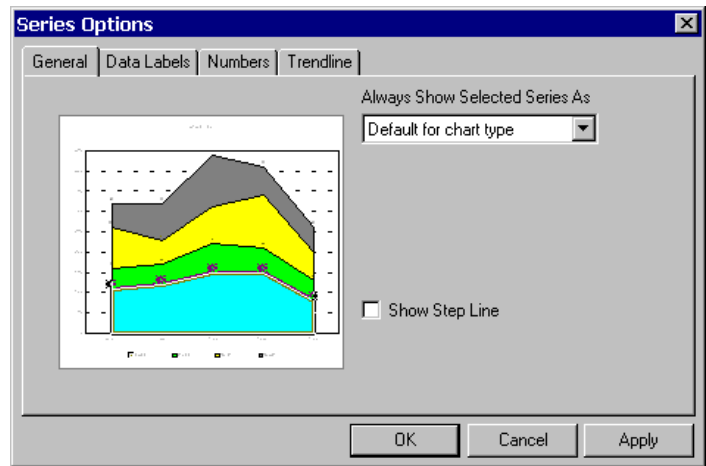
To	Do this
Use the specifications you've provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without using the specifications you've provided	Click Cancel .
Apply the specifications you've provided, see the results in Docuflex Studio (in the background), and remain in the charting engine	Click Apply .

Using the General View

Use this view in the Series Options dialog box to specify general formatting options for each chart type.

To Use the General View

- 1 If the General view is not already showing in the Series Options dialog box, click on the **General** tab.



- 2 Choose from the available options, as applicable:

Option

Meaning

Always Show Selected Series As

You can change the format in which risers are drawn. You can select Default for chart type, Line, Riser, or Area. For example, you can change an area riser in an area chart to always display as column or line riser or you could change a column riser in a column chart to always display an area or line.

Shape

Click this drop-down list box to select from a list of shapes, including Rectangle, Beveled Box, and Reverse Beveled Box.

For True 3D Riser column charts, the list includes:

- Rectangular Riser
- Round Column
- Cone / Pyramid
- Floating Cube
- Floating Sphere

Note: This field is deactivated/grayed-out if the Use 3D effect checkbox is selected.

Show Step Line

Enable this checkbox is you want to create a “Step-Line” chart, where data points are connected by steps instead of straight lines.

Detach Slice

Use this slider to detach the slice for the currently selected series away from the pie. Larger values move the slice further away from the pie.

Delete Slice

Select this button to delete the slice for the currently selected series.

Restore Pie

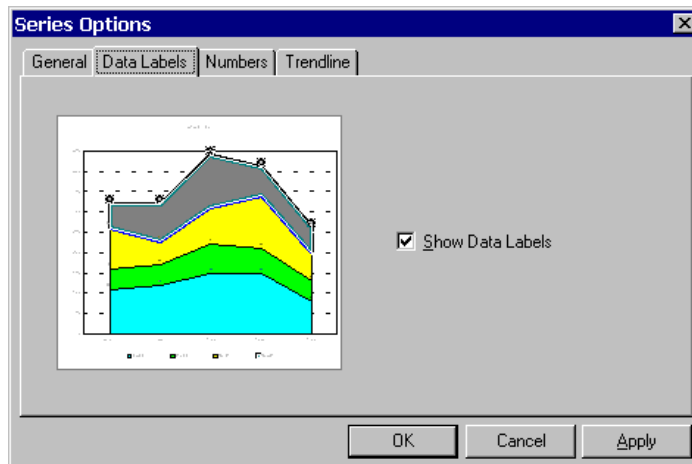
If a slice has been detached or deleted, use this button to restore all slices in the pie.

Using the Data Labels View

Use this view in the Series Options dialog box to show the actual values from the cells in your data sheet. Selectable data label values and locations will be slightly different depending on the chart type.

To Use the Data Labels View

- 1 If the Data Labels view is not already showing in the Series Options dialog box, click on the **Data Labels** tab.



- 2 Choose from the available options, as applicable:

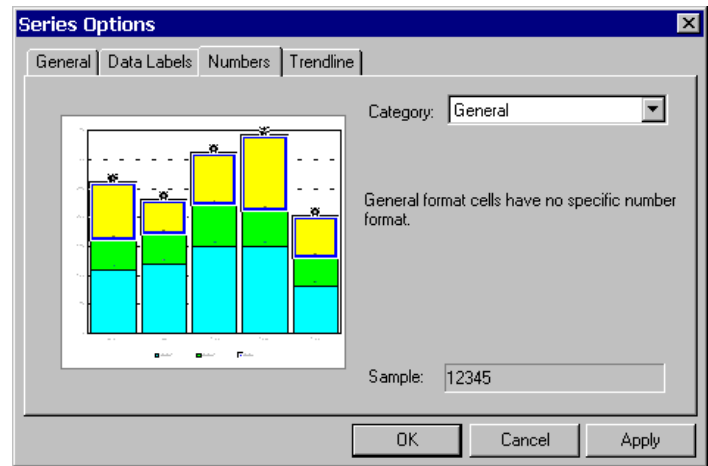
Option	Meaning
Show Data Labels	Use this check box to show or hide data labels for the currently selected series.
Show Values	Select this check box to show or hide data label values for each slice in the pie chart.
Show Labels	In Pie and Ring Pie charts, select this check box to show or hide the series label associated with each pie slice. Then, determine the placement of the labels: ■ Labels on Slices / Labels outside Slices—select one of these option buttons to display the series labels either on or outside each pie slice. ■ Show Leader Lines—If “Labels outside Slices” is selected, use this checkbox to show or hide leader lines from each pie slice to the series label displayed next to it. ■ Labels on Sides—If “Labels outside Slices” is selected, use this checkbox to display the series label on the side of the chart (i.e., away from the slice).

Using the Numbers View

Use this view in the Series Options dialog box to format data label numbers for an individual series in a chart.

To Use the Numbers View

- 1 If the Numbers view is not already showing in the Series Options dialog box, click on the **Numbers** tab.



- 2 Choose from the available options, as applicable:

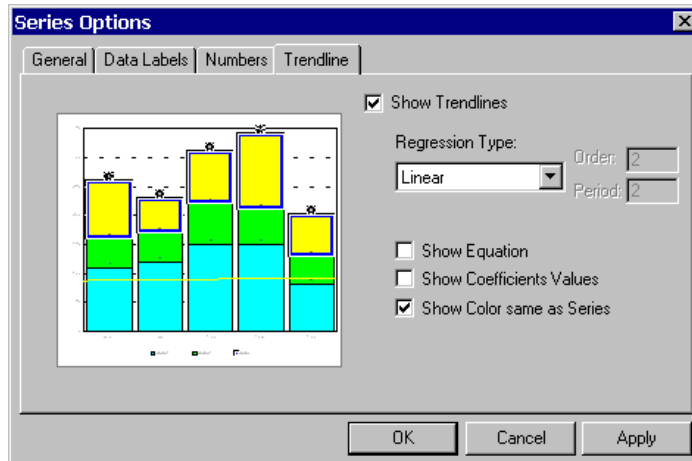
Option	Meaning
Category	Choose an option from this list box to select the format of data labels numbers—General, Number, Currency, Percentage, Scientific, etc. The remaining fields in this dialog will be different depending on the selected category.
Decimal Places	If you selected Number, Currency, Percentage, or Scientific in the Category field, enter the number of decimal places that you want to appear in the data label numbers.
Symbol	If you selected Currency in the Category field, choose a currency symbol from this list box. Domestic and international currency symbols are provided.
Use Thousand Separator (,)	If you selected Number in the Category field, select this check box if you wish to have a comma separating thousands of values (e.g., 123456789 or 123,456,789).
Abbreviation	Displays an abbreviation for large numbers (e.g., K = 1000).
Negative Numbers	If you selected Currency in the Category field, choose an item from this list box to identify how you want negative data label numbers to be formatted.
Type	If you selected Special in the Category field, choose an item from this list box to identify the format of special numbers to be used.

Using the Trendline View

Use this view in the Series Options dialog box to add trendlines to data series in 2D area, bar, and column charts. You can draw Linear, Logarithmic, Polynomial, or Exponential trendlines. You can also draw a Moving Average line that is a sequence of averages computer from the data points in the series. A moving average line smooths the fluctuations in the data points in the series.

To Use the Trendline View

- 1 If the Trendline view is not already showing in the Series Options dialog box, click on the **Trendline** tab.



- 2 Choose from the available options, as applicable:

Option

Meaning

Show Trendlines

Select this check box to show or hide a trend line for the selected series.

- **Regression Type**—Select one of these regression line types: Linear, Logarithmic, Polynomial, Exponential, or Moving Average to define the type of trend line you want to draw for the selected series. The moving average line is calculated from the data points for the selected series. This trendline smooths the fluctuations in the data points and shows the pattern or trend.
- **Order**—For a Polynomial trend line, specify the degree of linear regression for the polynomial trend line. It must be greater than one but no greater than the number of groups in the chart.
- **Period**—For a Moving Average trend line, specify the number of periods over which the trend spans.
- **Show Equation**—For all regression types except Moving Average, select this check box to show the equation that was used for a Linear, Logarithmic, Polynomial, Power, or Exponential trend line.
- **Show Coefficient Values**—For all regression types except Moving Average, select this check box to show the coefficient values that are used for a Linear, Logarithmic, Polynomial, Power, or Exponential trend line.
- **Show Color Same as Series**—Select this check box if you want the trend line to be drawn with the same color as the selected series.

Formatting

Use the Formatting command to apply formatting options to one or more text, line, or area objects in a chart.

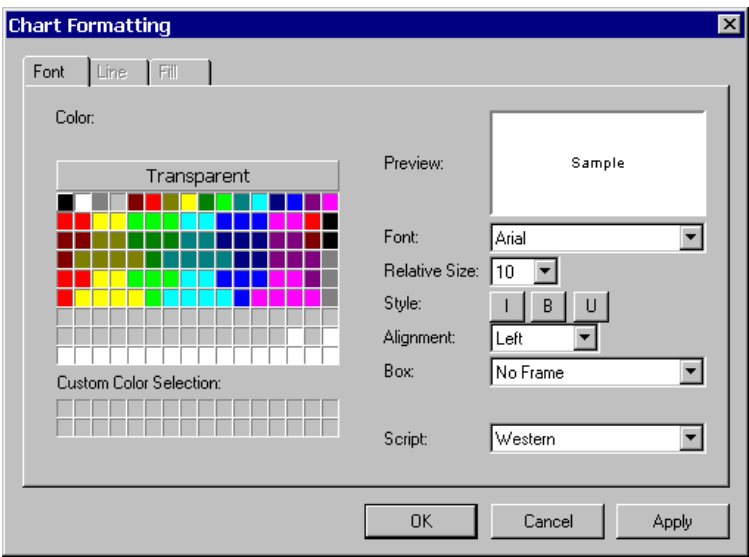
TIP

Use **SHIFT+CLICK** to select more than one element (e.g., risers on a column chart or slices in a pie chart).

To Specify the Formatting

- 1 Select **Formatting** from the context menu.

The Chart Formatting dialog displays.



- 2 Do any of the following:

To specify the format for	Go to this topic
Text	“Using the Font View” on page 345
Lines (including 3D)	“Using the Line View” on page 346
Area objects	“Using the Fill View” on page 347

To Save or Close the Chart Formatting Dialog

- Do one of the following:

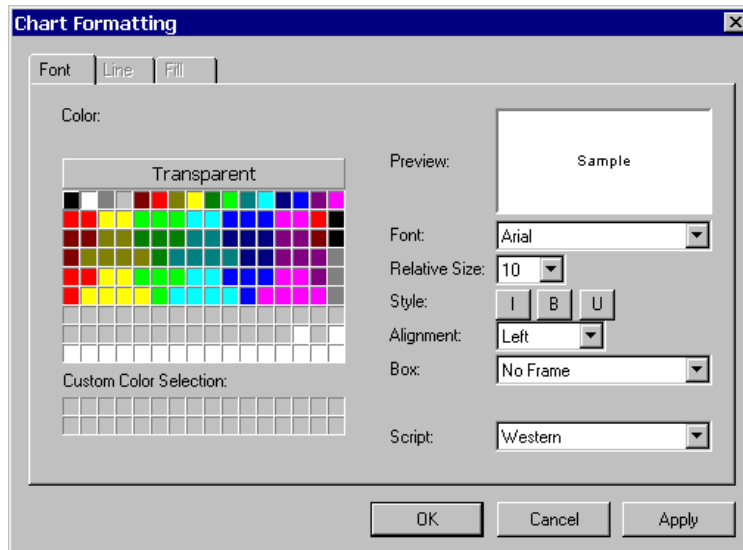
To	Do this
Use the specifications you’ve provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without using the specifications you’ve provided	Click Cancel .
Apply the specifications you’ve provided, see the results in Docuflex Studio (in the background), and remain in the charting engine	Click Apply .

Using the Font View

Use this view in the Chart Formatting dialog box to specify font and color styles.

To Use the Font View

- If the Font view is not already showing in the Chart Formatting dialog box, click on the **Font** tab.



Because you can specify a wide variety of options, this guide provides a separate topic for each option.

To	Go to this topic
Adjust the color	“To Specify the Color” on page 345
Adjust the font and bounding box	“To Specify the Font” on page 345

To Specify the Color

- In the Color group box, select the Transparent button to make the currently selected text object(s) transparent.

-or-

Select a color from the color grid to apply the color to the currently selected text object(s).

To Specify the Font

- Choose from the available options, as applicable:

Option	Meaning
Font	Any font that is installed and available in your Windows platform can be selected in this list box. When you select a font name from the list, the font will be applied to the currently selected text object(s).
Relative Size	Selections in this list box will be different depending on the selected font type. Any font size that is installed and available in your Windows platform can be selected in this list box. When you select a font size, it will be applied to the currently selected text object(s).
Style	Selections in this list box are used to apply bold, italic, and bold/italic to the text.
Alignment	Selections in this list box change the alignment of the text within its bounding box—left, center, or right justified.

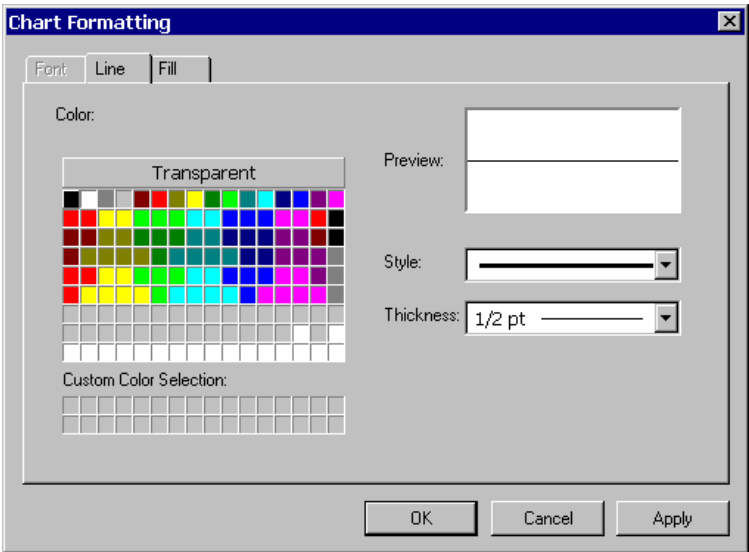
Option	Meaning
Box	Select a Box Style to draw around the text. When any option other than “No Frame” is selected, the Fill and Area tabs in the Formatting dialog will be activated.
Rotation	(Text labels only) Select a rotation degree setting for the orientation of the label.
Script	The name of the script (character set) shown in selected font.

Using the Line View

Use this view in the Chart Formatting dialog box to specify Line styles.

To Display the Line View

- If the Line view is not already showing in the Chart Formatting dialog box, click on the **Line** tab.



Because you can specify a wide variety of options, this guide provides a separate topic for each option.

To	Go to this topic
Adjust the color	“To Specify the Color” on page 345
Adjust the line style and thickness	“To Specify the Line Style and Thickness” on page 346

To Specify the Line Style and Thickness

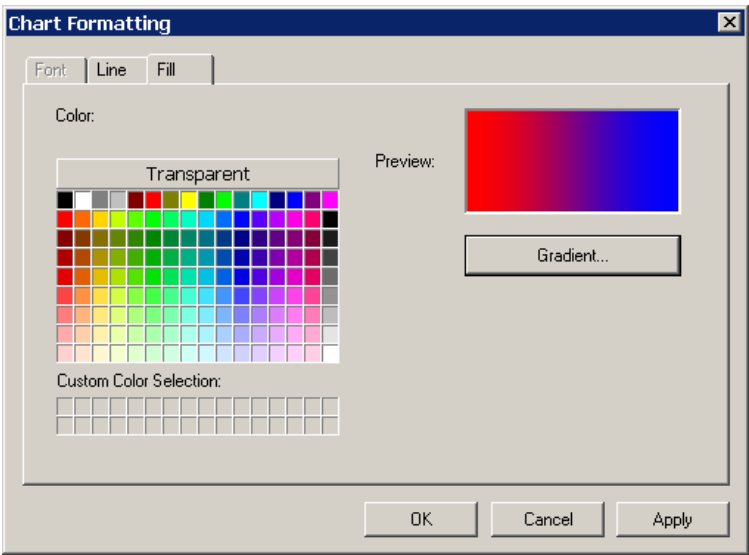
- 1 In the Style drop-down list box, select a style for the line.
- 2 In the Thickness drop-down list box, select a thickness (weight) for the line.

Using the Fill View

Use this view in the Chart Formatting dialog box to specify color and fill patterns.

To Display the Fill View

- ▶ If the Fill view is not already showing in the Chart Formatting dialog box, click on the **Fill** tab.

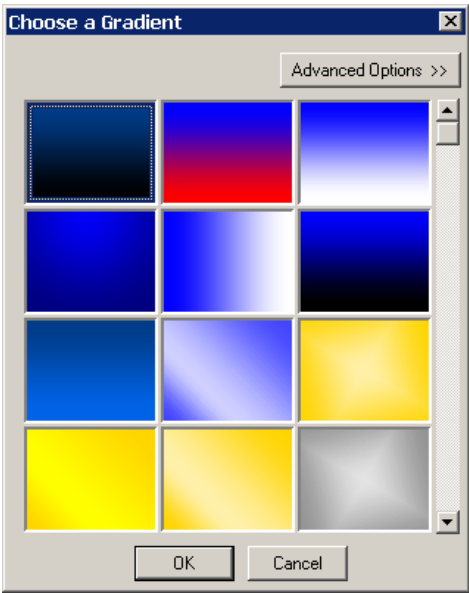


Because you can specify a wide variety of options, this guide provides a separate topic for each option.

To	Go to this topic
Adjust the color	“To Specify the Color” on page 345
Adjust the gradient	“To Specify the Gradient” on page 348
Save or close the Fill view	“To Save or Close the Chart Formatting Dialog” on page 344

To Specify the Gradient

- ▶ Click the **Gradient** button.
The Gradients dialog box displays.



Using the Gradients Dialog and Views

The gradients dialog box contains multiple views. You complete a setting by specifying general operating parameters under these views.

To Use a Gradients View

- ▶ Do any of the following:

To	Go to this topic
Select from a list of preset gradients	“Using the Preset View” on page 349
Create a custom gradient	“Using the Advanced Options View” on page 350

To Save or Close the Gradients Dialog

- ▶ Do one of the following:

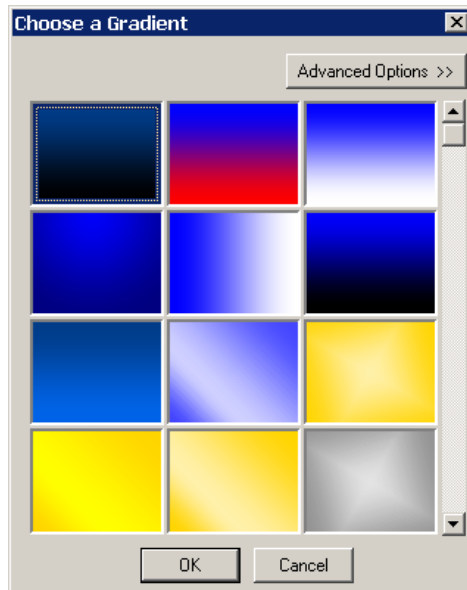
To	Do this
Use the specifications you’ve provided and return to the Chart Formatting dialog	Click OK .
Return to the Chart Formatting dialog without using the specifications you’ve provided	Click Cancel .

Using the Preset View

Use this view in the Gradients dialog box to select from an extensive list of preset gradients.

To Use the Preset View

- 1 If the Preset view is not already showing in the Gradients dialog box, click on the **Presets Only** button.



- 2 Select a preset gradient from the scroll box.

NOTE

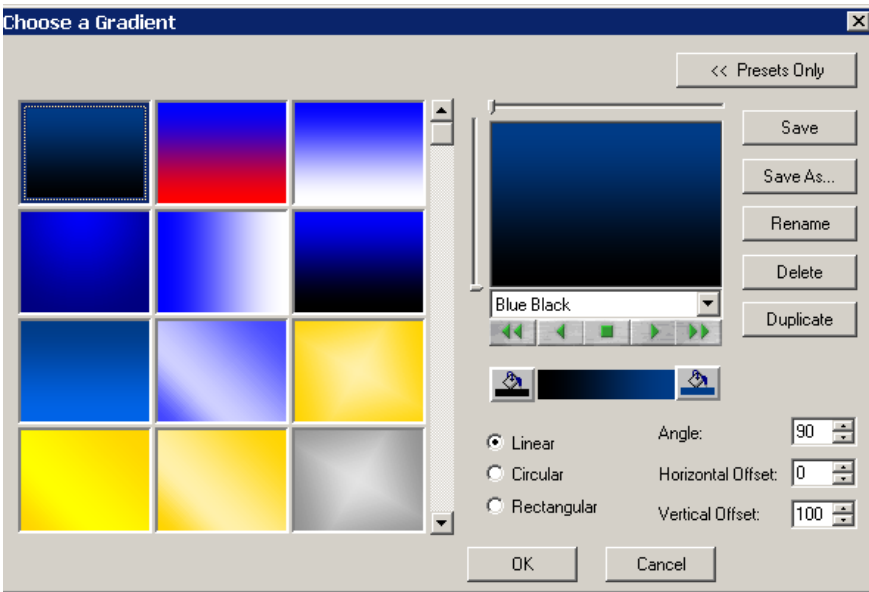
These preset gradient “styles” are only available in the indicated colors for foreground and background. If you want to change the colors, see “[To Customize a Gradient](#)” on page 351.

Using the Advanced Options View

Use this view in the gradients dialog box to create your own custom gradient.

To Use the Advanced Options View

- ▶ If the Advanced Options view is not already showing in the gradients dialog box, click on the **Advanced Options** button.



Because you can specify a wide variety of options, this guide provides a separate topic for each option.

To	Go to this topic
Choose an advanced gradient	“To Choose an Advanced Angle” on page 336
Customize a gradient	“To Customize a Gradient” on page 351
Save, delete, and duplicate gradient files	“To Maintain Gradient Files” on page 352

To Choose an Advanced Gradient

- 1 Select a gradient from the scroll box.
-or-
Use the arrow buttons underneath the gradient picture to scroll through and select from the different gradients on the left side of the dialog. The double left-arrow [<<] and right arrow [>>] buttons scroll through the list of gradients continuously. The single left-arrow [<] and right-arrow [>] buttons scroll to the next gradient in the list. The square button in the center of the arrow buttons stops continuous scrolling.
-or-
Select the name of a gradient from the drop-down list box beneath the gradient picture.
- 2 If you want to customize the appearance of the gradient, see [“To Customize a Gradient”](#) on page 351.

To Customize a Gradient

- 1 Select a gradient to customize (see “To Choose an Advanced Gradient” on page 350).
- 2 If you want to change the “starting” and “ending” colors of the gradient, click the appropriate icon (e.g., ) to display the color selection palette.

TIP

In a gradient, you can think of the starting color, represented by the icon on the left, as the foreground color that gradually changes to the ending, or background color, on the right.

- 3 Click the option button representing the type of gradient you want:

If you want the gradient to	Do this:
change from top-to-bottom or side-to-side	Click Linear .
originate in the center and radiate outward in a circle	Click Circular .
originate in the center and radiate outward in a rectangle	Click Rectangular .

- 4 Adjust the Angle of your gradient by typing a number between 0° and 360°.
-or-
Adjust the Angle of your gradient by clicking the  (spin control) icon.

NOTE

The angle specification does not apply to a Circular gradient.

Finally, you need to use the Horizontal and Vertical Offsets to pinpoint the origination of your starting color (i.e., the darkest point of your starting color before it begins to change to the ending color). These offsets are expressed as percentages, with 0-0 being in the top-left corner of the gradient picture and 100-100 in the bottom-right corner.

- 5 Do one of the following:

To adjust the offsets using the	Do this:
slide controls	1 Locate the sliders on the top and left sides of the gradient picture. 2 Use the mouse to drag the sliders so they represent the origin of the starting color. You can then use the combo boxes to fine-tune the settings.
combo boxes	In the Horizontal Offset and Vertical Offset combo boxes, type in a value between 1 and 100 to specify the darkest point of your starting color. Note: On a Linear gradient, there are two instances when one of the Offsets does not apply: ■ When the Angle is 0° or 180° (i.e., vertical), the Vertical Offset has no effect. ■ When the Angle is 90° or 270° (i.e., horizontal), the Horizontal Offset has no effect.

To adjust the offsets using the	Do this:
mouse	1 Click anywhere in the gradient picture. The  icon displays in the top-left corner. 2 Use the mouse to drag the icon so it represents the origin of the starting color. You can then use the combo boxes to fine-tune the settings.

To Maintain Gradient Files

► Do one of the following:

To	Do this:
Save an existing or new gradient using the existing gradient file name	Click Save .
Save the new gradient after you have changed an existing or created a new gradient	Click Save as .
Change the name of a gradient file name	Click Rename .
Delete an existing gradient file	Click Delete .
Create a duplicate gradient file based on the current one	Click Duplicate .

Edit

Use the Edit command to modify the many labels present on a chart (e.g., title, subtitle, footnote, X- and Y-axis, and legend).

To Edit a Label

- 1 In the Source window, alternate-click the title you want to change and select **Edit** from the context menu. Docuflex Studio opens the edit box for you to type your changes.
- 2 Press **ENTER** to save the changes; otherwise, press **ESC** to exit without saving.

Delete

Use the Delete command to remove a label or data source from a chart.

To Delete a Chart Element

- In the Source window, alternate-click the chart element you want to delete and select **Delete** from the context menu.
- If you clicked on the chart itself and selected to delete, you removed the data table from the ChartData property. The sample chart in the Source window reverts to the values from the sample data.
- If you clicked on a title field and selected to delete, you removed the value from the corresponding ChartProperties component property. The sample chart in the Source window no longer displays this title.

Clear Selection

Use the Clear Selection command to “un-select” multiple chart elements *before* making any changes (e.g., you’ve selected two slices of a pie chart so you can display the labels outside the slices, but then you change your mind).

To Clear the Selection of Multiple Chart Elements

- Alternate-click the chart on which you selected multiple elements and select **Clear Selection** from the context menu. Docuflex Studio resets the Source window so no elements are selected.

Add Page Definition

Use the Add Page Definition command to add another collection of pages to your document. A Page Definition is the highest member of the “collection-section-member” analogy (see “[What are Page Definitions?](#)” on page 146).

To Add a Page Definition

- 1 Select **Document>Add Page Definition**.
-or-
Select **Add>Page Definition** from the Component Explorer’s context menu.
Docuflex Studio adds a Page Definition to the Component Explorer.
- 2 Complete the specification of the page definition properties. A Page Definition provides the grouping mechanism for pages by incorporating the following categories of properties:

Property Category	Property	Description
Booklet	BookletEnabled	Whether to enable booklet printing
	BookletExtraPages	Where to place extra pages to achieve page count in multiples of four
	BookletPageOffsetDelta	Amount to offset “printing creep” of inner pages
Miscellaneous	(Name)	Name of the page definition
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
Position (Assembly & Placement)	Position properties control the page definition boundaries.	
	Height	Page definition height
	Width	Page definition width

For more information about adding a page to the Page Definition, see “[Add Page](#)” on page 354.

Add Page

Use the Add Page command to invoke the Page Layout Wizard. You can use this routine to add a Page Layout to your document. A page layout is the middle member of the “collection-section-member” analogy.

A page layout can be of any necessary size, but its Width and Height measurements usually encompass the entire side of a physical piece of paper (e.g., 8½” X 11” for Letter size or 8½” X 14” for Legal size). You can print the data on your paper in either of the two possible Orientations—portrait or landscape—and you can choose to print only on the front side of the paper (Simplex), or front-and-back (Duplex).

If your document consists of different sized pages, or you include special paper stock for the front and back covers, for example, you’ll need to define a different page layout as the Paper Source for each type of stock.

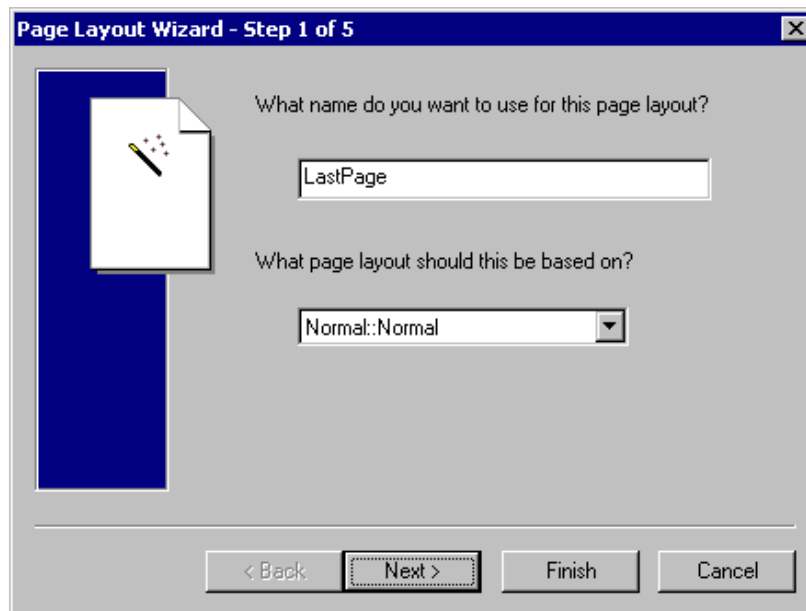
A page layout can actually span more than one physical side of a sheet of paper. As long as the structure is the same, the properties for a single page layout can control the formatting of multiple sheets of paper. When you define your page layout, you’ll specify the SectionBegPage and SectionEndPage properties, which determine the range for which the page layout is valid (e.g., from Page One through Page Four). You can also specify whether you want to print on an *odd*, *even*, or *any* page.

For more information, see “[What is a Page Layout?](#)” on page 147.

To Add a Page Layout

- 1 In the Page Layout window, highlight the Page Definition under which you want to add a page layout.
- 2 Select **Document>Add Page**.
-or-
Select **Add>Page** from the Component Explorer’s context menu.

The first dialog box of the Wizard displays.



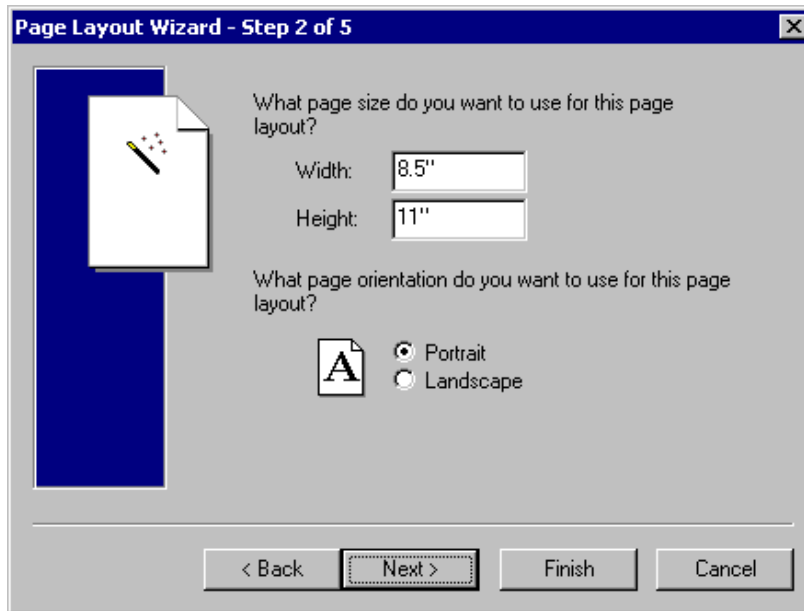
- 3 In the Name text box, type the name you want to assign to this page layout.

CAUTION

This wizard was designed to furnish Docuflex Studio with the mandatory property settings and minimize the occurrence of error messages.

You must also use the Component Properties to specify all of the remaining properties for this Page Layout (see “[Component Properties](#)” on page 171).

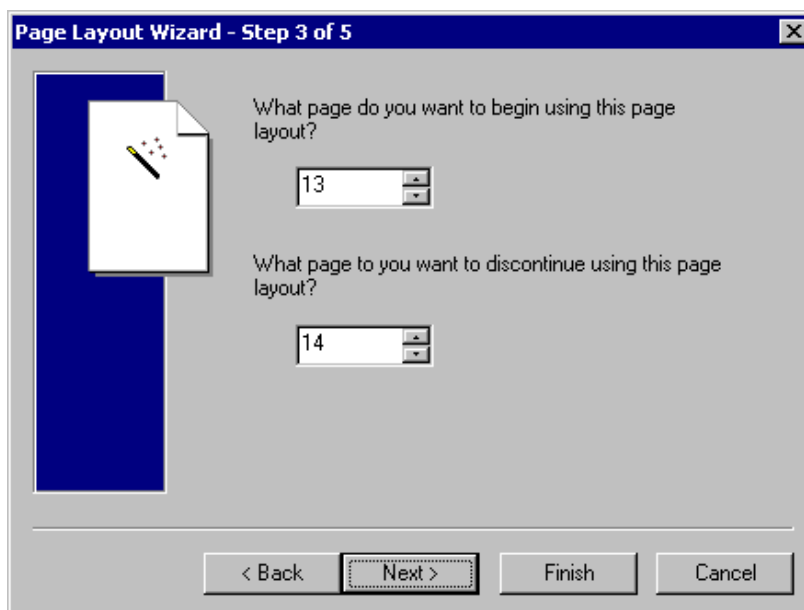
- 4 In the Based on drop-down list box, select the Page Layout to use as the model.
- 5 Click **Next >** and the next dialog box displays.



The dialog box is titled "Page Layout Wizard - Step 2 of 5". It features a blue sidebar on the left with a white document icon. The main area is light gray and contains the following elements:

- Text: "What page size do you want to use for this page layout?"
- Form fields: "Width:" with a text box containing "8.5" and "Height:" with a text box containing "11".
- Text: "What page orientation do you want to use for this page layout?"
- Radio buttons: "Portrait" (selected) and "Landscape".
- Buttons at the bottom: "< Back", "Next >" (highlighted with a dashed border), "Finish", and "Cancel".

- 6 Type a measurement specification for Width: and Height:.
- 7 Click the option button that indicates the proper orientation for the page layout.
- 8 Click **Next >** and the next dialog box displays.



The dialog box is titled "Page Layout Wizard - Step 3 of 5". It features a blue sidebar on the left with a white document icon. The main area is light gray and contains the following elements:

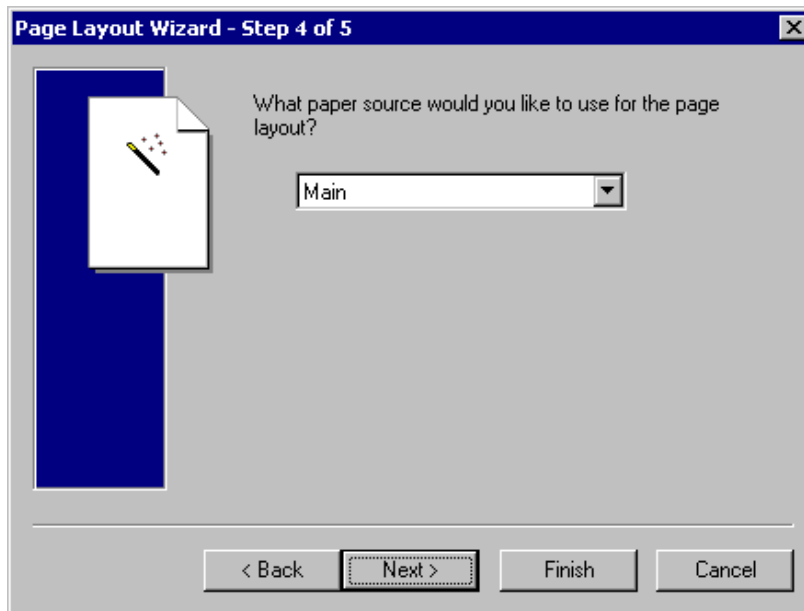
- Text: "What page do you want to begin using this page layout?"
- Form field: A spin box containing the number "13".
- Text: "What page do you want to discontinue using this page layout?"
- Form field: A spin box containing the number "14".
- Buttons at the bottom: "< Back", "Next >" (highlighted with a dashed border), "Finish", and "Cancel".

- 9 Enter the beginning and ending page ranges for this page layout.

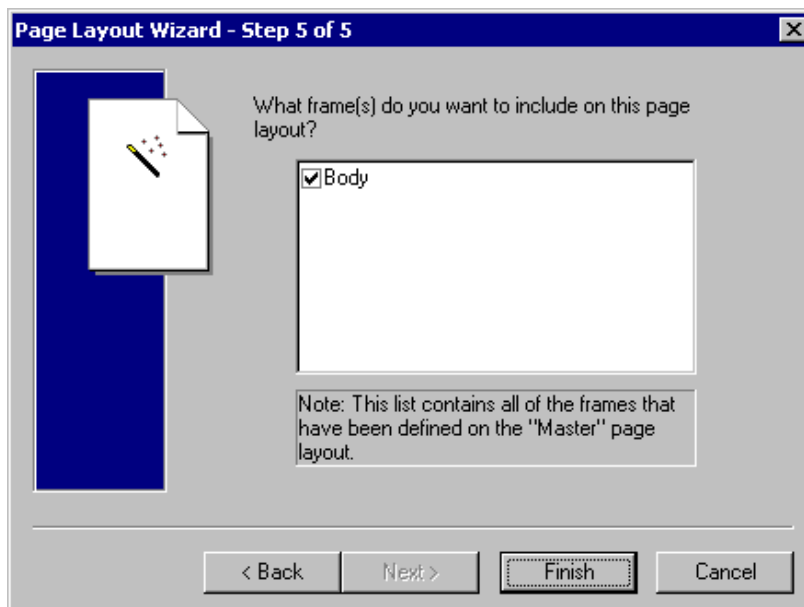
EXAMPLE

Suppose you're composing a document that includes a cover sheet. Obviously, you only want to use this cover sheet at the beginning of the document. Assuming you're printing on both sides of the page (duplex printing), the front side of the cover sheet is Page 1 and the back side is Page 2. This means that the remainder of your document resumes on Page 3. Therefore, you'd enter 1 as the page on which you want to begin using this page layout, and 2 as the page on which you want to discontinue using this page layout.

- 10 Click **Next >** and the next dialog box displays.



- 11 In the drop-down list box, select the name of the tray from which the printer will retrieve the paper stock.
- 12 Click **Next >** and the next dialog box displays.



- 13** From the list box, check all of the frames that you want to include on this page layout, and then click **Finish**.

Docuflex Studio adds your page layout to the page definition you chose as the “parent”.

You can use the Page Layout window to display an image of the physical page. This window accurately renders a page image with the dimensions you specified (see “[Page Layout Window](#)” on page 209).

To Complete the Specification of Page Layout Properties

- Complete the specification of the page layout properties. A Page Layout provides the framework for formatting a document by incorporating the following categories of properties:

Property Category	Property	Description
Appearance	BackColor	Background color of the page
	Orientation	Page orientation
Miscellaneous	(Name)	Name of the page
	BasedOn	The page on which this page is based
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	PaperSource	Printer tray or bin from which to “pull” the paper
	Simplex	Force Simplex (vs. Duplex) printing
	StackerOffset	Shift the paper in the output bin of the printer to ease collection
Position (Assembly & Placement)	Position properties control the positioning of a member as related to the Frame, Column, and Page boundaries	
	Height	Page height
	Width	Page width
Rules	Rule properties control the point in the composition procedure where any processing rules are applied	
	Inclusion	Execute the rule to qualify the page for inclusion in the document
Special Handling	SectionBegPage	The beginning of the valid page range for this page
	SectionEndPage	The ending of the valid page range for this page
	SuppressLastPageIfBlank	Prevents displaying a blank page
	WhereUsed	Side of the physical page on which to use this page

For more information about adding a page frame to the page, see “[Add Page Frame](#)” on page 358.

Add Page Frame

Use the Add Page Frame command to invoke the Frame Definition Wizard. You can use this routine to add frames to a Page. A Frame is the lowest member of the “collection-section-member” analogy.

CAUTION

Before you can add a page frame to a page, the frame *must* exist in the Master page.

You can define frames and place them anywhere on the page. In this respect, Docuflex Studio is also a true page layout program. You can place the frames side-by-side, or build white space into your document by leaving room between them. Providing additional white space often enhances the readability of your document.

With frames, Docuflex Studio gives you complete freedom in where you place them. For example, you can have a smaller frame layered on top of a larger frame. You must take care, however, because you can place frames anywhere you need them. You are not prohibited from accidentally overlapping frames, which could result in some content being overprinted.

If your text is larger than the frame you’ve defined, the text “flows” from the frame on one page to the corresponding frame on the next page. You should try to anticipate this instance when you’re specifying the range of your page definition.

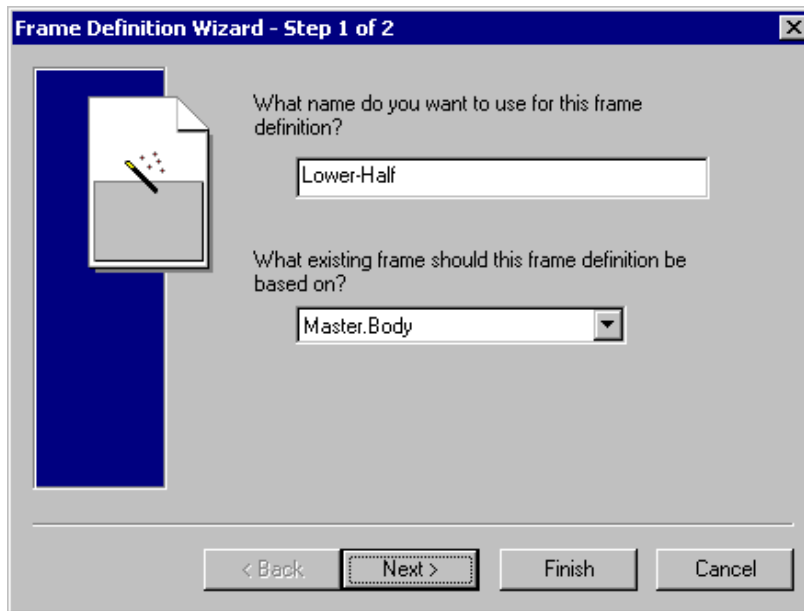
For more information, see “[What is a Frame?](#)” on page 148.

To Add a Page Frame

When you’re creating the physical design of the page, you should try to envision all of the necessary frames you’ll need. You’ll also need to decide on the names, locations, and dimensions of those frames. Docuflex Studio employs a Frame Definition Wizard to make this process quicker and easier.

- 1 In the Page Layout window, highlight the page under which you want to add a frame. This page can be either the Master page or one of the page definitions.
- 2 Select **Document>Add Page Frame**.
-or-
Select **Add>Page Frame** from the Component Explorer’s context menu.

The first dialog box of the Wizard displays.



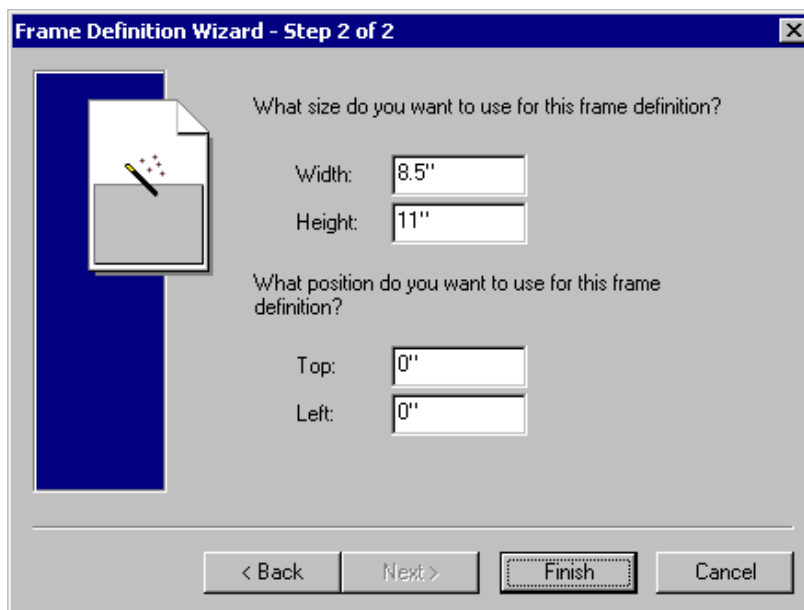
- 3 In the Name drop-down list box, select the frame you want to add to this page definition.

NOTE

If you're creating a new page frame for another page definition, your choices consist of the remaining Master page frames that are not already in use on this page definition.

(Master Page only) When you're adding a Page Frame to the Master page, type the name you want to assign to this frame in the Name text box.

- 4 In the Existing Frame drop-down list box, select the frame on which you want to base the new one.
- 5 Click **Next >** and the next dialog box displays.



6 Type a measurement specification for **Width**, **Height**, **Top**, and **Left**.

7 Click **Finish**.

Docuflex Studio adds your frame to the page you chose as the “parent”.

To Complete the Specification of Page Frame Properties

- Complete the specification of the frame properties. A Frame provides the means of determining the layout by incorporating five categories of properties:

Property Category	Property	Description
Appearance	BackColor	Background color of the frame
	BalanceColumns	Adjust the height of columns in a frame
	ColumnCount	Number of columns in this frame
	Gutter	Amount of space between the columns
	Orientation	Frame orientation
Borders	Control the appearance of the frame border.	
	BorderColor	The color of the border around the frame
	BorderLines	The number of border line(s) around the frame
	BorderLineWidthBottom	Width of the bottom border
	BorderLineWidthLeft	Width of the left border
	BorderLineWidthRight	Width of the right border
	BorderLineWidthTop	Width of the top border
	BorderMarginBottom	Space between the member and the bottom border
	BorderMarginLeft	Space between the member and the left border
	BorderMarginRight	Space between the member and the right border
	BorderMarginTop	Space between the member and the top border
	BorderStyleBottom	Style of the bottom border
	BorderStyleLeft	Style of the left border
	BorderStyleRight	Style of the right border
	BorderStyleTop	Style of the top border
Indentation	EllipseHeight	The vertical height of a curve (e.g., ellipse). A single “corner” of a frame with rounded corners consists of a height and a width
	EllipseWidth	The horizontal width of a curve (e.g., ellipse). A single “corner” of a frame with rounded corners consists of a height and a width
	Controls the distance of the paragraph content from all four sides of the paragraph frame, and the indentation of the first line of the paragraph	
	IndentationBottom	Space between the paragraph frame and the bottom border
	IndentationLeft	Space between the paragraph frame and the left border
	IndentationRight	Space between the paragraph frame and the right border
	IndentationTop	Space between the paragraph frame and the top border

Property Category	Property	Description
Miscellaneous	(Name)	Name of the frame
	BasedOn	The frame on which this frame is based
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	LeadingAdjustment	The percentage of the frame's height you want to designate as the point at which the content is vertically adjusted
	OverflowFrame	The frame to which the text should overflow
Position (Assembly & Placement)	Position properties control the positioning of a member as related to the Frame, Column, and Page boundaries	
	AlignTopToFrame	Position a member of one frame immediately below the lowest member of another frame
	Height	Frame height
	Left	Frame position in relation to the left side of the page
	Top	Frame position in relation to the top of the page
	VerticalAlign	The vertical alignment of the frame on the page
Special Handling	Width	Frame width
	WhereUsed	Side of the physical page where this frame is in effect (AnyPage (both sides), Odd, or Even)

After completing the frame definition, you have the option to add members to the frame. These members are then automatically composed with the frame (see “[Adding Members To Frames](#)” on page 361).

Adding Members To Frames

In the same manner that you can add members to Sections, Document Segments, and Overflow Definitions, you can also add members to Page Frames within Page Definitions. The result is that members assigned to frames are automatically composed with the frame.

This method is a more direct approach to publishing frame-specific content than the previous one which required four steps:

- 1 create an Overflow Definition
- 2 create a member in the Overflow Definition
- 3 select the frame in which you want the member composed
- 4 associate the Overflow Definition with either the entire project, or a specific section or member

Members in Frames use the `TableCell` property, rather than `FrameOrTableCell` for members in Sections or Overflow Definitions, with choices including “(None)” and all table cells of any table rows associated with the frame. If you select “(None)”, the member is composed directly into the frame (and it’s the first item in the frame). If you select a table cell, the member is composed directly into the selected table cell.

NOTE

Adding a member in a frame defeats the “AlignTopToFrame” feature of the frame, since the timing of the composition of the member precedes the composition of the specified frame.

For more information about adding a member to a frame, see “[Add Member](#)” on page 294.

Add Reference

Use the Add Reference command to incorporate an external project into the current one. The main use for incorporating references is as a source for reusing document components.

You can compose a document and then add it as a reference to a “master” project. With just a few changes to formatting styles at the master level, you can totally change the appearance of a document without recomposing.

TIP

If you include another project in your current one and the composition engine encounters duplicate names, such as an Overflow Definition with the same name in both projects, the Overflow Definition in your current project has priority over the referenced project.

If you include more than one reference, the composition engine starts at the bottom of the list of references and works upward, checking for duplicate names. Any lower-level component is overridden as soon as a higher-level name is encountered.

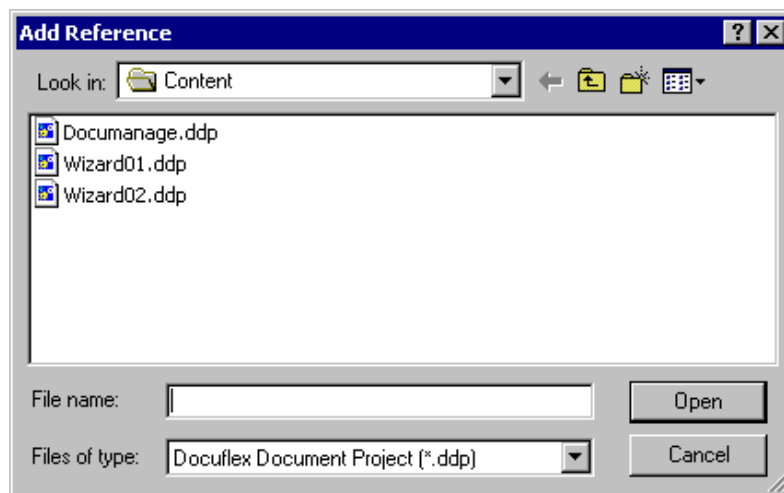
To Add an External Reference

- 1 Select **Document>Add Reference**.

-OR-

Select **Add>Reference** from the Component Explorer’s context menu.

The Add Reference dialog box displays.



- 2 In the Look in: drop-down list box, select the directory containing the document projects. If you do not see the files for which you’re searching, do one of the following from the Files of type: drop-down list box:

If you want to

Reference another project

Add the Transall executable used in “[The Post Processors](#)” on page 527

Do this

Select **Docuflex Document Project**.

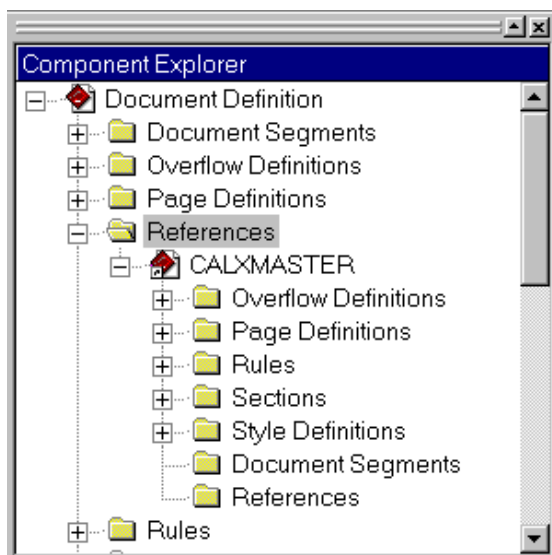
Select **Docuflex Post-Process Library**.

3 Do the following, as required:

If	Do this
The incorrect drive or folder is displayed in the Look in drop-down list box	Select the arrow on the right of the Look in: drop-down list box, and then choose the drive and/or folder where the table file is located.
The correct folder isn't displayed in the Look in list box	In the Look in: list box, scroll to see more folders, or double-click a root folder to see its subfolders.
The correct project (*.ddp) file name isn't displayed in the Look in list box	In the Look in: list box, double-click the correct folder to see its contents.
The name of the project file isn't displayed in the File name text box	In the Look in: list box, click to select the project file and place it in the File name: text box.

4 Click **Open**.

The external project, along with its components, are displayed in the appropriate category of the Component Explorer.

*To Complete the Specification of Reference Properties*

- Complete the specification of the Reference properties. A Reference reports several statistics about itself by incorporating the following properties:

Property Category	Property	Description
Miscellaneous	(Name)	Name of the Reference library
	AliasName	A descriptive name for the project
	ContentRetrievalType	(Documanager only) The method for retrieving a specific version of this pre-composed document
	DocumentName	(Documanager only) Alias for the name of the document
	Embed	Whether the Reference is embedded or linked with the parent project
	LastChangeDate	(Documanager only) Date on which the document was last changed

Property Category	Property	Description
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	LibraryDateTime	The date and time of the most recent update. This property value is for display only
	LibraryFileName	The file name and revision of the Reference. This property value is for display only
	Status	(Documanager only) Current status of the document (see "Step 10" on page 84).

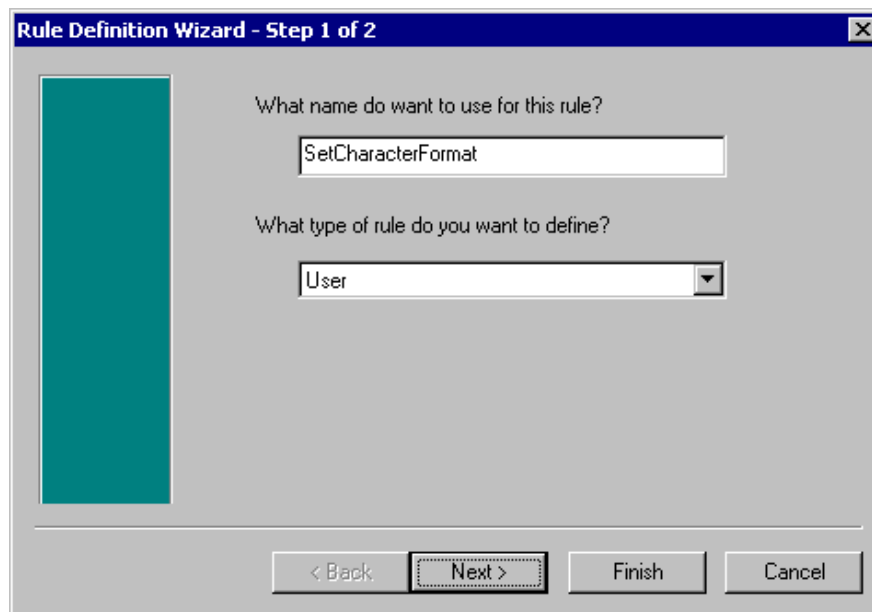
Add Rule

Use the Add Rule command to invoke the Rule Definition Wizard. You can use this routine to create either a business or an inclusion rule. A business, or processing, rule tells the composition engine how to process a qualified member. An inclusion rule tests each member for validity according to a set of qualifications.

For more information, see “[What are Rules?](#)” on page 157.

To Add a Rule

- 1 Select **Document>Add Rule**.
-or-
Select **Add>Rule** from the Component Explorer’s *context* menu.
The first dialog box of the Wizard displays.



- 2 In the Name: text box, type the name you want to assign to the rule.

NOTE

You can use this Wizard to create a total of three types of rules:

- Inclusion
- User (function)—returns a value of a specific type
- User (subroutine)—assigns a value to a variable; you do not need to specify a Return value

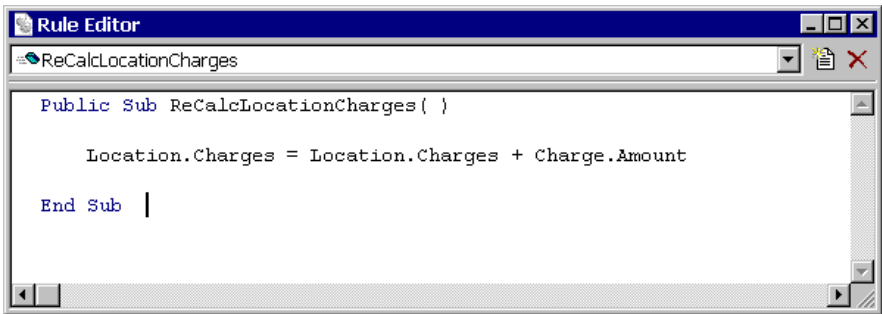
- 3 In the Type drop-down list box, select whether to create a User or Inclusion rule.
- 4 Click **Next >** and the next dialog box displays.

- 5 If you're adding an inclusion rule, click **Finish**; otherwise, continue with the procedure.
- 6 If you're adding a subroutine, which does not require a Return value, click **Finish**; otherwise, continue with the procedure.
- 7 (Functions only) In the Return drop-down list box, choose the type of value you want the rule to return.
- 8 (Functions only) In the Parameters drop-down list box, do any of the following:

If you need to	Do this:
Add a parameter	1 Click Add. 2 In the Name text box, type the name for this parameter. 3 In the Datatype drop-down list box, select the correct data type for this parameter.
Remove a parameter	1 Select the Name of the parameter you want to remove. 2 Click Remove.
Move a parameter up in the list	1 Select the Name of the parameter you want to move. 2 Click Move Up.
Move a parameter down in the list	1 Select the Name of the parameter you want to move. 2 Click Move Down.

9 Click **Finish**.

The Rule Editor displays.



For more information about composing, editing, and deleting rules, see “Rule Editor” on page 221.

- 10 Complete the specification of the Rule properties. A Rule reports several statistics about itself by incorporating the following properties:

Property Category	Property	Description
Miscellaneous	(Name)	Name of the Rule
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only

Add Section

TIP

The Sections folder, which contains the sections, also uses properties (see “Sections Folder” on page 371).

Use the Add Section command to invoke the Section Definition Wizard. You can use this routine when you need another collection of members in the Component Explorer.

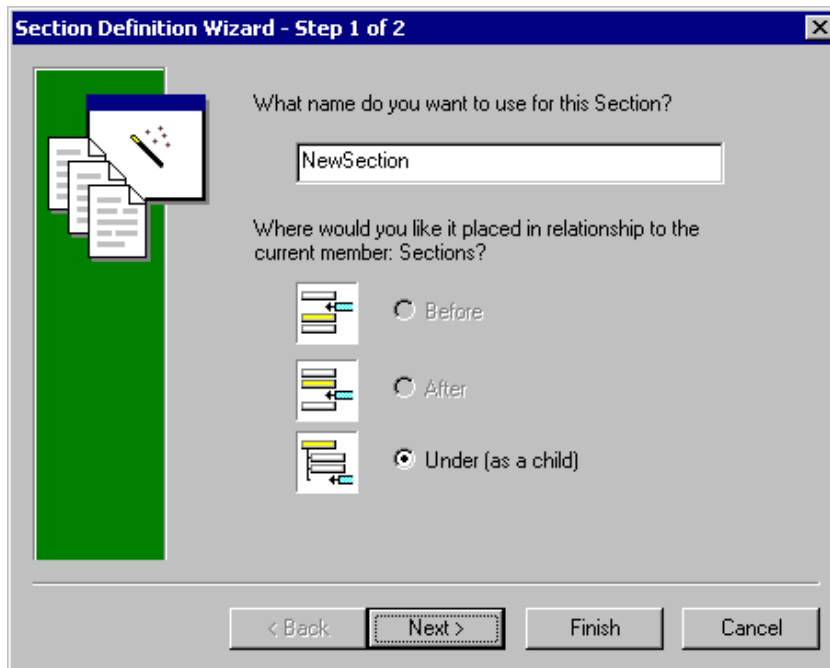
A Section contains members of similar content. If the information in your document changes drastically from one member to the next, you could consider making a new section to contain the different types of data (e.g., a cover letter followed by an invoice would be two sections).

For more information, see “What are Sections?” on page 149.

To Add a Section

- 1 Select **Document>Add Section**.
-or-
Select **Add>Section** from the Component Explorer’s context menu.

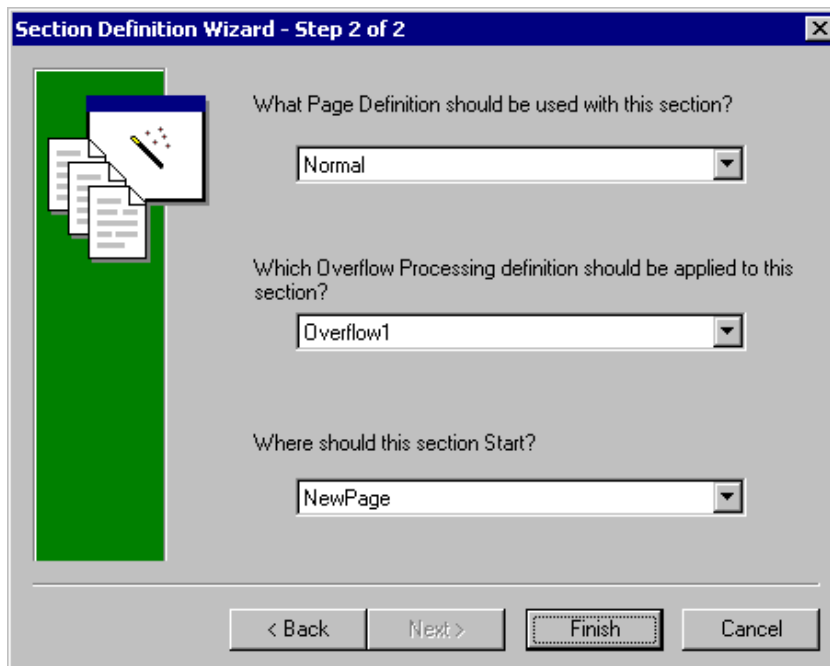
The first dialog box of the Wizard displays.



The dialog box is titled "Section Definition Wizard - Step 1 of 2". It features a green sidebar on the left with a document icon. The main area contains the following elements:

- Question: "What name do you want to use for this Section?"
- Text box: "NewSection"
- Question: "Where would you like it placed in relationship to the current member: Sections?"
- Three radio button options with corresponding icons:
 - ☐ Before
 - ☐ After
 - ☒ Under (as a child)
- Buttons at the bottom: "< Back", "Next >", "Finish", and "Cancel".

- 2 In the Name text box, type the name you want to assign to the section.
- 3 For the Location, click the appropriate option button.
- 4 Click **Next >** and the next dialog box displays.



The dialog box is titled "Section Definition Wizard - Step 2 of 2". It features a green sidebar on the left with a document icon. The main area contains the following elements:

- Question: "What Page Definition should be used with this section?"
- Drop-down list: "Normal"
- Question: "Which Overflow Processing definition should be applied to this section?"
- Drop-down list: "Overflow1"
- Question: "Where should this section Start?"
- Drop-down list: "NewPage"
- Buttons at the bottom: "< Back", "Next >", "Finish", and "Cancel".

- 5 In the Page Definition drop-down list box, select from the list of Page Definitions (see "[What are Page Definitions?](#)" on page 146).
- 6 In the Overflow Processing drop-down list box, select from the list of Overflow Definitions (see "[What are Overflow Definitions?](#)" on page 155).

- 7 In the Section Start drop-down list box, select from the list of Start Parameters. Each section in your document must begin on a new page, including EvenPage, NewPage, NewSheet, NewSheet(EvenPage), and OddPage (see “[StartParm](#)” on page 598).
- 8 Click **Finish**.

To Complete the Specification of Section Properties

- Complete the specification of the section properties. A Section provides the framework for separating document components by incorporating the following properties:

Property Category	Property	Description
Data (Multiple Inclusion)	Data properties control whether a section is included, based on the occurrences of rows in a Docuflex Studio schema	
	DataSource	The source table of the variable data
	DataSourceSort	Whether the data file is sorted
	DataSourceSortCol	The column in the data file by which to sort
	RowBegin	The row of the table on which you start collecting data
	RowEnd	The row of the table on which you cease collecting data
Miscellaneous	RowIncrement	Increment for reading rows in the table (e.g., a value of 2 means to read every other row)
	(Name)	Name of the section
	Comment	Any clarifying description about the section
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	OverflowDefinition	Default Overflow Definition
	PageDefinition	(Not available on Document Segments or TOC entries) The collection of pages on which this section prints
	Recipients	Recipient for this section or TOC entry
	StartParm	(Not available on Document Segments or TOC entries) The place within the page or document to “start” this section
Rules	Rule properties control the point in the composition procedure where any processing rules are applied	
	Inclusion	Execute the rule to qualify the section for inclusion in the document
	PostComposition	Execute the rule after composing the document
	PostInclusion	Execute the rule after including the section
	PreComposition	Execute the rule before composing the document
	PreInclusion	Execute the rule before including the section
Special Handling	BeginUseDate	The processing date on which the member is included
	EndUseDate	The processing date on which the member is disqualified
	Include	Apply or override an inclusion rule qualifying a section
	IncludeIfRow	Whether to include a member representing a multiple occurrence of data in a data file

Property Category	Property	Description																		
	VisibleIfOutput	Whether to include a member marked for display, print, or both Note: This property produces different results at batch processing time, depending on which PDL / Printer Definition you're using. The following table describes how each PDL is treated as an output device: <table><tr><th>PDL</th><th>Display or Printer?</th></tr><tr><td>DCD</td><td>Both</td></tr><tr><td>HTML</td><td>Display</td></tr><tr><td>PDF</td><td>Display</td></tr><tr><td>AFP</td><td>Printer</td></tr><tr><td>Metacode</td><td>Printer</td></tr><tr><td>PCL</td><td>Printer</td></tr><tr><td>Postscript</td><td>Printer</td></tr><tr><td>HDC</td><td>Printer</td></tr></table> If you're creating HTML output from DFLXCOMP or DFLXOUT, for example, and some members in your project are marked as VisibleIfOutput=Printer, those members will not be included in your HTML.	PDL	Display or Printer?	DCD	Both	HTML	Display	PDF	Display	AFP	Printer	Metacode	Printer	PCL	Printer	Postscript	Printer	HDC	Printer
PDL	Display or Printer?																			
DCD	Both																			
HTML	Display																			
PDF	Display																			
AFP	Printer																			
Metacode	Printer																			
PCL	Printer																			
Postscript	Printer																			
HDC	Printer																			

For more information about the component properties of the Sections folder itself, see “Sections Folder” on page 371.

For more information about adding a member to the section, see “Add Member” on page 294.

Sections Folder

The Sections folder, which contains each section, also employs properties that give you further control over the inclusion of members in the project. These properties are identical to the ones for members, but give you some specific advantages when applied to the entire Sections folder.

Property Category	Property	Description
Data (Multiple Inclusion)		Data properties control whether a section is included, based on the occurrences of rows in a Docuflex Studio schema
	DataSource	The source table of the variable data. When each section has an inclusion rule, it is possible to reorder the sections in the output document according to the order of the records in the table
Miscellaneous	(Name)	Name of the Sections folder
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
Rules		Rule properties control the point in the composition procedure where any processing rules are applied
	PostComposition	Execute the rule after the document is <i>completely</i> composed
	PreInclusion	Execute the rule before <i>any</i> section is included

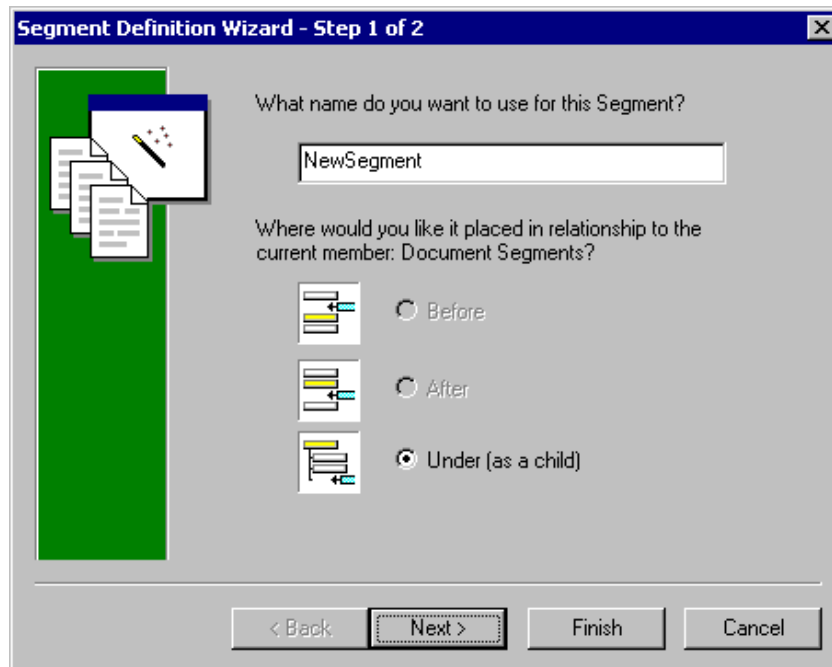
Add Segment

Use the Add Segment command to invoke the Segment Definition Wizard. You can use this routine to add a Document Segment to your document. A Segment is treated like a Section and is the middle member of the “collection-section-member” analogy.

For more information, see “What are Document Segments?” on page 153.

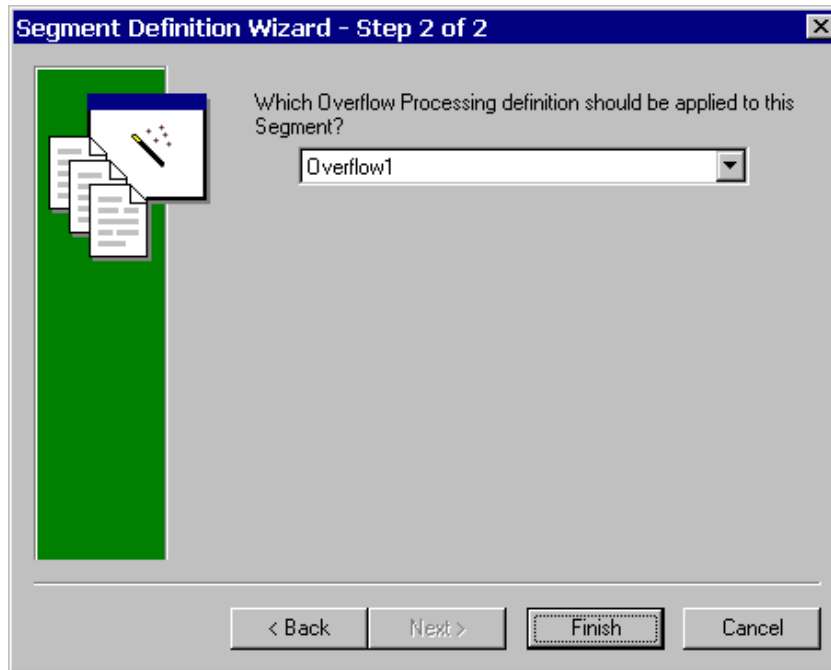
To Add a Segment

- 1 Select **Document>Add Segment**.
-or-
Select **Add>Segment** from the Component Explorer’s context menu.
The first dialog box of the Wizard displays.



- 2 In the Name text box, type the name you want to assign to the segment.
- 3 For the Location, click the appropriate option button.

- 4 Click **Next >** and the next dialog box displays.



- 5 In the Overflow Processing drop-down list box, select from the list of Overflow Definitions (see “[What are Overflow Definitions?](#)” on page 155).
- 6 Click **Finish**.
- 7 To complete the remaining segment properties, see “[To Complete the Specification of Section Properties](#)” on page 370.

For more information about adding a member to the Document Segment, see “[Add Member](#)” on page 294.

Add Style

Use the Add Style command to add to the available Character, Color, Field, Member, Paragraph, and Tab styles.

For more information, see “[What are Style Definitions?](#)” on page 152.

To Add a Character Style

- 1 Select **Document>Add Style>Character**.
-or-
Select **Add>Style>Character** from the Component Explorer’s context menu.
Docuflex Studio displays the new Character style in the Component Explorer.
- 2 To complete the remaining properties, see “[Using the Character Styles View](#)” on page 190.

For more information, see “[Styles Control Bar](#)” on page 187.

To Add a Color Style

- 1 Select **Document>Add Style>Color**.
-or-
Select **Add>Style>Color** from the Component Explorer's context menu.
Docuflex Studio displays the new Color style in the Styles bar.
- 2 To complete the remaining properties, see [“Using the Color Styles View”](#) on page 192.
For more information, see [“Styles Control Bar”](#) on page 187.

To Add a Field Style

- 1 Select **Document>Add Style>Field**.
-or-
Select **Add>Style>Field** from the Component Explorer's context menu.
Docuflex Studio displays the new Field style in the Styles bar.
- 2 To complete the remaining properties, see [“Using the Field Styles View”](#) on page 193.
For more information, see [“Styles Control Bar”](#) on page 187.

To Add a Member Style

- 1 Select **Document>Add Style>Member**.
-or-
Select **Add>Style>Member** from the Component Explorer's context menu.
Docuflex Studio displays the new Member style in the Styles bar.
- 2 To complete the remaining properties, see [“Using the Member Styles View”](#) on page 196.
For more information, see [“Styles Control Bar”](#) on page 187.

To Add a Paragraph Style

- 1 Select **Document>Add Style>Paragraph**.
-or-
Select **Add>Style>Paragraph** from the Component Explorer's context menu.
Docuflex Studio displays the new Paragraph style in the Styles bar.
- 2 To complete the remaining properties, see [“Using the Paragraph Styles View”](#) on page 202.
For more information, see [“Styles Control Bar”](#) on page 187.

To Add a Tab Style

- 1 Select **Document>Add Style>Tab**.
-or-
Select **Add>Style>Tab** from the Component Explorer's context menu.
Docuflex Studio displays the new Tab style in the Styles bar.
- 2 To complete the remaining properties, see [“Using the Paragraph Styles View”](#) on page 202.
For more information, see [“Styles Control Bar”](#) on page 187.

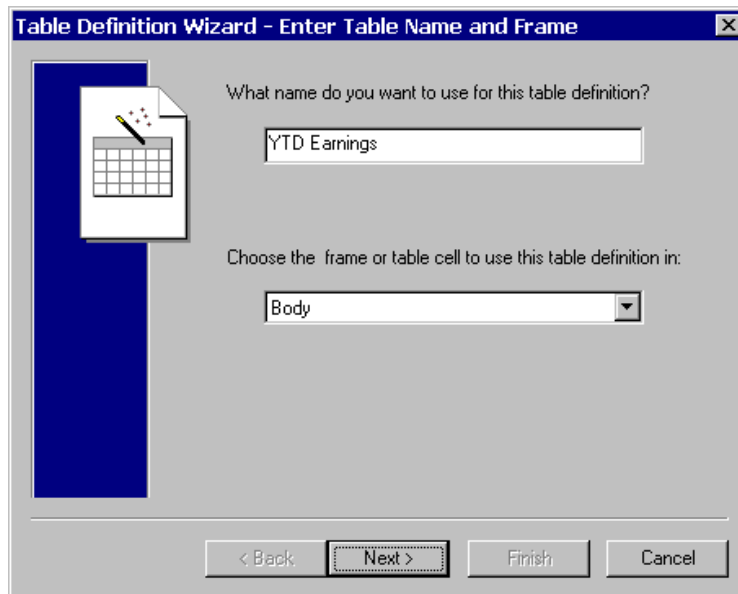
Add Table Definition

Use the Add Table Definition command to add a table definition, or framework, to your project. The Table Definition consists of a Table with one or more Rows, where each Row contains one or more Cells, and each cell may contain one or more Members.

To Add a Table Definition

- 1 In the Component Explorer, select the Table Definitions folder.
- 2 Select **Document>Add Table Definition**.

Docuflex Studio displays the Table Definition Wizard.



- 3 In the Table Name text box, type the name for this table.

NOTE

If your current selection in the Component Explorer is a Table Cell, you will not be prompted to choose a frame or table cell (i.e., you're creating a table that's a child of a table cell). Skip to [Step 5](#).

- 4 In the Frame drop-down list box, use the arrow to select the frame or table cell for this table. If you're adding a separate table, select the Body frame. If you're adding a "table within a table," select a cell from an existing table.

- 5 Click **Next >** and the next dialog box displays.

Table Definition Wizard - Enter Row and Cell Count

Enter the number of cells for each row:

3

Enter the number of different looking content rows:

1

Note: The number entered here has no correlation to the number of rows a table will have. That is determined by the data that is used to generate the table. This value determines how many different looking content rows the table should have. See the documentation for more information.

< Back **Next >** Finish Cancel

- 6 Using the Cells spin control, select the number of cells you want on each row. You can adjust this figure later in the Advanced dialog.
- 7 Using the Rows spin control, select the number of different *types* of content rows. In other words, you're indicating the *formats* for rows, not the actual number of rows.

The flexibility of the Table feature is illustrated by the fact that you're defining the format for a table, not the table itself. Since the system is data-driven, you do not have to predict the number of rows that will contain the actual data. Because you should not have to predict the number of rows, the Table Wizard cannot depict a table that has "X" columns by "Y" rows.

- 8 Click **Next >** and the next dialog box displays.

Table Definition Wizard - Enter the Number of Each Type of Row

Enter the number of header rows:

1

Enter the number of overflow header rows:

1

Enter the number of footer rows:

0

Enter the number of overflow footer rows:

0

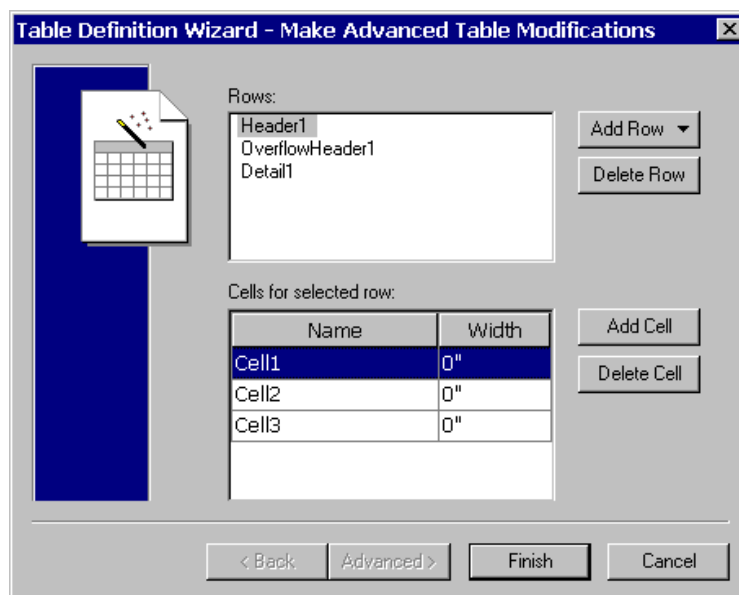
< Back **Advanced >** Finish Cancel

- 9 Using the Header Rows spin control, select the number of header rows for the table (e.g., the names for the columns).
- 10 Using the Overflow Header Rows spin control, select the number of overflow header rows for the table (e.g., the names for the columns, plus any additional information needed when the table continues to another page).
- 11 Using the Footer Rows spin control, select the number of header rows for the table (e.g., sub-totals for the columns listed on that page).
- 12 Using the Overflow Footer Rows spin control, select the number of overflow footers rows for the table (e.g., the names for the columns, plus any additional information needed when the table continues to another page).

At this point in the Wizard, you have specified all the basic settings for Tables. You can either end the Wizard or continue to specify some of the more advanced settings.

If you want to end the Wizard, skip to “[Step 15](#)” on page 378; otherwise, continue with the procedure. If you continue to the Advanced dialog, you cannot go Back; you must Finish the Wizard. The settings on the Advanced dialog can easily be modified later through menu options and the Component Properties.

- 13 Click **Advanced >** and the next dialog box displays.



The Advanced dialog box displays the rows of your table, along with the cells in each row. For each row that you highlight, the component cells and their widths are displayed. You can add and delete rows, and add, delete, and adjust the widths of the cells.

14 Do the following, as required:

If you want to	Do this:
Add a Row	Click Add Row and select the type of row you want to add.
Delete a Row	Select the row you want to delete and click Delete Row .
Add a Cell	1 In the Rows text box, select the Row to which you want to add a Cell. The cells are displayed in the lower portion of the dialog. 2 Click Add Cell.
Delete a Cell	1 In the Rows text box, select the Row for which you want to delete a Cell. The cells are displayed in the lower portion of the dialog. 2 Click Delete Cell.
Adjust the Width of a Cell	1 In the Rows text box, select the Row containing a Cell whose width you want to adjust. 2 Double-click the Width field for the appropriate Cell. 3 Type the new Width value.

15 Click **Finish**.

Docuflex Studio adds the Table Definition to the Table Definitions folder.

To Complete the Specification of Table Definition Properties

- Complete the specification of the Table Definition properties. A Table Definition provides the means of determining the layout of the table by incorporating the following categories of properties:

Property Category	Property	Description
Appearance	BackColor	Background color of the contents. Note: If you specify BackColors for both a row and a cell, the row BackColor is displayed. The same is true for rows and tables.
	BackColorEvenRow	(Row and Cell Definitions only) Background color for the even rows (and cells in those rows) of a table, if specified. See the above note about color hierarchy.
	BalanceCells	(Row Definition only) Balance the width of cells in a table row
	BalanceColumns	(Cell Definition only) Adjust members to balance the height of contents across the cells in a table
	ColumnCount	(Cell Definition only) Number of columns in this table component
	Gutter	(Cell Definition only) Amount of space between the columns
Borders	Control the appearance of the table border. Note: If a cell and a row share a common border, the border of the row is honored. The same is true for the row and table.	
	BorderColor	The color of the border around the table component
	BorderLines	The number of border line(s) around the table component
	BorderLineWidthBottom	Width of the bottom border

Property Category	Property	Description
	BorderLineWidthLeft	Width of the left border
	BorderLineWidthRight	Width of the right border
	BorderLineWidthTop	Width of the top border
	BorderMarginBottom	Space between the contents and the bottom border
	BorderMarginLeft	Space between the contents and the left border
	BorderMarginRight	Space between the contents and the right border
	BorderMarginTop	Space between the contents and the top border
	BorderStyleBottom	Style of the bottom border
	BorderStyleLeft	Style of the left border
	BorderStyleRight	Style of the right border
	BorderStyleTop	Style of the top border
	CommonBorders	Specifies whether to overlap borders of adjacent table cells versus placing the borders side-by-side.
	EllipseHeight	The vertical height of a curve (e.g., ellipse). A single “corner” of a table component with rounded corners consists of a height and a width.
	EllipseWidth	The horizontal width of a curve (e.g., ellipse). A single “corner” of a table component with rounded corners consists of a height and a width.
Indentation	Controls the distance of the contents from all four sides of the table frame, and the indentation of the first line of the contents.	
	IndentationBottom	Space between the table frame and the bottom border
	IndentationLeft	Space between the table frame and the left border
	IndentationRight	Space between the table frame and the right border
	IndentationTop	Space between the table frame and the top border
Miscellaneous	(Name)	Name of the table component
	BasedOn	The frame on which this table is based
	CellListSource	(Row Definition only) The name of a schema table column supplying a CSV list of cell names and widths.
	DisplayIfEmpty	(Cell Definition only) Whether to display an empty cell
	FrameOrTableCell	(Table Definition only) The frame or table cell into which you want to place this table
	LastModifiedBy	The user ID of the last person to change this component. This property value is for display only
	LastModifiedDate	The date and time of the last change to this component. This property value is for display only
	LeadingAdjustment	(Cell Definition only) The percentage of the row’s height you want to designate as the point at which the content is vertically adjusted
Position (Assembly & Placement)	Position properties control the positioning of the contents as related to the table, row, and cell boundaries	
	Height	Row or cell height

Property Category	Property	Description
	Left	Row or cell position in relation to the left side of the table or row
	Top	(Table Definition only) Row or cell position in relation to the top of the table or row
	VerticalAlign	(Cell Definition only) Align the contents within a table cell
	Width	Table component width. This property is mostly applicable to cells and, to some extent, the table itself. Note: If you don't explicitly define the width of each cell in a table row, the Width property displays a value of 0 which causes Docuflex to calculate the width of each cell by dividing the width of the table by the number of cells.
	WidthPercent	(Cell Definition only) The width of the cell, expressed as a percentage of the width of the row
Special Handling	WhenUsed	(Row Definition only) Marks a row in the table for a specific event.

For more information about using a Table Definition in your document, see “[Building Tables](#)” on page 64.

After completing the table definition, you have the option to add members to the cells. These members are then automatically composed with the cell (see “[Adding Members To Cells](#)” on page 380).

Adding Members To Cells

In the same manner that you can add members to Sections, Document Segments, Overflow Definitions, and Frames, you can also add members to Cells within Table Definitions. The result is that members assigned to cells are automatically composed with the cell.

For more information about adding a member to a cell, see “[Add Member](#)” on page 294.

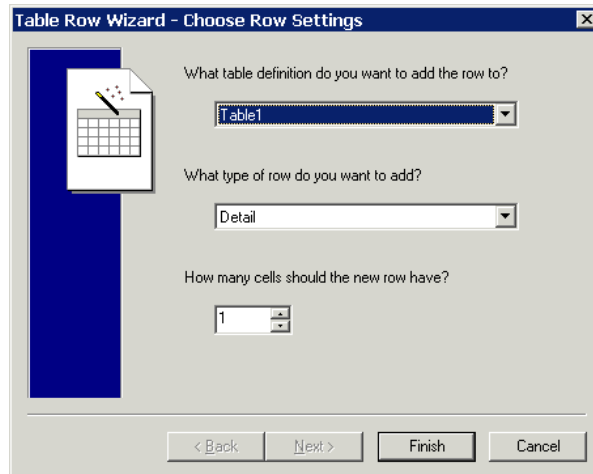
Add Table Row

Use the Add Table Row command to add another row to the selected Table—either the members conforming to the table definition or the Table Definition itself. The new row is added to the bottom of the existing rows.

To Add a Row to the Table Definition

- 1 In the Component Explorer, select the Table Definition to which you want to add a row.
- 2 Select **Document>Add Table Row**.

Docuflex Studio displays the Table Row Wizard dialog.



- 3 Select the table definition to which you want to add the row. Then select the type of row you want to add and how many cells the row should have.
- 4 Depending on your other selections, you may be prompted to enter more information. Click Finish to complete the addition of a table row. For more information about table properties, see [“To Complete the Specification of Table Definition Properties”](#) on page 378.

Add Table Cell

Use the Add Table Cell command to add another cell to the selected row. The new cell is added to the right of the existing cells with a Width equal to zero. You can use the Component Properties to adjust the width.

TIP

A width of zero does not indicate a cell with no width, it means that Docuflex Studio automatically calculates the cell width based on the remaining space in the row. You can have a mixture of cells with specific widths and cells for which you want the width to be calculated. The remaining space on a row, after the fixed widths have been removed, is divided equally between the cells with un-specified widths.

To Add a Cell

- 1 In the Component Explorer, select the row to which you want to add a Cell.
- 2 Select **Document>Add Table Cell**.
Docuflex Studio adds a cell to the row.
- 3 Complete the specification of the Table Cell properties. Refer to the table in [“Step ”](#) on page 378.

Add TOC Entry

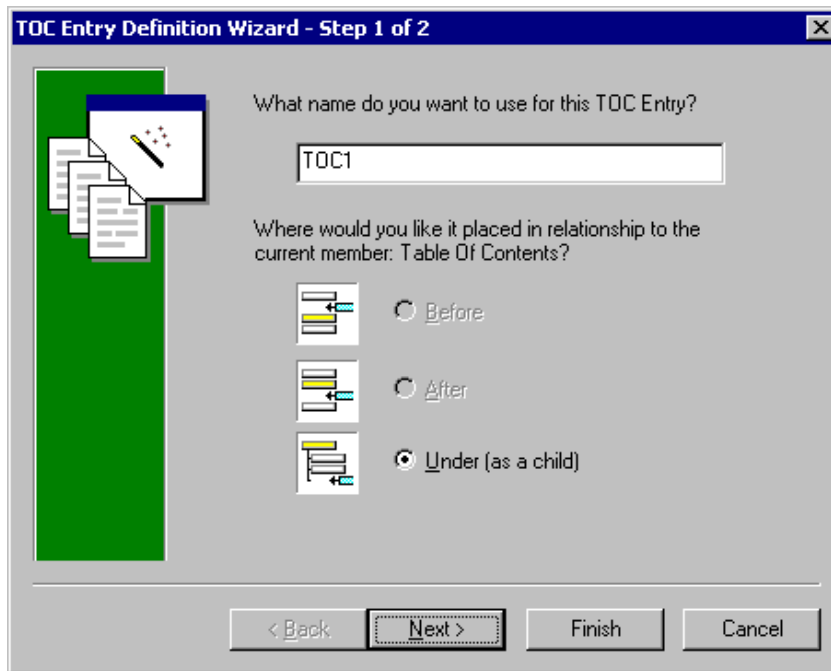
Use the Add TOC Entry command to create a parent for one or more members that define the format and contents of each type of TOC entry.

For more information, see [“What is a Table of Contents?”](#) on page 160.

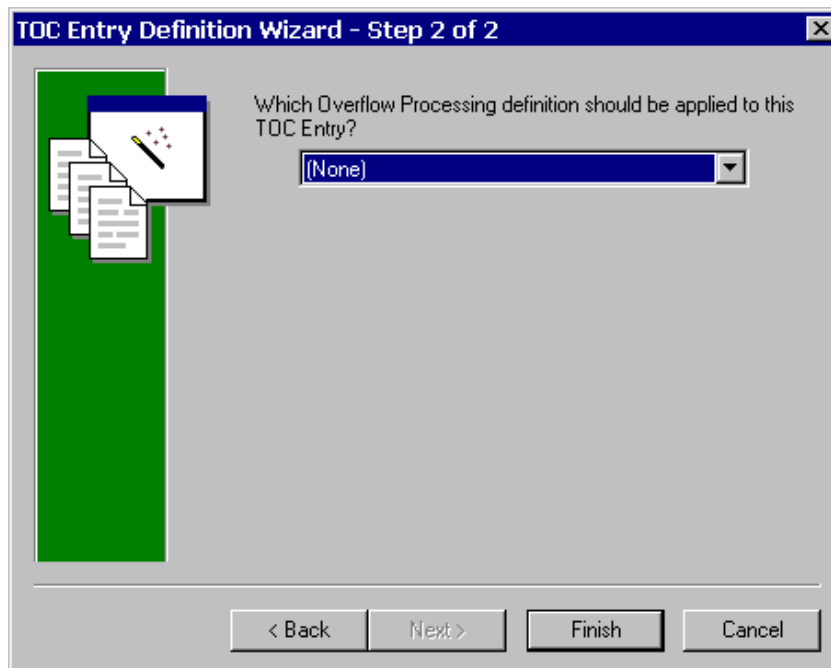
To Add a TOC Entry

- 1 Select **Document>Add TOC Entry**.
-or-
Select **Add>TOC Entry** from the Component Explorer’s context menu.

The first dialog box of the Wizard displays.



- 2 In the Name text box, type the name you want to assign to this TOC entry.
- 3 For the Location, click the appropriate option button.
- 4 Click **Next >** and the next dialog box displays.



- 5 In the Overflow Processing drop-down list box, select from the list of Overflow Definitions (see [“What are Overflow Definitions?”](#) on page 155).
- 6 Click **Finish**.
- 7 To complete the remaining TOC properties, see [“Step ”](#) on page 370.

For more information about adding a member to the TOC Entry, see [“Add Member”](#) on page 294.

Component

Copying and moving components directly affects their order within the tree structure of the major document components. This order is very important because the composition engine processes components in the order in which they're encountered.

Copy To

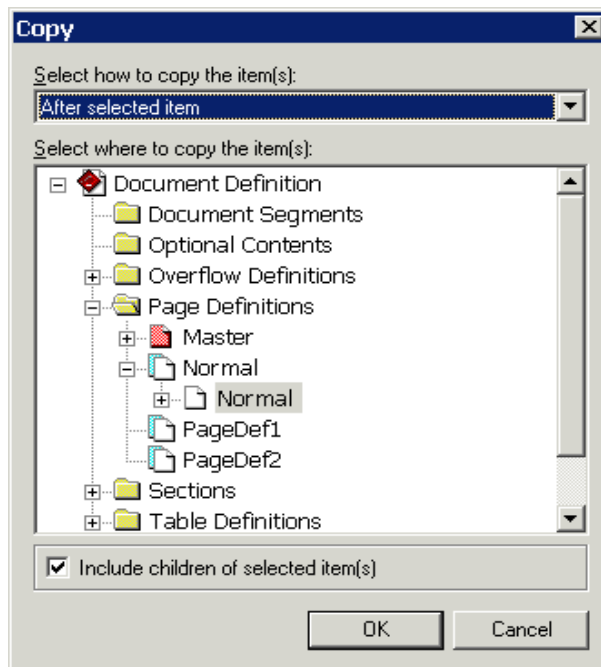
Use the Copy To command to place a copy of a component in another location.

TIP

The Copy To command is valid with all document components except Page Frames and external References.

To Copy a Component To Another Location

- 1 In the Component Explorer, select the component you want to copy (e.g., the "Normal" Overflow Definition; see "[Component Explorer](#)" on page 169).
- 2 Select **Document>Component>Copy To**.



- 3 If you want to change how the component is copied, select another option from the Select how to copy the item(s): drop-down list.
- 4 In the Select where to copy the item(s): file list, navigate the tree listing to the location where you want to copy the item.
- 5 If you also want to copy any child components belonging to the selected items, check the Include children of selected item(s).
- 6 Click **OK**.

Docuflex Studio displays the new component in the selected location of the Component Explorer. The name is displayed as "member2".

For more information about renaming components, see "[Rename](#)" on page 385.

Move To

Use the Move To command to move a component to another location. Unlike the action of the Copy To command, Move To removes the component from its original location.

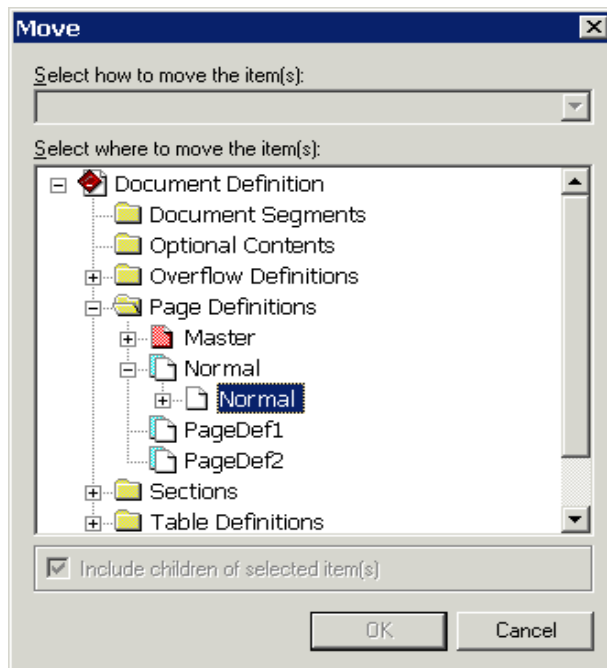
TIP

The Move To command is valid with all document components except Page Frames, external References, Rules, and formatting Styles.

To Move a Component to Another Location

- 1 In the Component Explorer, select the component you want to move (e.g., the “Normal” Overflow Definition; see “[Component Explorer](#)” on page 169).
- 2 Select **Document>Component>Move To**.

The Move dialog displays.



- 3 If you want to change how the component is moved, select another option from the Select how to move the item(s): drop-down list.
- 4 In the Select where to move the item(s): file list, navigate the tree listing to the location where you want to move the item.
- 5 Click **OK**.

Rename

Use the Rename command to change the name of a component.

To Rename a Component

- 1 In the Component Explorer, alternate-click on the component you want to rename, and then click **Rename**.

CAUTION

Do not attempt to rename a frame unless the frame exists in the Master page definition.

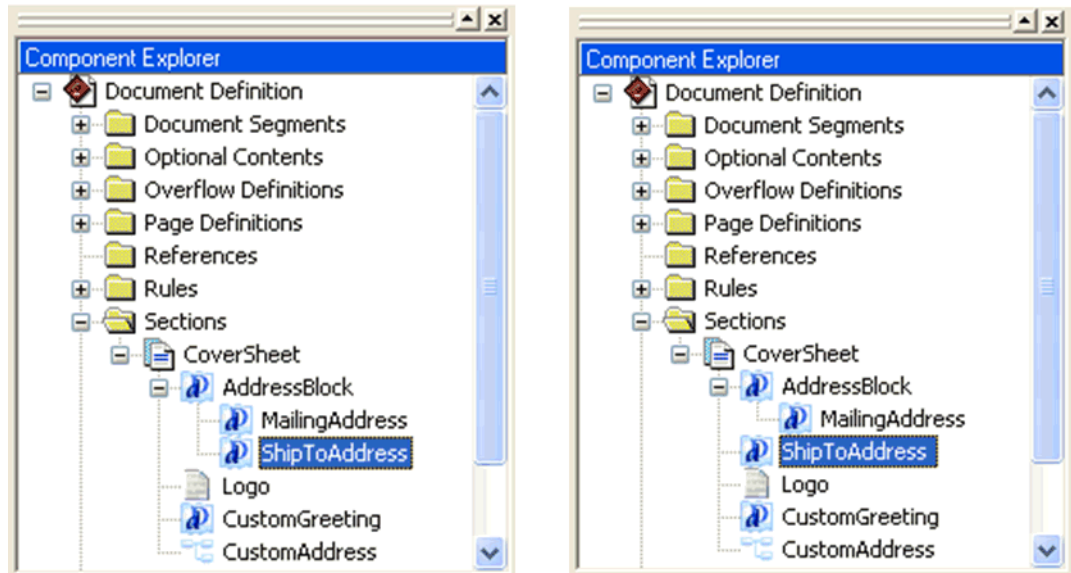
- 2 Type the name you want to assign to this component.
- 3 Press **ENTER**.

Promote

Use the Promote command to move the component to a higher branch in the tree structure (i.e., the component moves up to a “parent” level).

To Promote a Component

- 1 In the Component Explorer, select the component you want to move.
- 2 Click  in the Standard Toolbar.
-or-
Select **Document>Component>Promote**.



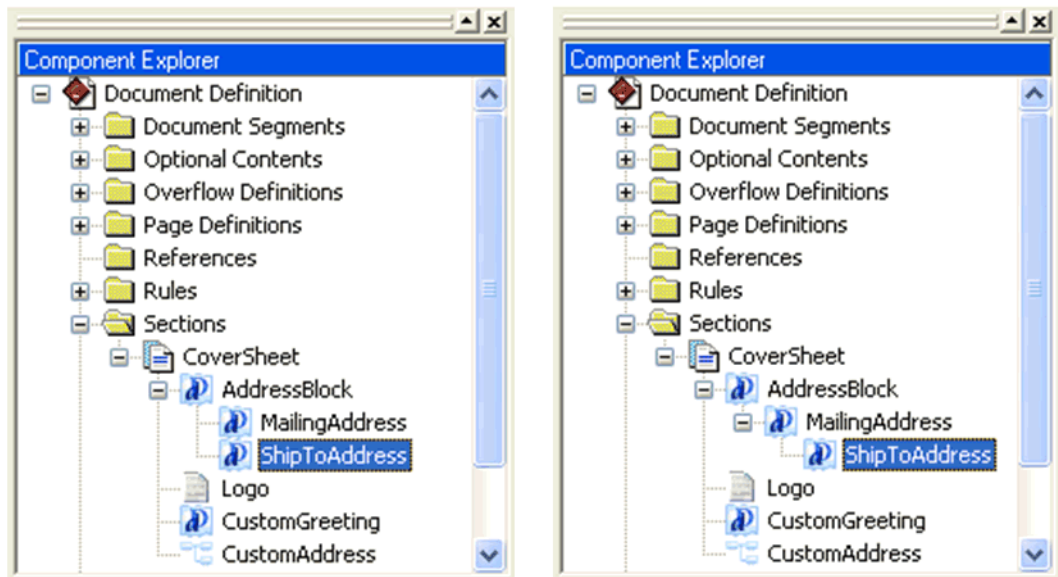
ShipToAddress moves from being a child of AddressBlock to being its sibling.

Demote

Use the Demote command to move the component to a subordinate branch in the tree structure (i.e., the component moves down to a “child” level).

To Demote a Component

- 1 In the Component Explorer, select the component you want to move.
- 2 Click  in the Standard Toolbar.
-or-
Select **Document>Component>Demote**.



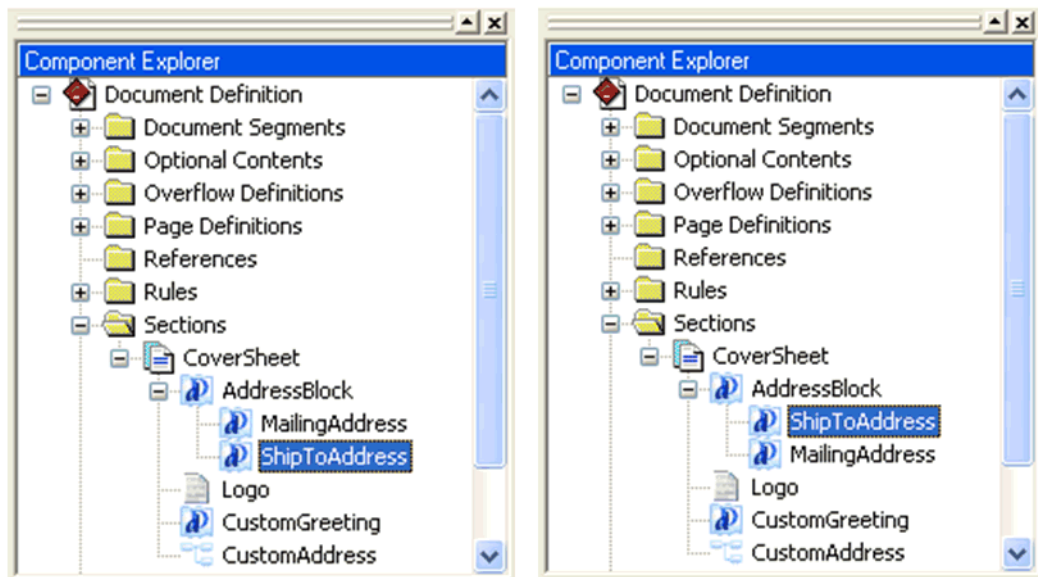
ShipToAddress moves from being a sibling of MailingAddress to being its child.

Move Up

Use the Move Up command to place the component above the previous member on the same level.

To Move a Component Up

- 1 In the Component Explorer, select the component you want to move.
- 2 Click  in the Standard Toolbar.
-or-
Select **Document>Component>Move Up**.



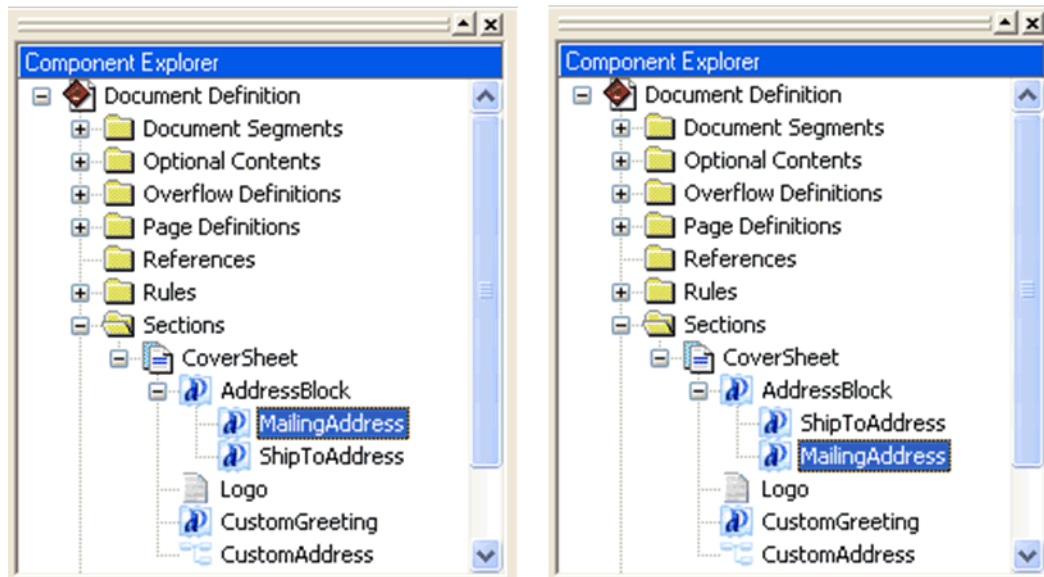
ShipToAddress moves prior to MailingAddress.

Move Down

Use the Move Down command to place the component below the next member on the same level.

To Move a Component Down

- 1 In the Component Explorer, select the component you want to move.
- 2 Click  in the Standard Toolbar.
-or-
Select **Document>Component>Move Down**.



MailingAddress moves below ShipToAddress.

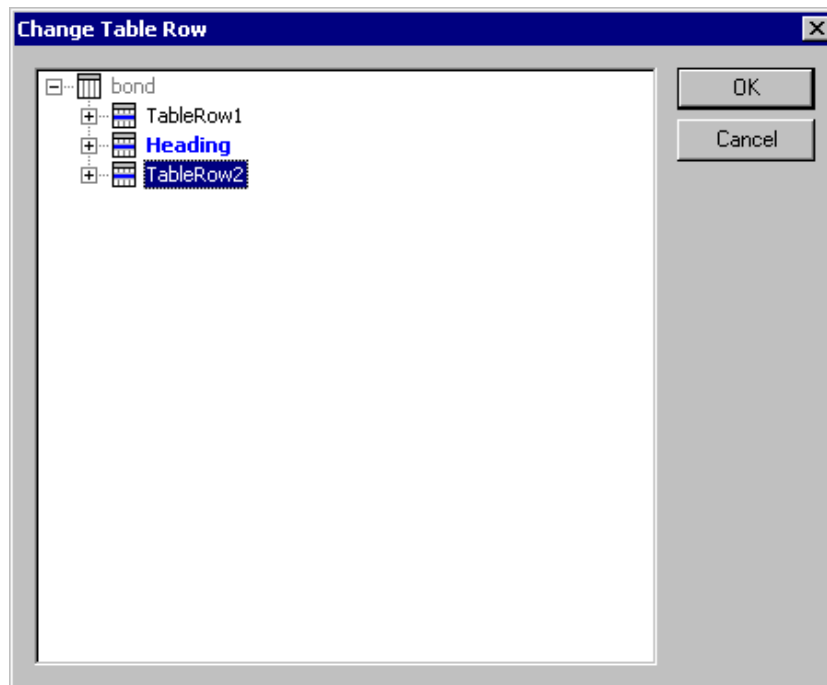
Change Table Row

Use the Change Table Row command to change the row in a table to which a member or group of members is assigned. This feature is useful if you alter the structure of the table you're using, and you need to make major adjustments to the placement of the members.

To Change the Table Row

- 1 In the Component Explorer, select the member(s) whose `FrameOrTableCell` property references a table cell.
- 2 Select **Document>Change Table Row**.

Docuflex Studio displays the Change Table Row dialog.



The current table row to which the member or group is assigned is highlighted in blue.

- 3 Navigate the tree view to locate the new desired row.
- 4 Click **OK** to reassign the members.

Edit Inserted Wizard

Use the Edit Inserted Wizard command to change any of the values you supplied in response to the questions posed by the wizard that created the member(s). Even though you used the wizard to create a member, Docuflex Studio refers to these “members” as “wizards.” The wizards in Docuflex Studio can create Document Segments, Overflow Definitions, and Sections.

TIP

This menu option is only available if the project on which you're working was created based on a template that employs Wizards (see “[Solutions Wizard](#)” on page 469).

To Edit a Member Inserted Via Wizard

- 1 In the Component Explorer, select the component whose value(s) you want to change (see “[Component Explorer](#)” on page 169).
- 2 Select **Document>Edit Inserted Wizard**.

Docuflex Studio displays the pre-defined wizard routine.

- 3 Make the necessary changes to the stored values of the member.

Docuflex Studio updates the member with the changes you made.

Update Reference

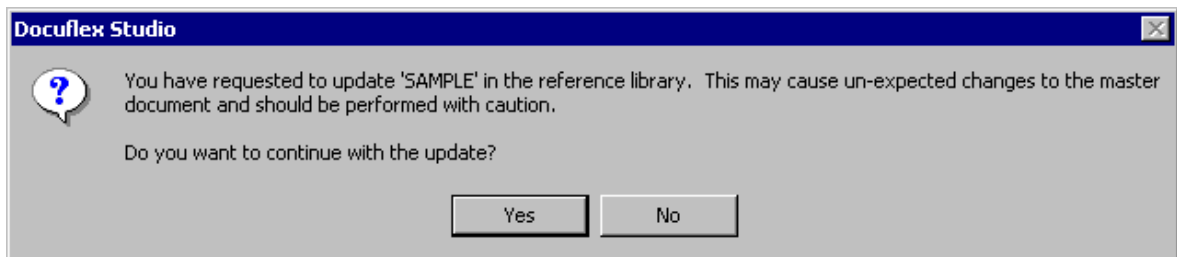
When you add an external reference to the parent document, it is, by default, embedded into the document. This means a copy of the reference is stored within the parent document; however, you cannot make changes directly to the referenced project from within the parent—you must open the referenced project separately.

If you make changes to this reference, you can choose whether to use the Update Reference command to load an updated copy. You can also change the Embed property to False, where the reference is “linked” and any and all changes are automatically loaded when the parent document is loaded.

To Update an External Reference

- 1 Select **Document>Update Reference**.

Docuflex Studio prompts you to confirm your decision.



- 2 Click **Yes** to update the project; otherwise, click **No** to cancel.

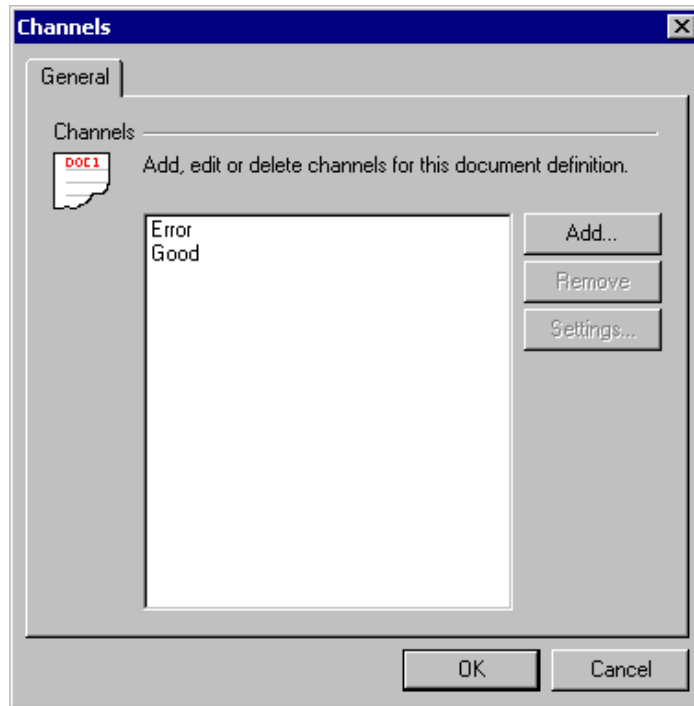
Channels

Use the Channels command to specify different channels that will be available to the project. Channels are logical destinations for different recipients of the document.

To Display the Channels Dialog

- Select **Document>Channels**.

The Channels dialog displays.



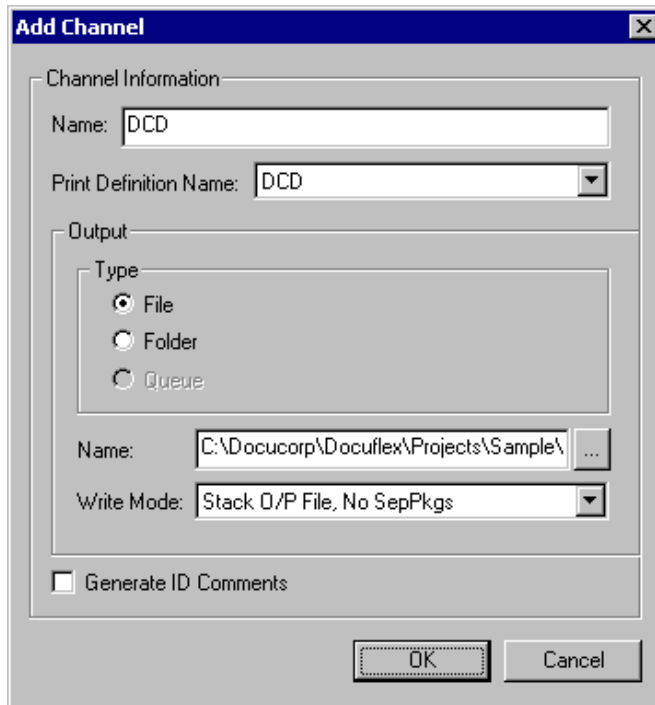
Because the Channels dialog contains several procedures, this guide provides a separate topic for each procedure.

If you need to	Go to
Add a Channel	“To Add a Channel” on page 392
Edit a Channel	“To Edit a Channel” on page 393
Delete a Channel	“To Delete a Channel” on page 393
Overriding the output Channel	“Overriding Output Destinations” on page 62
Save or close the Channels dialog	“To Save the Channels” on page 393

To Add a Channel

- 1 Click **Add**.

The Add Channel dialog displays.



- 2 In the Name text box, type the name you want to assign to the new Channel.
- 3 In the Print Definition Name drop-down list box, select the type of print data stream you want to send to the Channel.

TIP

If you want to use the Post-Processors with your Docuflex Studio output:

- 1 In the Print Definition Name drop-down list box, select **DCD**.
- 2 In the Output Type group box, select **Folder**.
- 3 In the Name text box, **Browse** for the desired folder.
- 4 In the Write Mode drop-down list box, select **Stack O/P File, Do SepPkgs**.

This channel then produces a Stacked DCD with a generated, time-and-date stamped file name.

- 4 For the Output Stream Type, click the appropriate option button for the destination of the print data stream.
- 5 For the Output Stream Name, enter the file name or drive and directory path name for the print data stream.

-or-

Click  to browse for the file or folder.

TIP

Docuflex Studio can produce output directly to a printer (i.e., without going to a file) if you specify "***NONE**" as a file name in the Docuflex channel. Be sure to include the asterisks but omit the quotation marks.

- 6 For the Output Stream Write Mode drop-down list box, select any one of the following:
 - New File For Each Document—each document produced for this channel is placed in a separate file.
 - Stack Output File, Do SepPkgs—all documents produced for this channel are placed in a single file, but each document is stacked in a staggered arrangement to make separation easier.
 - Stack Output File, No SepPkgs—all documents produced for this channel are placed in a single file with no staggered stacking.
- 7 Enable Generate ID Comments to generate comment information pertaining to the DataSet ID and Recipient.
- 8 Click **OK** to add the Channel; otherwise, click **Cancel** to exit without saving.

To Edit a Channel

- 1 From the list box, select the Channel you want to change, and then click **Settings**.
- 2 Follow the instructions starting with “Step 2” on page 392.

To Delete a Channel

- From the list box, select the Channel you want to delete, and then click **Remove**.

To Save the Channels

- Click **OK** to save your changes; otherwise, click **Cancel** to exit without saving.

Filters

Use the Filters command to manage both static and table-based compound verbiage filters, devices with which you can specify alternate text items that you can dynamically choose based on filter criteria. You can store a message, for example, in several different languages and only include the message for the appropriate filter.

TIP

An ideal use of compound verbiage filters is to provide alternate language versions of messages. In this case, define filters of “English,” “Spanish,” and “French” to isolate language-specific versions of messages. For static filters, you would then type these messages into the Source window of the appropriate member. For table-based filters, the static filter name is stored in the *table.column* of the data source for that member.

Filtered sections within Content Text members are treated as a true range of text, rather than simple ‘breaks,’ a benefit of which is that now you can “nest” filters. So, you could have a range of text selected that has an ‘English’ filter applied to it and, within that range, another range that includes a ‘Texas’ filter.

Filters also provide more dynamic processing, in the following ways:

- Along with selecting static filters for a Recipient, you can now select *table.columns* from a data source (i.e., if you select a member with a data source, you can populate the *table.column* field with one of your static filter names).

For instance, one table row may contain English text in that field and, hence, the member composes text subject to the ‘English’ filter. The next row may contain German in the field, and its text is subject to the same treatment. The names specified in the *table.columns* must correspond to those of the predefined static filters.

- You can apply an Inclusion rule to a range of text (in addition to static filters). These Inclusion rules are similar to those applied to Members.

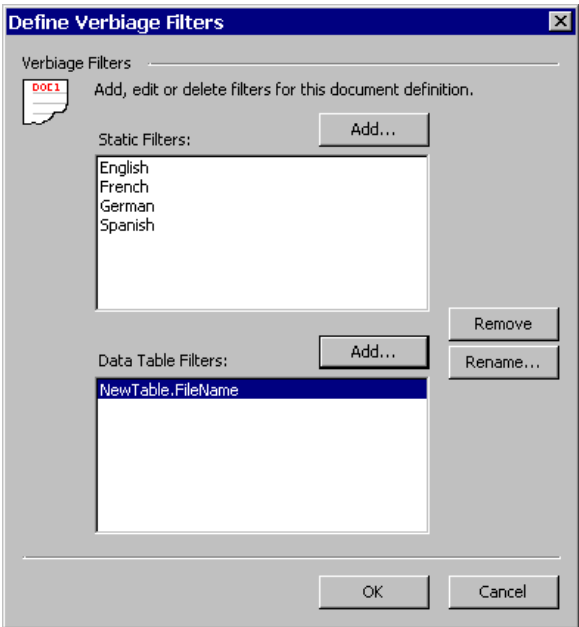
NOTE

If the Inclusion rule evaluates to False, the selected range is not composed regardless of the remaining filters. If the Inclusion rule evaluates to True, the other filters are then tested to determine their validity.

To Display the Filters Dialog

- Select **Document>Filters**.

The Define Verbiage Filters displays.



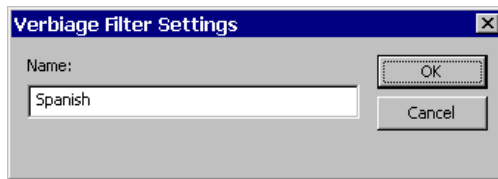
Because the Define Verbiage Filters dialog contains several procedures, this guide provides a separate topic for each procedure.

If you need to	Go to
Add a static filter	“To Add a Static Filter” on page 395
Rename a static filter	“To Rename a Static Filter” on page 395
Add a data table filter	“To Add a Data Table Filter” on page 395
Rename a data table filter	“To Rename a Data Table Filter” on page 396
Delete a filter	“To Delete a Filter” on page 396
Save or close the Define Verbiage Filters dialog	“To Save the Filters” on page 396

To Add a Static Filter

- 1 Click **Add** (located in the upper half of the dialog).

The Verbiage Filter Settings dialog displays.



- 2 In the Name text box, type the name you want to assign to the new filter.

This name is simply a label; it does not affect nor specify the contents.

- 3 Click **OK** to add the filter; otherwise, click **Cancel** to exit without saving.

For more information about the use of filters, see “[Verbiage Filter](#)” on page 455.

Assigning filters to “[Recipients](#)” on page 397

Inserting a “[Verbiage Filter](#)” on page 455

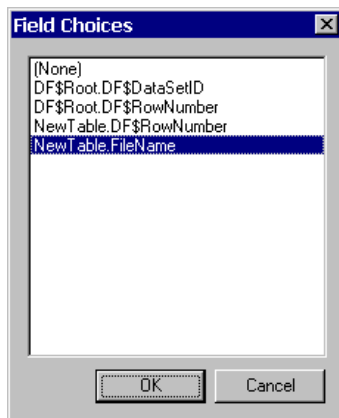
To Rename a Static Filter

- 1 From the Static Filters list box, select the filter you want to change, and then click **Rename**.
- 2 Type the new name for the filter.
- 3 Click **OK**.

To Add a Data Table Filter

- 1 Click **Add** (located in the lower half of the dialog).

The Field Choices dialog displays.



- 2 Select the *table.column* from the schema that contains the desired filter name.

- 3 Click **OK** to add the filter; otherwise, click **Cancel** to exit without saving.

For more information about the use of filters, see “[Verbiage Filter](#)” on page 455.

Assigning filters to “[Recipients](#)” on page 397

Inserting a “[Verbiage Filter](#)” on page 455

To Rename a Data Table Filter

- 1 From the Static Filters list box, select the filter you want to change, and then click **Rename**.
- 2 Select the new *table.column* from the schema.
- 3 Click **OK**.

To Delete a Filter

- ▶ From the appropriate list box, select the filter you want to delete, and then click **Remove**.

To Save the Filters

- ▶ Click **OK** to save your changes; otherwise, click **Cancel** to exit without saving.

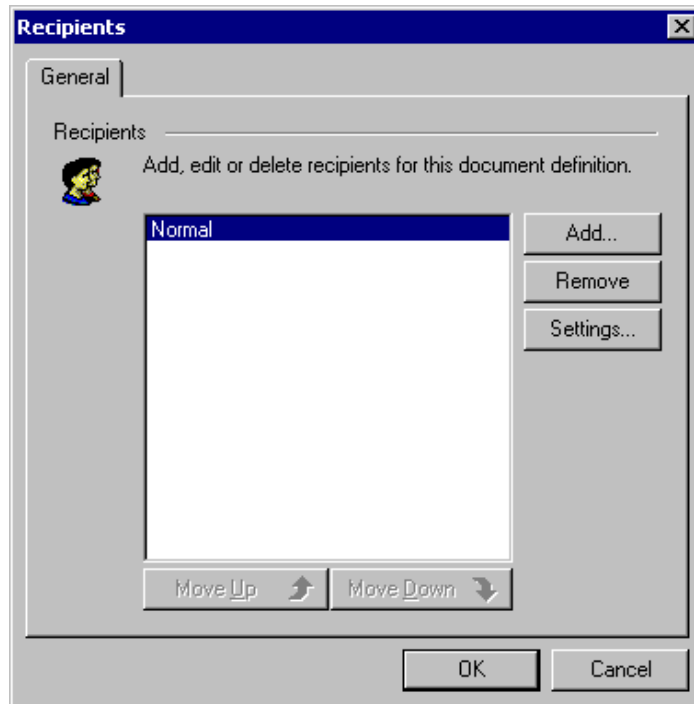
Recipients

Use the Recipients command to specify the available groups of Recipients for this document. Some example Recipients include customers of utility bills, financial statements, and insurance policies.

To Display the Recipients Dialog

- Select **Document>Recipients**.

The Recipients dialog displays.



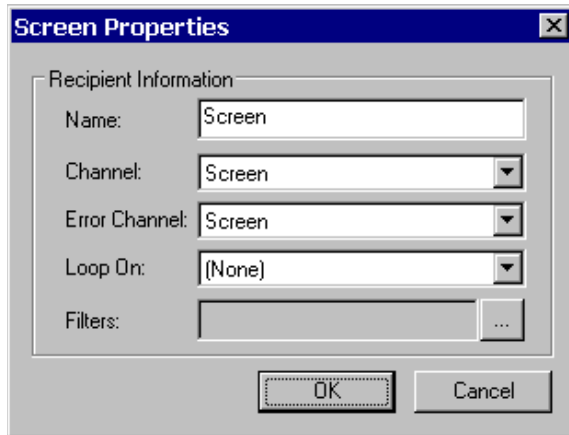
Because the Recipients dialog contains several procedures, this guide provides a separate topic for each procedure.

If you need to	Go to
Add a Recipient	“To Add a Recipient” on page 398
Edit a Recipient	“To Edit a Recipient” on page 399
Delete a Recipient	“To Delete a Recipient” on page 399
Arrange the Recipients	“To Arrange the Recipients” on page 399
Save or close the Recipients dialog	“To Save the Recipients” on page 399

To Add a Recipient

- 1 Click **Add**.

The Properties dialog displays.

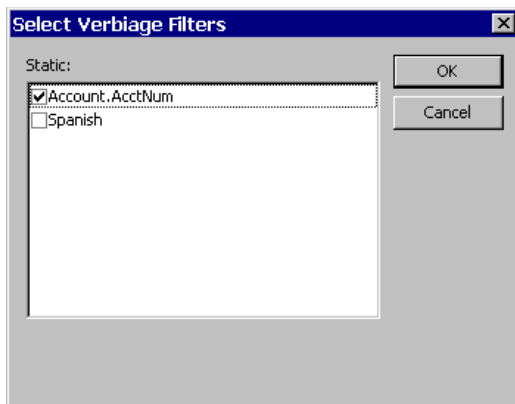


- 2 In the Name text box, type the name you want to assign to the new Recipient.
- 3 In the Channel drop-down list box, select a “good” Channel for this Recipient.
- 4 In the Error Channel drop-down list box, select an Error Channel for this Recipient.
- 5 In the Loop On drop-down list box, select the data file table against which to cycle the Recipient (e.g., Account; see “DataSource” on page 573).

NOTE

Use the Loop On list box to select a table to step through Recipients of a given type. For example, the type could be “LienHolder” and the Recipients could be names of banks holding liens. The table you choose **MUST** include a column labelled “Name.”

- 6 In the Filters display box, click  to display the Select Verbiage Filters dialog.

**NOTE**

If you do not see any filters displayed, you have not yet created them; see “Filters” on page 393.

- 7 Enable the check box(es) beside the applicable filter(s).

TIP

You can enable more than one filter if you want a recipient to receive multiple filtered messages.

Associating verbiage filters with recipients is the most direct method of selecting verbiage filters. It's also possible to directly set the DCP.CURRENT.VERBIAGE reserved tag to control verbiage selection. The desired verbiage criteria may be available in a schema table. In this case, calling

`DF$SetTagValue ("DCP.CURRENT.VERBIAGE", verbiage_criteria)`
in a business rule will redefine the verbiage filter(s) for this current Recipient.

- 8 Click **OK** to save your filter selections; otherwise, click **Cancel** to exit without saving.
- 9 Click **OK** to add the Recipient; otherwise, click **Cancel** to exit without saving.

To Edit a Recipient

- 1 From the list box, select the Recipient you want to change, and then click **Settings**.
- 2 Follow the instructions starting with "Step 2" on page 398.

To Delete a Recipient

- From the list box, select the Recipient you want to delete, and then click **Remove**.

To Arrange the Recipients

- 1 From the list box, select the Recipient whose position you want to change.
- 2 Click **Move Up** to promote the Recipient in the list.
-or-
Click **Move Down** to demote the Recipient in the list.

To Save the Recipients

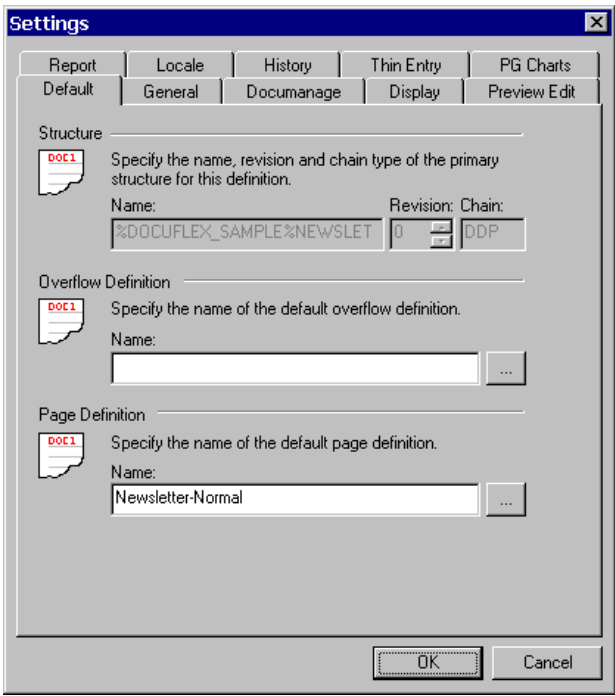
- Click **OK** to save your changes; otherwise, click **Cancel** to exit without saving.

Settings

Use the Settings command to specify several default Docuflex Studio options for use when composing and proofing your document. The Settings dialog and all of its properties are used to manage “project-related” information. This information is saved in the project workspace and reloaded with each project.

To Specify Project Settings

- ▶ Select **Document>Settings**.
The Settings dialog displays.



Using the Settings Dialog and Views

The Settings dialog box contains several views. You complete a setting by specifying general operating parameters under these views.

To Use a Settings View

- ▶ Do any of the following:

To specify	Go to this topic
Project settings for the Structure, Overflow Definition, and Page Definition	“Using the Default View” on page 402
Default units of measurement and display handling choices	“Using the General View” on page 404
Customize the integration and behavior of the Documanager Library	“Integrating Docuflex with Documanager” on page 77
Preview and page layout choices	“Using the Display View” on page 406
Preview Edit options	“Using the Preview Edit View” on page 409
Items to be included, how they should be included, and their appearance	“Using the Report View” on page 410

To specify	Go to this topic
Various formatting symbols common to your geographic location	“Using the Locale View” on page 413
Whether to enable a history file, or clear an existing file	“Using the History View” on page 415
The configuration file for customized Thin Entry navigation buttons	“Using the Thin Entry View” on page 416
Custom color palettes for Presentation Graphics Charts	“Using the PG Charts View” on page 417

To Save or Close the Settings Dialog

- Do one of the following:

To	Do this
Apply the specifications you’ve provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without applying the specifications you’ve provided	Click Cancel .

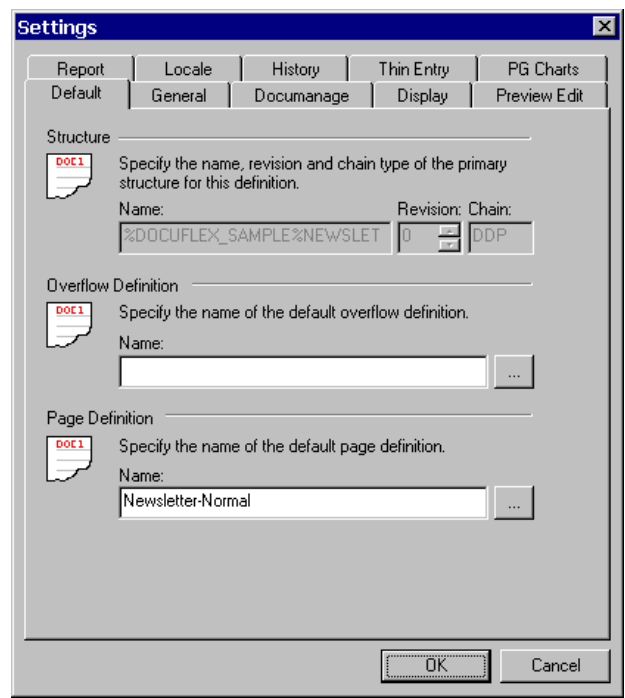
Using the Default View

Use the first view in the Settings dialog box to customize the default settings of Docuflex Studio, including:

- The name, revision, and chain type of the primary structure for this project
- The name of the default Overflow Definition
- The name of the default Page Definition

To Display the Default View

- If the Default view is not already showing in the Settings dialog box, click on the **Default** tab.



Because the Default view contains multiple group boxes of specifications, this guide provides a separate topic for each group.

If you need to specify the	Go to
Structure	“To Specify the Structure” on page 402
Overflow Definition	“To Specify the Overflow Definition” on page 403
Page Definition	“To Specify the Page Definition” on page 403
Saving or closing of the Default view	“To Save or Close the Settings Dialog” on page 401

To Specify the Structure

- 1 In the Name text box, type the name of the primary Structure for this project.
The primary structure is identical to the Docuflex Document Project (*.ddp) name.
- 2 In the Revision scroll box, select the revision of this Structure. You can use this field to work on a specific version of the project.
- 3 In the Chain text box, type the code identifying the chain type of this Structure. The default chain type is DDP.

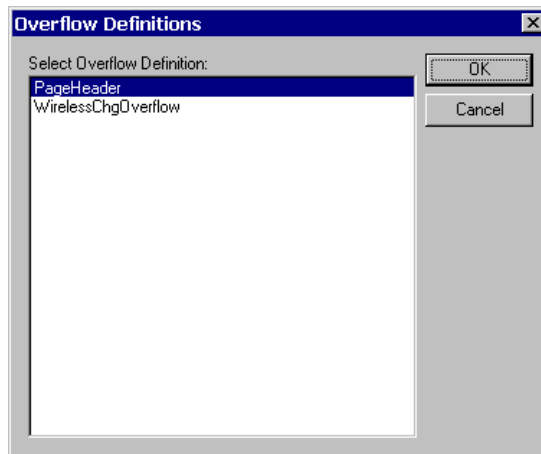
To Specify the Overflow Definition

NOTE

When you specify a default, or global, Overflow Definition, that definition is in effect for every page of the document. If a member calls an overflow definition, you'll see both the "local" and global definitions.

- 1 Click  to browse the selection of Overflow Definitions.

The Overflow Definitions dialog box displays.

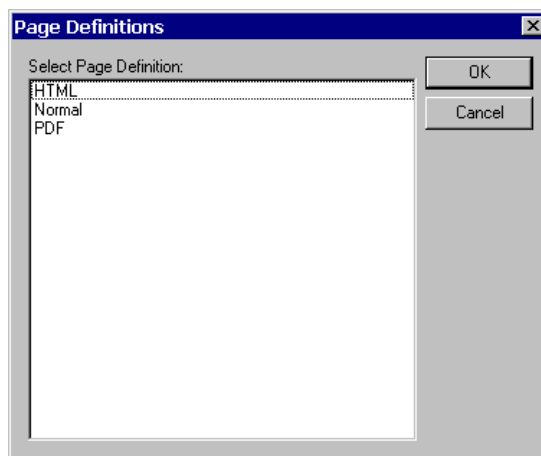


- 2 Select the Overflow Definition you want to specify as the default, and then click **OK**.

To Specify the Page Definition

- 1 Click  to browse the selection of Page Definitions.

The Page Definitions dialog box displays.



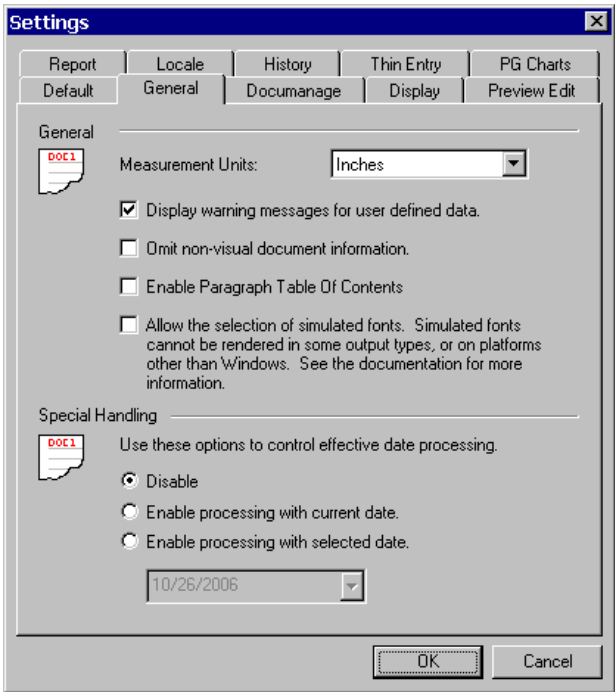
- 2 Select the Page Definition you want to specify as the default, and then click **OK**.

Using the General View

Use the second view in the Settings dialog box to specify general settings for your project and whether to enable effective date processing.

To Display the General View

- If the General view is not already showing in the Settings dialog box, click on the **General** tab.



Because the General view contains multiple group boxes of specifications, this guide provides a separate topic for each group.

If you need to specify the	Go to this topic
General settings for your project	“To Specify the General Settings” on page 405
Options to control effective date processing	“To Specify Effective Date Processing” on page 406
Saving or closing of the General view	“To Save or Close the Settings Dialog” on page 401

To Specify the General Settings

- 1 In the Measurement Units drop-down list box, select the appropriate unit of measure to use when defining the boundaries and placement of components.
- 2 Click the Display Messages check box if you want Docuflex Studio to display a dialog box containing warning messages pertaining to user-defined data elements, such as variables.
- 3 Click the Omit non-visual document information check box to remove information from the composed document that does not contribute to the visual appearance of the document.

NOTE

Docucorp Compound Document (DCD) files created by Docuflex contain information about the frames, columns, paragraphs, and members involved in the composition of the document. Omitting this information reduces both the size of the document and the storage requirements. Frames and paragraphs that have borders or colors do, in fact, contribute to the visual appearance of the document and those will not be removed. This process is also called “flattening” since it removes many layers of the document hierarchy in DCD.

- 4 Click the Enable Paragraph Table Of Contents check box if you want to generate table of contents entries from individual paragraphs (see “[Building a Table of Contents](#)” on page 69).
- 5 Click the simulated fonts check box if you want to allow the selection of simulated fonts.

WARNING!

You should use this option for backwards-compatibility **ONLY** and with extreme caution.

A simulated font is a font that is not part of the on-disk definition; the Windows GDI creates a simulated font by making modifications to that definition. For example, Tahoma Bold Italic is simulated from the on-disk definition of Tahoma Bold. Since this simulation only occurs on the Windows platforms, output using these fonts may not be rendered correctly in certain situations. Use simulated fonts with extreme caution.

To Specify Effective Date Processing

By default, Effective Date Processing is disabled. If you want to take advantage of this feature, you must first enable it and then assign values to the **BeginUseDate** and **EndUseDate** properties for the member. These two fields comprise the effective date range. This range is then compared to the processing date to determine if the processing date falls within the effective date range.

- In the **Special Handling** group box, do one of the following:

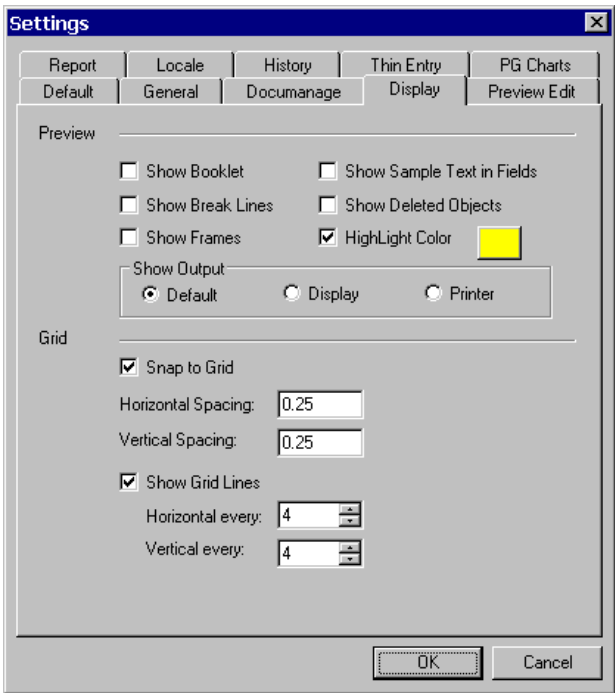
If you want to	Do this
Disable effective date processing	Click Disable .
Use the current calendar date as the processing date	Click Enable processing with current date .
Specify a particular date as the processing date	1 Click Enable processing with selected date. 2 Select the appropriate date from the drop-down list box.

Using the Display View

Use the fourth view in the Settings dialog box to specify the preview and page layout options for the page image displayed in the Preview window.

To Display the Display View

- If the Display view is not already showing in the Settings dialog box, click on the **Display** tab.

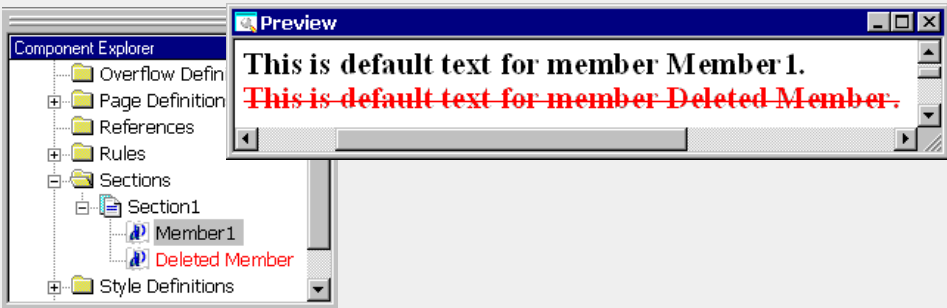


Because the Display view contains multiple group boxes of specifications, this guide provides a separate topic for each group.

If you need to specify the	Go to this topic
Options displayed while previewing your document in the Preview window	"To Specify the Preview Options" on page 407
Page layout options while previewing your document in the Preview window	"To Specify the Grid Options" on page 408
Saving or closing of the Display view	"To Save or Close the Settings Dialog" on page 401

To Specify the Preview Options

- In the Preview group box, do any of the following:

If you want to	Do this
Preview the document in the special page order required for booklet printing	Enable the Show Booklet check box.
See in the Source window the Sample Text you've assigned to the data field	Enable the Show Sample Text in Fields check box.
Display a colored line indicating where page and column breaks can occur	Enable the Show Break Lines check box.
Display deleted members and text	Enable the Show Deleted Objects check box. Note: You must enable the history file to use this feature (see "To Enable the History File" on page 415). Deleted components in the Component Explorer are displayed in red and the corresponding content is displayed in red strike-through mode:
	
Display the frame borders and colors	Enable the Show Frames check box
Enable and select the highlight color	1 Enable the Highlight Color check box. 2 Click the colored box. The Color dialog is displayed. 3 Select the desired highlight color, and then click OK.

If you want to	Do this
Display ALL members in the Preview window (e.g., <code>VisibleIfOutput=Any</code>)	Click Default .
Display only those members marked for Display, but not for Print (e.g., <code>VisibleIfOutput=Display</code>)	Click Display .
Display only those members marked for Printer, but not for Display (e.g., <code>VisibleIfOutput=Printer</code>)	Click Printer .

To Specify the Grid Options

- In the **Grid** group box, do any of the following:

If you want to	Do this:
Have your document components gravitate to the nearest grid reference point when you're dragging them on the page	1 Enable the Snap to Grid check box. 2 Type the decimal number representing the desired spacing between grid reference points.
Display the measurement grid to make laying out the page more precise	1 Enable the Show Grid Lines check box. 2 Use the scroll boxes or type the number of grid reference points between grid lines (e.g., if your horizontal spacing is 0.25 inches and you want to display grid lines every fourth reference point, you'll see grid lines every inch).

NOTE

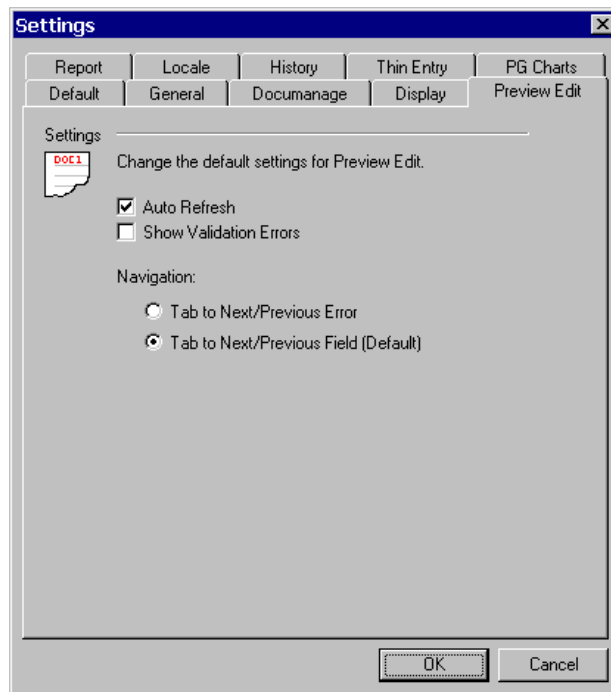
If you create frames that cover the entire page, the grid will not be visible.

Using the Preview Edit View

Use the fifth view in the Settings dialog box to specify your preferences for options in force when using the Preview Edit window.

To Display the Preview Edit View

- If the Preview Edit view is not already showing in the Settings dialog box, click on the **Preview Edit** tab.



Because the Preview Edit view contains multiple specifications, this guide provides a separate topic for each task.

If you need to specify the	Go to this topic
Default settings	“To Specify the Default Settings” on page 409
Navigation settings	“To Specify the Navigation Settings” on page 409
Saving or closing of the Preview Edit view	“To Save or Close the Settings Dialog” on page 401

To Specify the Default Settings

- 1 Enable the **Auto Refresh** check box if you want to recompose the document every time you make a change.
- 2 Enable the **Show Validation Errors** check box if you want Docuflex Studio to display errors in the Output bar.

To Specify the Navigation Settings

- 1 Click **Tab to Next/Previous Error** if you want to go to the next invalid field when tabbing through the document, thereby skipping valid fields.
- 2 Click **Tab to Next/Previous Field (Default)** if you want to go to the next field when tabbing through the document, regardless of its validity.

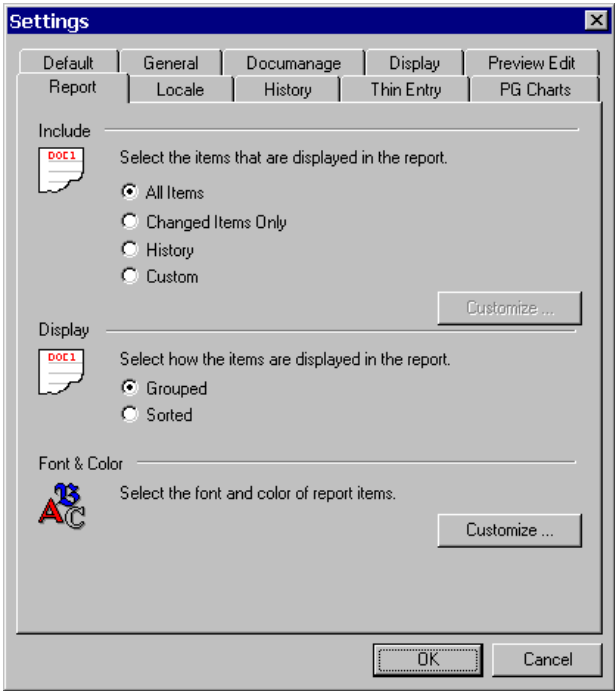
Using the Report View

Use the sixth view in the Settings dialog box to specify

- The items to be included
- The order in which they're displayed
- The appearance of the displayed items

To Display the Report View

- If the Report view is not already showing in the Settings dialog box, click on the **Report** tab.



Because the Report view contains multiple group boxes of specifications, this guide provides a separate topic for each group.

If you need to specify the	Go to this topic
Items to be included on the report	“To Specify the Include Options” on page 411
Order in which the included items are displayed	“To Specify the Display Order” on page 412
Font and color of the displayed items	“To Specify the Display Appearance” on page 413
Saving or closing of the Report view	“To Save or Close the Settings Dialog” on page 401

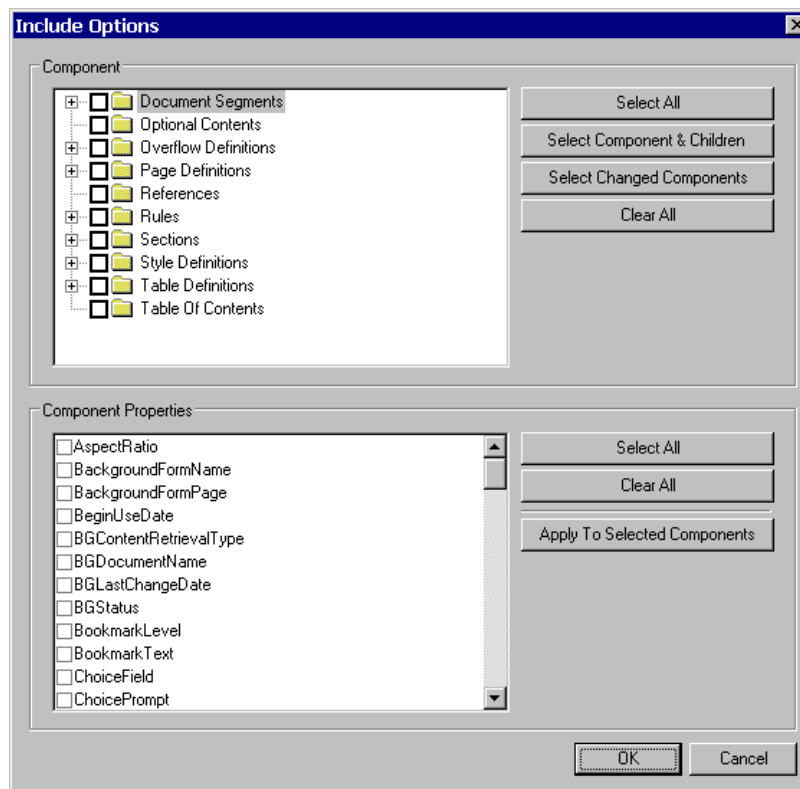
To Specify the Include Options

- In the Include group box, do one of the following:

If you want to include	Do this
All items in your document	Click All Items .
Only items that have changed since the last time you saved the document	Click Changed Items Only .
History	Click History . Note: Clicking History displays only items contained in the history file (see “To Enable the History File” on page 415).
A customized choice	See “To Customize the Include Options” on page 411.

To Customize the Include Options

- 1 In the Include group box, click **Custom**.
- 2 Click **Customize** and the Include Options dialog box displays.



- 3 Do one of the following:

If you want to	See
Choose the components to include on the report	“To Select the Components for the Report” on page 412
Choose the component properties to include with the components	“To Select the Component Properties for the Report” on page 412
Save your custom report choices	“To Save the Custom Report Options” on page 412

To Select the Components for the Report

- 1 In the Component group box, expand the tree listing, if necessary, to reveal all the components you want to display on the report.
- 2 Mark the component(s) you want to include by enabling the check box(es) next to each one.
- 3 Select one of the following:

If you want to	Do this
Include every single component, style, and external reference	Click Select All .
Include the selected component and any children it possesses	Click Select Component & Children .
Include only the components that have been changed since the last time you saved the document	Click Select Changed Components .
Clear all of the selected components so you can start the selection process again	Click Clear All .

To Select the Component Properties for the Report

- 1 In the Component Properties group box, expand the tree listing, if necessary, to reveal all the components you want to display on the report.
- 2 Mark the properties you want to include by enabling the check boxes next to each one.
- 3 Select one of the following:

If you want to	Do this
Include every single component, style, and external reference	Click Select All .
Clear all of the selected components so you can start the selection process again	Click Clear All .
Display the selected properties for each and every component you selected	Click Apply To Selected Components .

To Save the Custom Report Options

- Click **OK** to save the customized report options; otherwise, click **Cancel** to exit without saving.

To Specify the Display Order

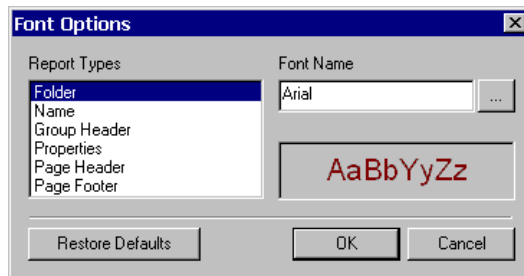
- In the Display group box, do one of the following:

If you want to see the report	Do this
Displayed with the components in their respective categories	Click Grouped .
Displayed with the components in alphabetical order	Click Sorted .

To Specify the Display Appearance

- 1 In the Font & Color group box, click **Customize**.

The Font Options dialog displays.



- 2 In the Report Types list box, select the report for which you want to customize the appearance.
- 3 In the Font Name text box, click  to select the display font and color.
- 4 If you need to negate the changes you've made, click **Restore Defaults**.
- 5 Click **OK** to save the changes or **Cancel** to exit without saving.

Using the Locale View

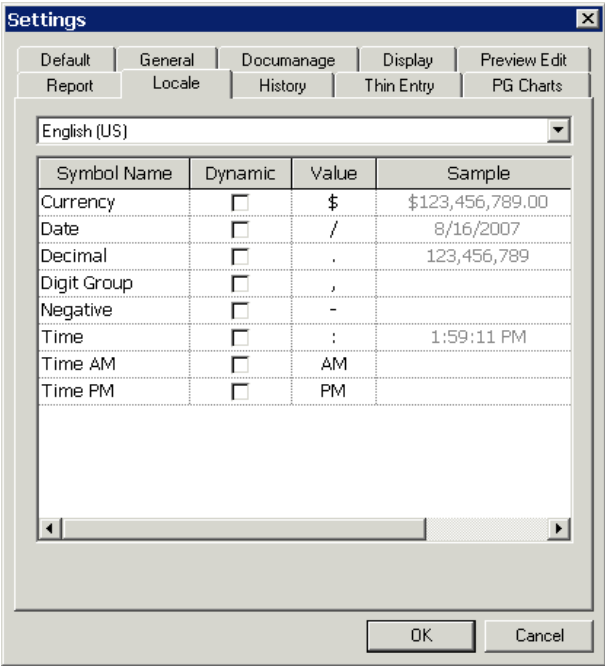
Use the seventh view in the Settings dialog box to specify the major language of your geographical region and whether to use the default Windows formatting symbols for currency, dates, and times.

If you click Dynamic, Docuflex Studio uses the default symbol value for the Locale that is selected through the Windows Control Panel, regardless of what is selected in Docuflex Studio.

If you want to override the default Value for a given Symbol, you can leave the Dynamic check box blank and enter the desired value.

To Display the Locale View

- If the Locale view is not already showing in the Settings dialog box, click on the **Locale** tab.



NOTE
The data shown in the Sample column is not entered in the Value column. It is only there to show you how the data will be formatted based on the locale you selected.

Because the Locale view contains multiple group boxes of specifications, this guide provides a separate topic for each group.

If you need to	Go to this topic
Specify the language common to your geographic region	“To Specify the Regional Language” on page 414
Indicate dynamic loading of common formatting symbols for date, time, and currency	“To Specify Dynamic Loading of Formatting Symbols” on page 414
Specify custom values for the formatting symbols	“To Specify Custom Formatting Symbol Values” on page 415
Save or close the Locale view	“To Save or Close the Settings Dialog” on page 401

To Specify the Regional Language

- In the Language drop-down list box, select the language common to your geographic region.

Docuflex Studio saves the language option *for this workstation*. If you access this project from another workstation, be sure to verify the language.

To Specify Dynamic Loading of Formatting Symbols

Depending on the language you choose on your workstation, Windows contains formatting symbols common to that region for currency, date, and time fields. If you click the Dynamic option, you cannot override the symbol value: Docuflex Studio loads the symbol from the Windows Registry when you compile and run your project.

- For each formatting symbol, enable the **Dynamic** check box if you want to load the value stored in the Windows Registry.

To Specify Custom Formatting Symbol Values

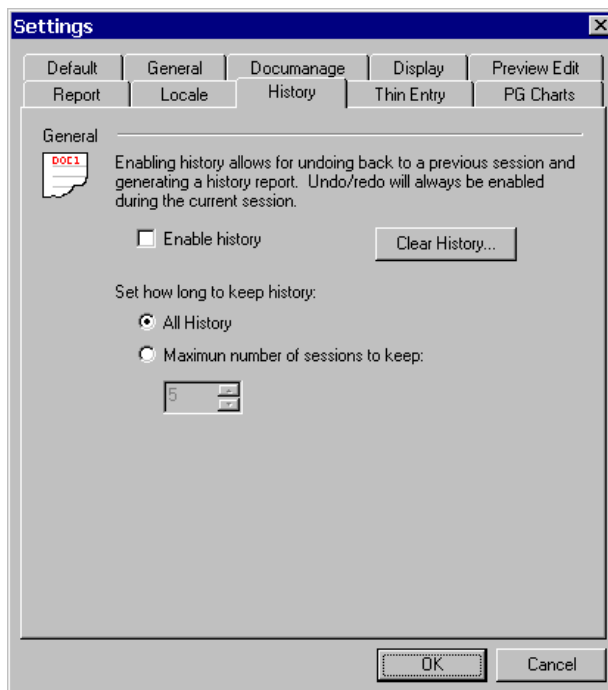
- If you want to use a symbol other than the default, leave the **Dynamic** check box blank and enter the desired Value.

Using the History View

Use the eighth view in the Settings dialog box to specify whether to enable a history file and whether to clear an existing history file.

To Display the History View

- If the History view is not already showing in the Settings dialog box, click on the **History** tab.



Because the History view contains multiple specifications, this guide provides a separate topic for each task.

If you need to	Go to this topic
Enable the history file	“To Enable the History File” on page 415
Clear the history file	“To Clear the History File” on page 416
Save or close the History view	“To Save or Close the Settings Dialog” on page 401

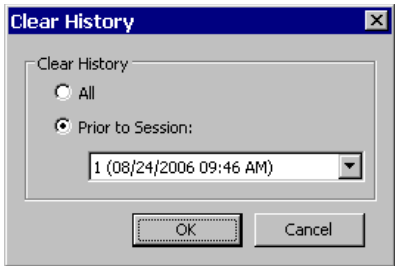
To Enable the History File

- Enable the **Enable History** check box to start collecting processing history and storing it in a file.

Once you've enabled the history file, you can view the contents of the file in the Report window (see [“History Report”](#) on page 220).

To Clear the History File

- 1
- Click **Clear History** to clear all or a portion of, but not delete, the history file.
The Clear History dialog displays.\



The last option helps reduce the file size of a Docuflex Project.

- 2
- Do one of the following:

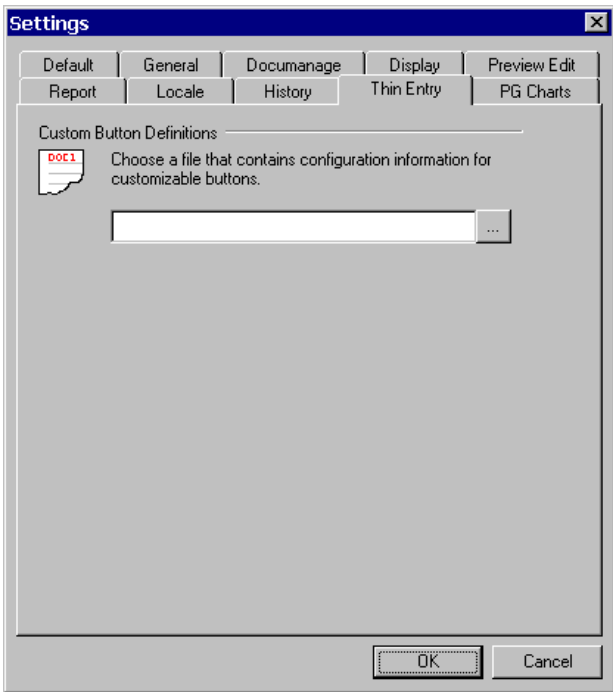
If you want to	Do this:
Clear all of the history	Click All .
Clear the history prior to a certain editing session	1 Click the Prior to Session option button. 2 Select a session from the drop-down list.

Using the Thin Entry View

Use the ninth view in the Settings dialog box to specify the location of an XML file containing the custom settings for the navigation buttons in the Thin Entry application.

To Display the Thin Entry View

-
- If the Thin Entry view is not already showing in the Settings dialog box, click on the **Thin Entry** tab.



Because the Thin Entry view contains multiple specifications, this guide provides a separate topic for each task.

If you need to	Go to this topic
Specify the custom button definitions file	“To Specify the Custom Button Definitions” on page 417
Save or close the Thin Entry view	“To Save or Close the Settings Dialog” on page 401

To Specify the Custom Button Definitions

- In the Custom Button Definitions combo box, type the path and file name of the XML file containing the custom button definitions.

-or-

Click  to browse the location of the configuration file.

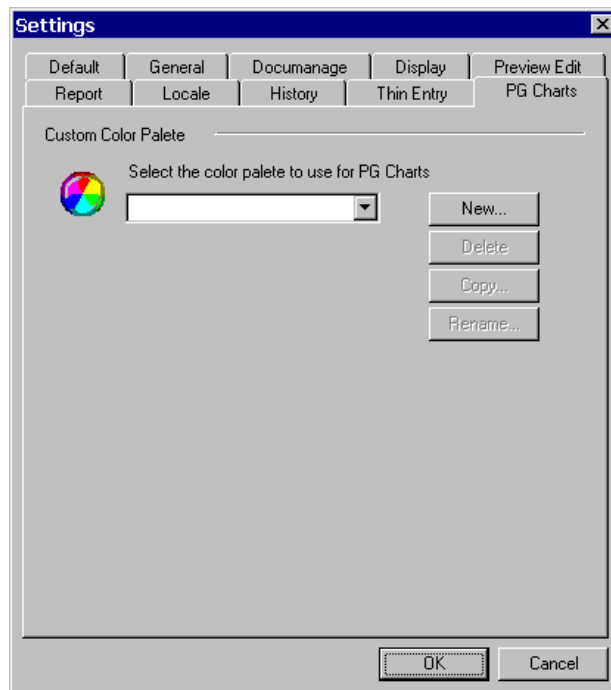
The configuration file defines custom buttons for Docuflex Thin Entry, which accesses the button definitions and adds them to the standard menu buttons (e.g., Update, Cancel, Complete).

Using the PG Charts View

Use the tenth view in the Settings dialog box to manage custom color palettes for Presentation Graphics charts. You can create multiple color palettes to use with charts for different customers, thus having a specific palette for each customer. To modify the colors, you must set the colors in the color properties page for the chart.

To Display the PG Charts View

- If the PG Charts view is not already showing in the Settings dialog box, click on the **PG Charts** tab.



Because the PG Charts view contains multiple specifications, this guide provides a separate topic for each task.

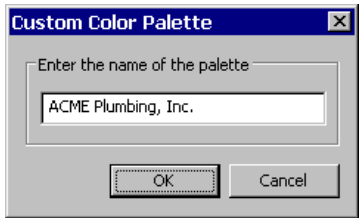
If you need to	Go to this topic
Select a color palette	“To Select a Color Palette” on page 418
Create a color palette	“To Create a Color Palette” on page 418
Delete a color palette	“To Delete a Color Palette” on page 418
Copy a color palette to a new palette	“To Copy a Color Palette” on page 418
Rename an existing palette	“To Rename a Color Palette” on page 419
Save or close the PG Charts view	“To Save or Close the Settings Dialog” on page 401

To Select a Color Palette

- In the Custom Color Palette drop-down list box, select the palette you want to use.
Any changes you make to the colors of PG charts are saved to this name the next time you access document settings or close the project.
If you need to create a color palette, see [“To Create a Color Palette” on page 418](#).

To Create a Color Palette

- 1 Click **New...** to display the Custom Color Palette dialog.



- 2 Type the name of the palette, and then click **OK**.
- 3 Edit the colors for a PG chart (see [“Using the Fill View” on page 347](#)).

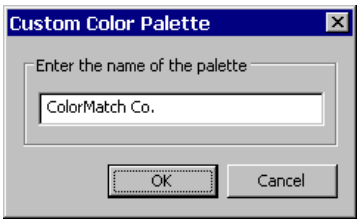
The next time you close the project you’re working on, or you go back into the **Document>Settings** dialog box, Docuflex saves the colors for the PG charts to the name of the palette that’s currently selected.

To Delete a Color Palette

- 1 In the Custom Color Palette drop-down list box, select the palette you want to delete.
- 2 Click **Delete**.

To Copy a Color Palette

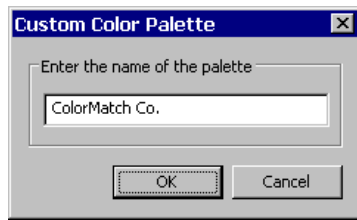
- 1 In the Custom Color Palette drop-down list box, select the palette you want to copy.
- 2 Click **Copy...** to display the Custom Color Palette dialog.



- 3 Type the new name of the palette, and then click **OK**.

To Rename a Color Palette

- 1 In the Custom Color Palette drop-down list box, select the palette you want to rename.
- 2 Click **Rename...** to display the Custom Color Palette dialog.



- 3 Type the revised name of the palette, and then click **OK**.

Data Menu

The Data menu comprises the following menu options:

If you want to	See
Create a data file	“Creating a Data File” on page 420
Open a data file	“Opening a Data File” on page 421
Remove a data file	“Removing a Data File” on page 422
Save a data file	“Saving a Data File” on page 422
Export a data file	“Exporting a Data File” on page 423
Open a schema	“Opening a Schema File” on page 424
Remove a schema	“Removing a Schema File” on page 425
Export a schema	“Exporting a Schema File” on page 426
See the next record	“Next” on page 427
See the previous record	“Previous” on page 427
Search the data file	“Search” on page 427
Insert a row in the data file	“Insert Row” on page 429
Remove a row from the data file	“Delete Row” on page 430
Insert a table into the schema	“Insert Schema Table” on page 431
Delete a table from the schema	“Delete Schema Table” on page 431
Reload the field data in a pre-composed document	“Reload Data Fields” on page 431

Creating a Data File

Use the Create command to create a data file from within Docuflex Studio. You can use this feature to create a small data file *for testing purposes only* without first creating a data file in Transall.

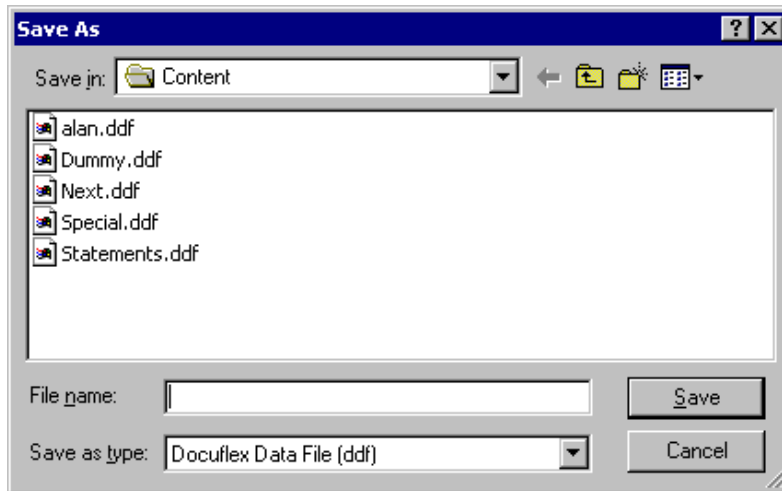
NOTE

Before you create a data file, you should first create the underlying framework, or schema (see [“Insert Schema Table”](#) on page 431).

To Create a Data File

- 1 Select **Data>Data File>Create**.

The Save As dialog displays.



- 2 Type the name you want to assign to the data file, and then click **Save**.

Docuflex Studio creates a data file based on the current schema.

Opening a Data File

Use the Open command to initiate a link between a data file and a project. The data file is the source material for your document (e.g., customer records).

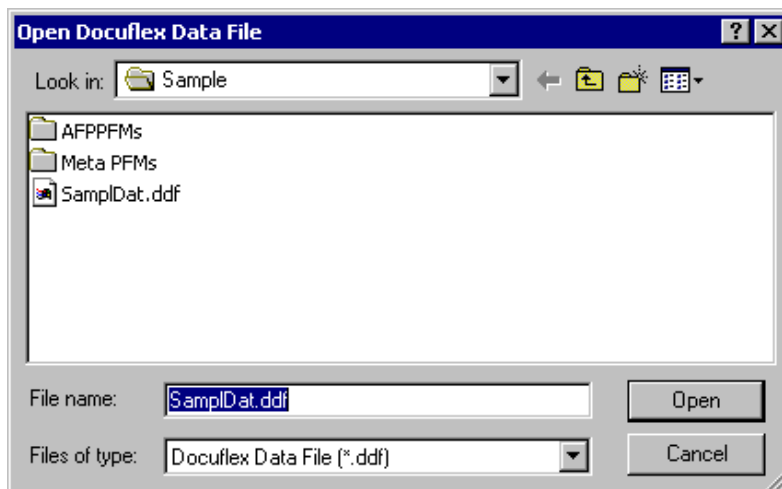
To Open a Data File

- 1 Select **Data>Data File>Open**.

-or-

Click  in the Data Toolbar.

The Open Docuflex Data File dialog displays.



- 2 Do the following, as required, to locate and load the data (*.ddf) file:

If	Do this
The incorrect drive or folder is displayed in the Look in drop-down list box	Select the arrow on the right of the Look in: drop-down list box, and then choose the drive and/or folder where the table file is located.
The correct folder isn't displayed in the Look in list box	In the Look in: list box, scroll to see more folders, or double-click a root folder to see its subfolders.
The correct data file name (*.ddf) isn't displayed in the Look in list box	In the Look in: list box, double-click the correct folder to see its contents.
The name of the project file isn't displayed in the File name text box	In the Look in: list box, click to select the project file and place it in the File name: text box.
You want to open the project file indicated by the current specifications	Click Open .

Docuflex Studio loads the data file and displays its name and the number of the current record in the Status bar at the bottom of the main window.

Removing a Data File

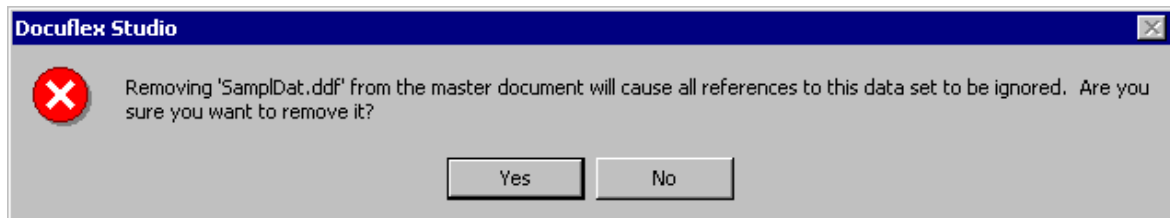
Use the Remove command to sever the link between the data file and the project. Removing the link in no way affects the data file itself.

To Remove a Data File

- 1 Select **Data>Data File>Remove**.
-or-

Click  in the Data Toolbar.

Docuflex Studio prompts you to confirm your decision.



- 2 Click **Yes** to delete the data file; otherwise, click **No** to cancel.

Saving a Data File

Use the Save command to make minor changes to your data file. This command is enabled once you've made changes to the data set. You'll be prompted to save changes if you

- select the previous or next data set
- make changes to the data sets
- close the project
- exit the application

If you need to make major changes to your data file, you should revert to the authoring application, such as Transall.

To Save a Data File

- ▶ Select **Data>Data File>Save**.

-or-

Click  in the Data Toolbar.

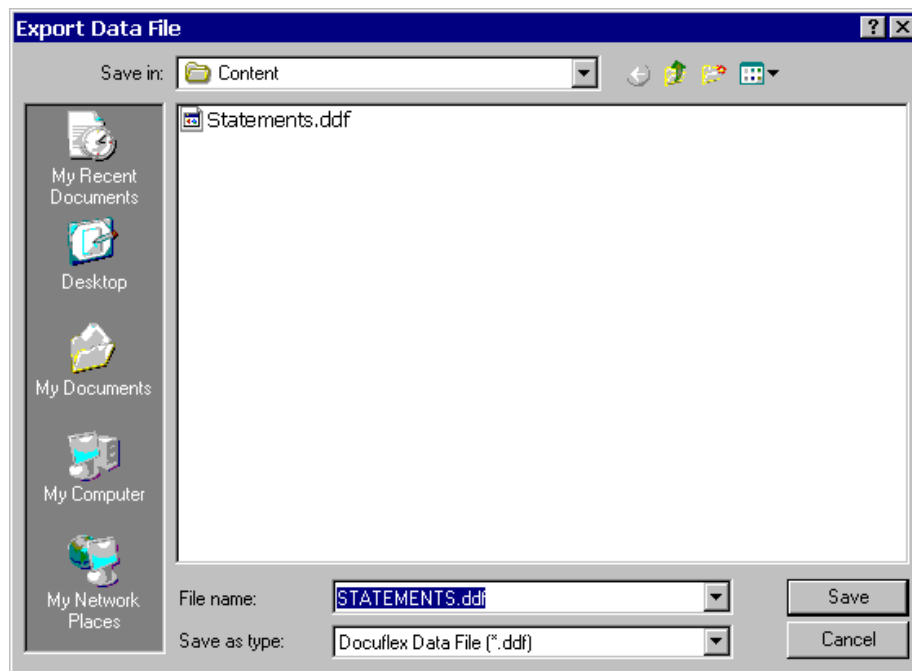
Exporting a Data File

Use the Export command to create a data file containing a single entry—the data set you’re currently editing or viewing.

To Export a Data File

- 1 Select **Data>Data File>Export**.

The Export Data File dialog displays.



- 2 Type a file name to which you want to save your changes (see “[To Export a Data File to a New File Name](#)” on page 424), or select a data file not currently in use.

TIP

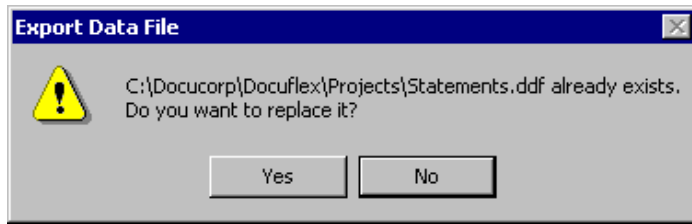
The data file that’s created only contains the data set you’re currently editing or viewing.

- 3 Click **Save**.

NOTE

If you want to use the new data file, you need to manually open it.

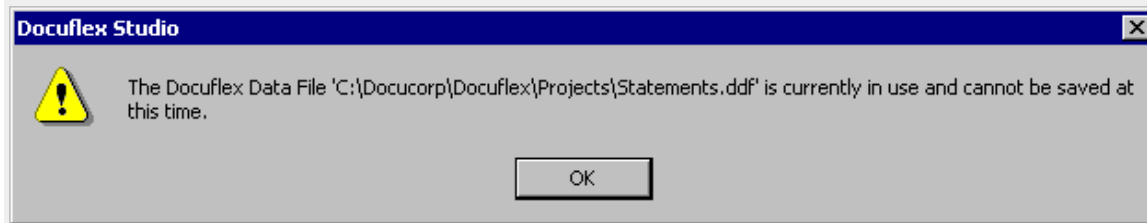
If you selected an existing data file, the Export Data File message box displays, prompting you to confirm your decision.



- 4 Click **Yes** if you want to replace the file with the exported data set; otherwise, click **No**.

CAUTION

If you selected the data file that's currently open in this session, you'll receive the following message box:



To Export a Data File to a New File Name

- In the File name: text box, type the name you want to assign to the new data file, and then click **Save**.

TIP

The file that's created only contains the data set you're currently editing or viewing.

Opening a Schema File

Use the Open command to initiate a link between a schema and a project. The schema is the structure of the data.

TIP

After you initially open the schema, it's stored in the project file (*.ddp). If you want to share your project with someone else, you only need to make available the project and data file.

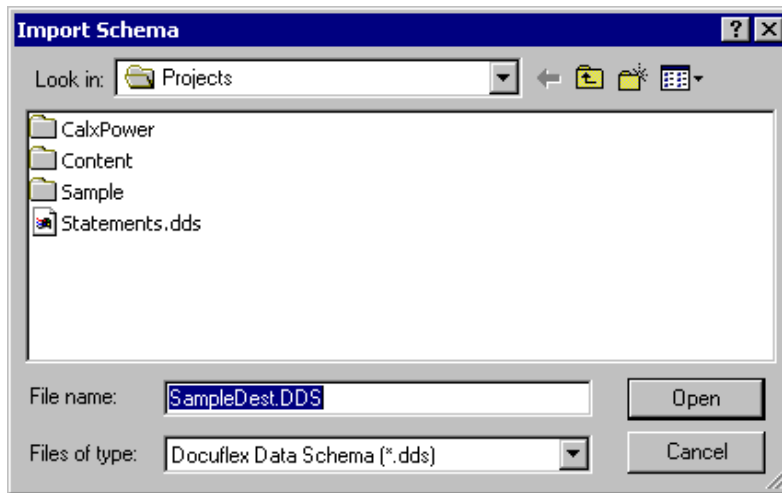
To Open a Schema File

- 1 Select **Data>Schema File>Open**.

-or-

Click  in the Data Toolbar.

The Import Schema dialog displays.



- 2 Do the following, as required, to locate and load the schema (*.dds) file:

If	Do this
The incorrect drive or folder is displayed in the Look in drop-down list box	Select the arrow on the right of the Look in: drop-down list box, and then choose the drive and/or folder where the table file is located.
The correct folder isn't displayed in the Look in list box	In the Look in list box, scroll to see more folders, or double-click a root folder to see its subfolders.
The correct schema file name (*.dds) isn't displayed in the Look in list box	In the Look in list box, double-click the correct folder to see its contents.
The name of the project file isn't displayed in the File name text box	In the Look in list box, click to select the project file and place it in the File name: text box.
You want to open the project file indicated by the current specifications	Click Open .

Docuflex Studio imports the schema and displays its name in the Status bar at the bottom of the main window.

Removing a Schema File

Use the Remove command to sever the link between the schema and the project. Removing the schema in no way affects the schema file itself.

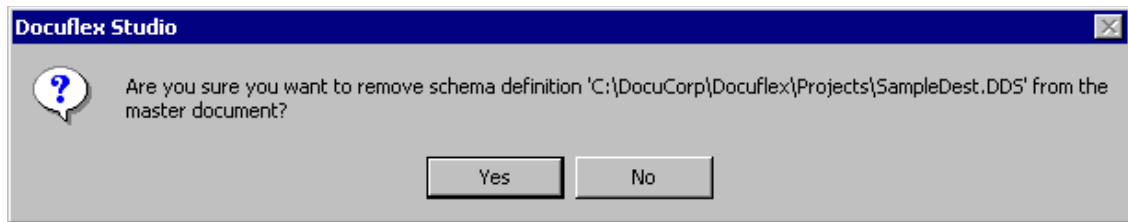
To Remove a Schema File

- 1 Select **Data>Schema File>Remove**.

-or-

Click  in the Data Toolbar.

Docuflex Studio prompts you to confirm your decision.



- 2 Click **Yes** to delete the schema; otherwise, click **No** to cancel.

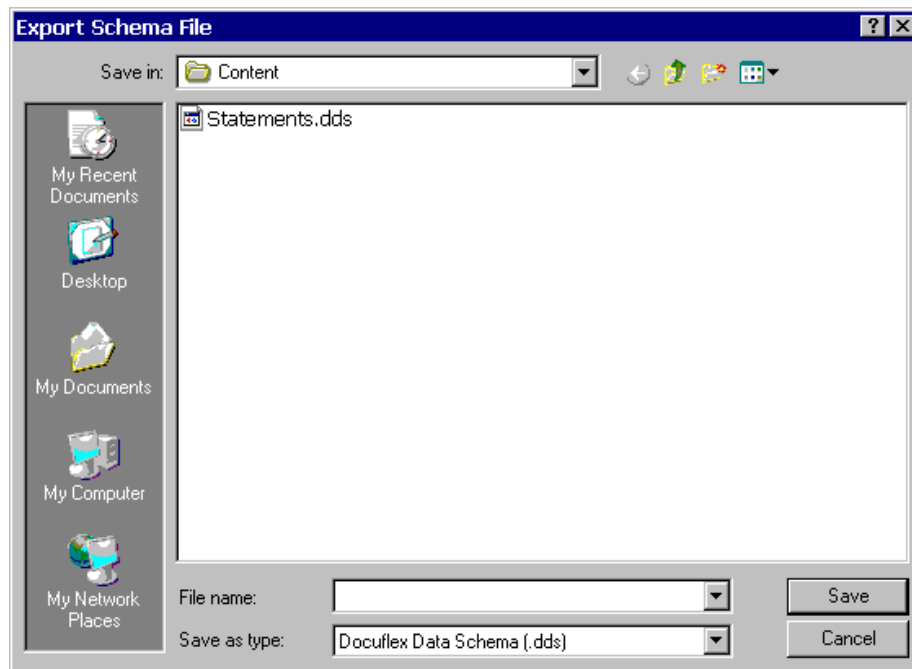
Exporting a Schema File

Use the Export command to create a schema file (.dds) based on your current schema in Docuflex Studio. You can then import the schema file into Transall for further processing.

To Export a Schema File

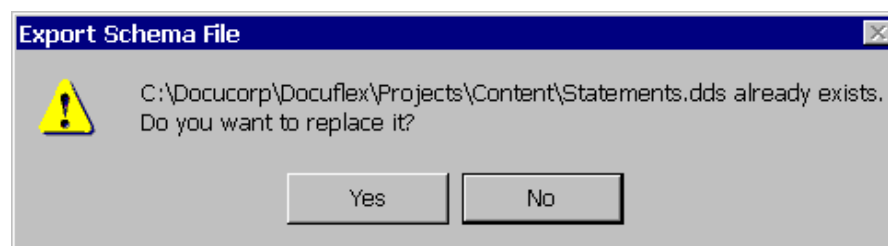
- 1 Select **Data>Schema File>Export**.

The Export Schema File dialog displays.



- 2 Type a file name to which you want to save your changes (see [“To Export a Schema File to a New File Name”](#) on page 427), or select a schema file not currently in use.
- 3 Click **Save**.

If you selected an existing schema file, the Export Schema File message box displays, prompting you to confirm your decision.



- 4 Click **Yes** if you want to replace the file with the exported schema; otherwise, click **No**.

To Export a Schema File to a New File Name

- In the File name: text box, type the name you want to assign to the new schema file, and then click **Save**.

Next

Use the Next command to move to the next data set in the data file.

To View the Next Data Set

- Select **Data>Next**.

-or-

Click  in the Data Toolbar.

Docuflex Studio moves to the next data set and displays the number of the current data set in the Status bar at the bottom of the main window.

Previous

Use the Previous command to move to the prior data set in the data file.

To View the Previous Data Set

- Select **Data>Previous**.

-or-

Click  in the Data Toolbar.

Docuflex Studio moves to the prior data set and displays the number of the current data set in the Status bar at the bottom of the main window.

Search

NOTE

The Search dialog contains two features that are mutually exclusive; you either search the data file based on a criteria or directly go to a transaction, not both.

Use the Search command to search through the data file for data sets matching the specified search criteria. You can search one or more pairs of *table.column* names and search strings.

You can also jump directly to a transaction within the data file by using the Go To Transaction group box.

To Search the Data File

- 1 Open the Preview window (e.g., **View>Windows>Preview**).

- 2 Select **Data>Search**.

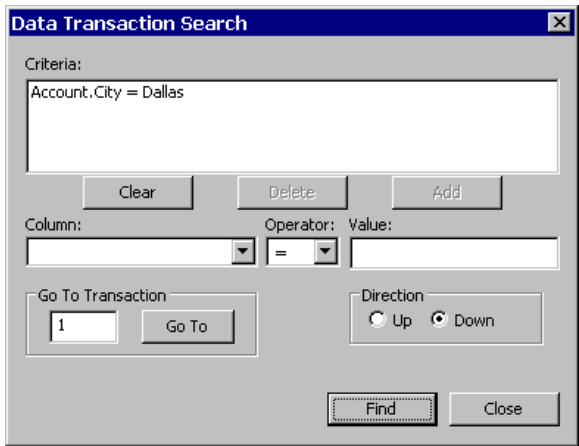
-or-

Click  in the Data Toolbar.

-or-

Double-click a column name in the Schema view of the Data bar.

The Data Transaction Search dialog displays.



Because the dialog contains multiple tasks, this guide provides a separate topic for each task.

To	See this topic:
Add a criterion	“To Add a Criterion” on page 428
Edit a criterion	“To Edit a Criterion” on page 428
Delete a criterion	“To Delete a Criterion” on page 429
Clear all criteria	“To Clear All Criteria” on page 429
Search the data file	“To Search the Data File” on page 429
Go to a specific transaction	“To Go Directly to a Transaction” on page 429

To Add a Criterion

- 1 In the Column combo-box, select from the list of available *table.column* names. If you double-clicked a column from the Data bar, the column is automatically selected.
- 2 In the Operator drop-down list box, select one of the following:

Operator	Action
=	You want to specifically match the Value.
Like	You want to search for data sets matching a partial string with wildcard indicators (e.g., searching for a Column of <i>Customer.City</i> with an Operator of <i>Like</i> and a Value of <i>*town</i> locates Jamestown as well as Georgetown).

- 3 In the Value text box, type the text string you want to compare to the Column. Be sure to type the string exactly as you want it as the search is context-sensitive.
- 4 Click **Add** to add the criterion to the Criteria list box.

To Edit a Criterion

- 1 In the Criteria list box, double-click the criterion you want to modify.
The criterion is removed from the list box and the Column and Value controls are enabled for editing.
- 2 Change the Column and Value, as necessary.
- 3 Click **Add** to add the criterion to the Criteria list box.

To Delete a Criterion

- 4 In the Criteria list box, select the criterion you want to remove.
- 5 Click **Delete** to remove the criterion from the Criteria list box.

To Clear All Criteria

- Click **Clear** to remove all criteria from the Criteria list box.

To Search the Data File

- 1 In the Direction group box, click on the option button indicating the desired direction of the search.

TIP

New searches start from either the top or bottom of the file, not at the “current” data set.

- 2 Click **Find** to perform the first search or a “find next.”

The Message area, on the left side, displays the results:

- The message, “At end/top of file” indicates the search was successful and the last/first data set of the file is “current.” A search following an “end/top of file” message will wrap.
- If the search is successful, the next set matching the search criteria is made “current.”
- If the search criteria is not found, indicated by a beep and a “not found” message, the data set currency is unchanged.

A “not found” message indicates that the search went to the end or top of the file without finding a match. A search following a “not found” message will wrap.

The preview of that transaction is displayed in the Preview window.

To Go Directly to a Transaction

- 1 In the Go To Transaction group box, type the number of the transaction that you want to find within the data file.
- 2 Click **Go To** to jump to that transaction.

The preview of that transaction is displayed in the Preview window.

Insert Row

Use the Insert Row command to add a row to the data file.

WARNING!

If your data file contains more than one Data Set (document set), you cannot edit the data file.

To Insert a Row

- 1 View the Data bar (see “[To Display the Data Bar](#)” on page 177).
- 2 View the Data Sets (see “[To View the Data Sets](#)” on page 178).
- 3 For the desired record, select the “parent” row under which you want to insert a row.

- 4 Select **Data>Insert Row**.

-or-

Click  in the Data Toolbar.

The Insert Row dialog displays.



Docuflex Studio searches the data and, according to the schema, determines which type of rows are available to add.

- 5 Select the type of row you want to insert, and then click **OK**.

Docuflex Studio inserts the row into the data file.

- 6 Save the Data file (see [“To Save a Data File”](#) on page 423).

Delete Row

Use the Delete Row command to remove a row from the data file.

WARNING!

If your data file contains more than one Data Set (document set), you cannot edit the data file.

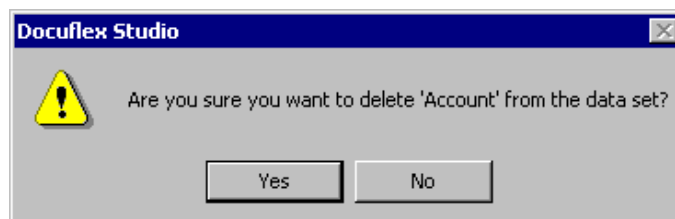
To Delete a Row

- 1 View the Data bar (see [“To Display the Data Bar”](#) on page 177).
- 2 View the Data Sets (see [“To View the Data Sets”](#) on page 178).
- 3 Select the row in the data file that you want to delete.
- 4 Select **Data>Delete Row**.

-or-

Click  in the Data Toolbar.

A Docuflex Studio message box displays.



- 5 Click **Yes** if you're sure you want to delete this row; otherwise, click **No**.

Docuflex Studio deletes the row from the data file.

- 6 Save the Data file (see [“To Save a Data File”](#) on page 423).

Insert Schema Table

Use the Insert Schema Table command to add a table (row) to your schema *for testing purposes only*. After adding a table to your schema, you can then make additions to the data file that correspond to the changes.

WARNING!

If your data file contains more than one Data Set (document set), you cannot edit the schema.

To Insert a Schema Table

- 1 View the Data bar (see [“To Display the Data Bar”](#) on page 177).
- 2 View the Schema (see [“To View the Schema”](#) on page 180).
- 3 Select the “parent” table under which you want to insert a table.
- 4 Select **Data>Insert Schema Table**.
Docuflex Studio inserts the table into the schema.
- 5 In the upper portion of the Data bar, double-click the table name and rename it.
- 6 Save the project (see [“To Save a Project”](#) on page 258).

If you need to add new columns to the table, see [“To Add a Column”](#) on page 181.

Delete Schema Table

Use the Delete Schema Table command to remove tables (rows) from your schema *for testing purposes only*.

WARNING!

If your data file contains more than one Data Set (document set), you cannot edit the schema.

To Delete a Schema Table

- 1 View the Data bar (see [“To Display the Data Bar”](#) on page 177).
- 2 View the Schema (see [“To View the Schema”](#) on page 180).
- 3 Select the table that you want to delete.
- 4 Select **Data>Delete Schema Table**.
Docuflex Studio deletes the table.
- 5 Save the project (see [“To Save a Project”](#) on page 258).

Reload Data Fields

Use the Reload Data Fields command to refresh the field data from a Pre-Composed Document member.

To Reload Data Fields

- 1 In the Component Explorer, select the Pre-Composed Document member for which you want to reload the data fields.

- 2 View the Source window (see “To Display the Source Window” on page 234).
- 3 Select **Data>Reload Data Fields**.
-or-
Alternate-click and select **Reload Data Fields** from the pop-up context menu.

Debug Menu

The Debug menu comprises the following menu options:

If you want to	See
Begin debugging your document	“Go” on page 432
Cease debugging your document	“Stop” on page 434
Pause debugging at the current point	“Demand Break” on page 434
Process the current member and stop at the next member, regardless of level	“Step Into” on page 434
Process all the children of the current member and stop at the next member of the same level (i.e., sibling)	“Step Over” on page 435
Finish processing the children of the current member and stop at the next parent member	“Step Out” on page 435
Process the current member until the next rule is encountered	“Single Step” on page 435
Go to the next statement to execute when at a rule breakpoint	“Next Statement” on page 436
Process the current member until the next Inclusion rule is encountered	“Enable Pass1 Break” on page 436
Process the current member until the next Composition rule is encountered	“Enable Pass2 Break” on page 437
Set/Remove a breakpoint	“Toggle Breakpoint” on page 437
Clear any and all breakpoints	“Clear All Breakpoints” on page 437
View breakpoints	“View Breakpoints” on page 438
Stop at the end of the debugging process	“Enable Final Breakpoint” on page 438

Go

Use the Go command to start the debugging utility. The debugger runs until it encounters the first breakpoint. From that point, you can use the various “step” commands to scrutinize more thoroughly the results of the debugger.

The debugger operates on the concept of a tree hierarchy, where members are parents, children, or siblings. The Step commands operate exclusively within this concept.

Docuflex Studio contains two types of debugging routines:

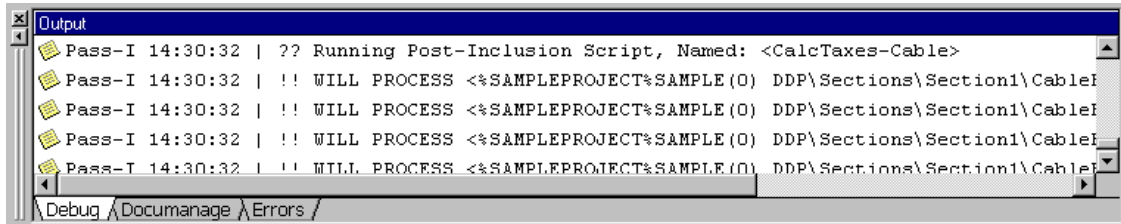
- Visual debugging—if you place a break point on a member, you get this “high-level” debugging concept.
- Rule debugging—if you place a break point on a statement in a subroutine or function, you get this more detail-oriented concept.

To Start Debugging

- ▶ Select **Debug>Go**.
- or-

Click  in the Debug Toolbar.

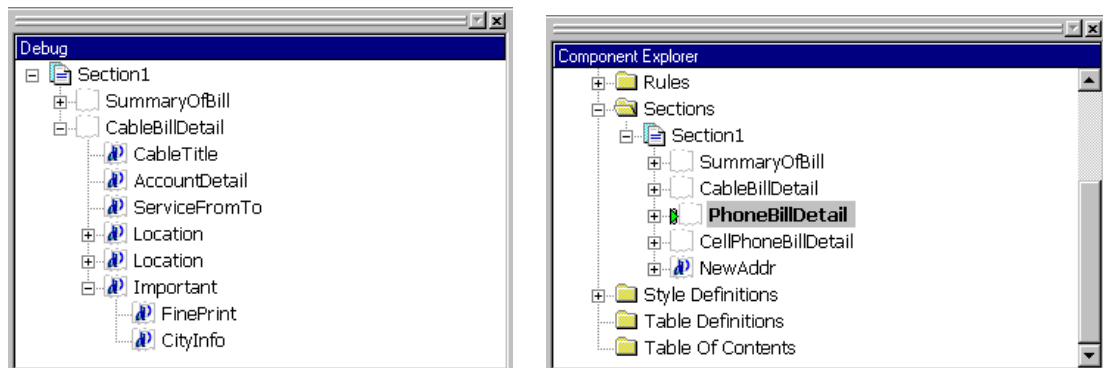
The Output control bar displays.



The Output bar reports the results of composing the document in a step-by-step fashion.

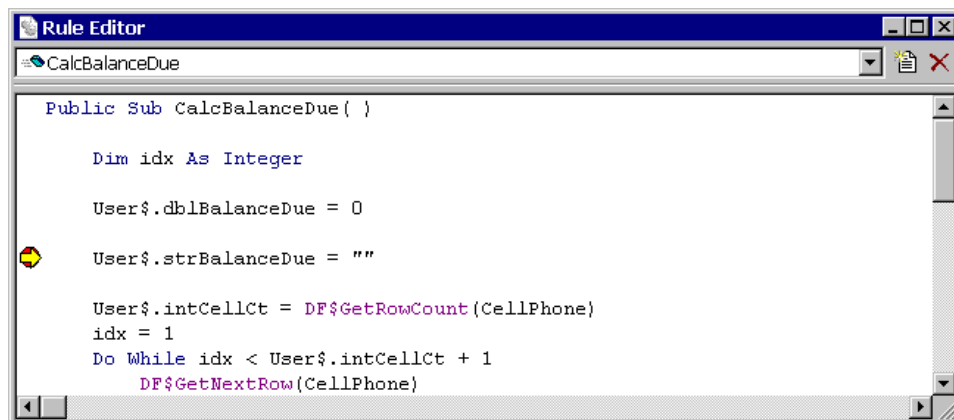
Docuflex Studio also displays the

- Debug bar showing members that have satisfied their inclusion rules and are eligible for composition.
- Component Explorer bar showing the member on which the debugging process “breaks.” Notice the small green triangle marker, next to the current member, that advances with each Step command.



Docuflex Studio also displays a short status message in its Title bar at the top of the main application window (e.g., “(Break), (Run)”).

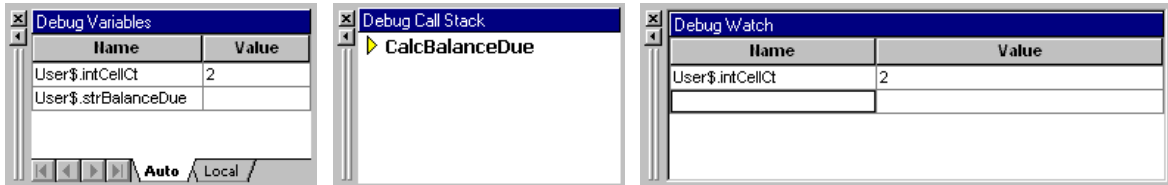
If you place a break point on a statement in a Rule, the debugging routine displays the Rule Editor window.



The Rule Editor window displays the break point you're currently on, designated by a yellow arrow. As you "step through" the rule, the yellow arrow moves to indicate the current line.

Docuflex Studio also displays the

- Debug Variables bar with values for Auto and Local variables.
- Debug Call Stack bar with a tree view of the Rules.
- Debug Watch bar with values for "global" variables.



Stop

Use the Stop command to cease debugging your document. Docuflex Studio closes the Output bar.

To Stop Debugging

- Select **Debug>Stop**.
- or-

Click  in the Debug Toolbar.

Demand Break

Use the Demand Break command to pause the debugging routine at the current point.

To Demand a Dubugging Break

- Select **Debug>Demand Break**.
- or-

Click  in the Debug Toolbar.

Step Into

Use the Step Into command to continue viewing the debugging process after the debugger has reached the initial breakpoint. With the Step Into command, the debugger steps through each member and any of its children (and grandchildren, etc.), in the order listed in the Component Explorer, one at a time.

To Step Into

- 1 Select **Debug>Step Into**.
- or-

Click  in the Debug Toolbar.

Docuflex Studio reports the progress in the Output bar and moves the marker indicator in the Component Explorer.

- 2 Continue clicking the icon to process each additional member.

Step Over

Use the Step Over command to continue viewing the debugging process after the debugger has reached the initial breakpoint. With the Step Over command, the debugger processes all the children of the current member and stops at the next sibling of the parent.

To Step Over

- 1 Select **Debug>Step Over**.

-or-

Click  in the Debug Toolbar.

Docuflex Studio reports the progress in the Output bar and moves the marker indicator in the Component Explorer.

- 2 Continue clicking the icon to process additional members.

Step Out

Use the Step Out command to continue viewing the debugging process after the debugger has reached the initial breakpoint. With the Step Out command, the debugger finishes processing the children of the current member and stops at the next sibling of the parent.

You'll most likely use the Step Out command if you're at the child level and want to process the rest of the child records at once and stop at the next sibling member.

To Step Out

- 1 Select **Debug>Step Out**.

-or-

Click  in the Debug Toolbar.

Docuflex Studio reports the progress in the Output bar and moves the marker indicator in the Component Explorer.

- 2 Continue clicking the icon to process additional members.

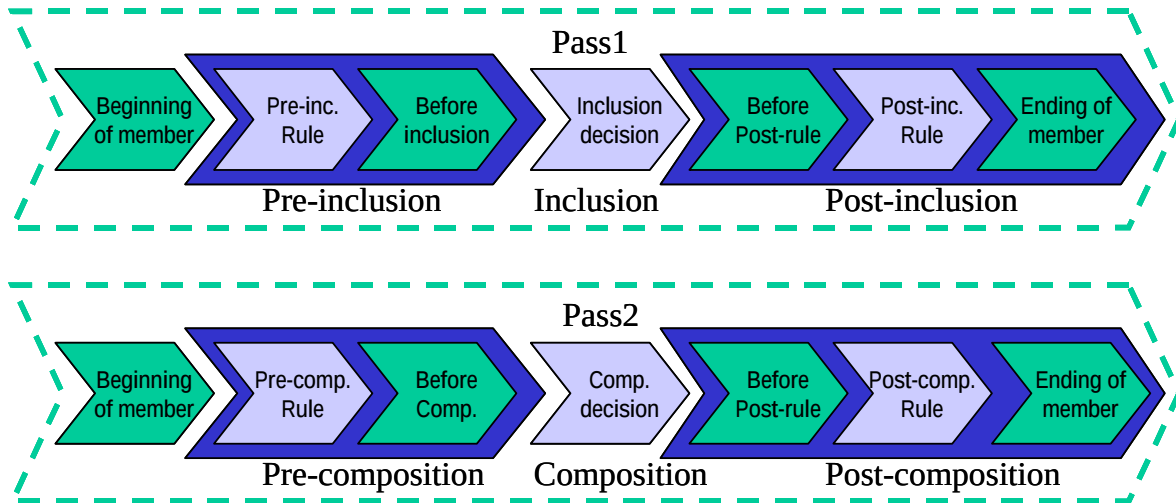
Single Step

Use the Single Step command to continue viewing the debugging process after the debugger has reached the initial breakpoint. With the Single Step command, the debugger stops at each "major" break point in each Pass, regardless of whether it encounters a rule (e.g., Beginning of member, Before inclusion, Before composition, Before post-rule, and Ending of member).

The debugger stops at the "minor" break points in each Pass only if that break point contains a rule (e.g., Pre-inclusion rule, Pre-composition rule, Inclusion decision, Composition decision, Post-inclusion rule, and Post-composition rule).'

EXAMPLE

If a "minor" break point does not contain a rule, such as a member with no Pre-inclusion rule in the Inclusion pass, the debugger skips that break point and continues until the next break point with an associated rule.



To Execute a Single Step

- 1 Select **Debug>Single Step**.

-or-

Click  in the Debug Toolbar.

Docuflex Studio reports the progress in the Output bar and moves the marker indicator in the Component Explorer.

- 2 Continue clicking the icon to process additional members.

Next Statement

Use the Next Statement command to go to the next statement to execute when at a Rule breakpoint.

To Go To The Next Statement

- Select **Debug>Next Statement**.

-or-

Click  in the Debug Toolbar.

Enable Pass1 Break

Use the Enable Pass1 Break command to specify the active breakpoints. With the Enable Pass1 Break command, the debugger stops at any active breakpoints in Pass1 (e.g., before PreInclusion rule, after PreInclusion rule, before PostInclusion rule, after PostInclusion rule).

To Enable Pass1 Breaks

- 1 Select **Debug>Enable Pass1 Break**.

-or-

Click  in the Debug Toolbar.

Docuflex Studio reports the progress in the Output bar and moves the marker indicator in the Component Explorer.

- 2 Continue clicking the icon to process additional members.

Enable Pass2 Break

Use the Enable Pass2 Break command to specify the active breakpoints. With the Enable Pass2 Break command, the debugger stops at any active breakpoints in Pass2 (e.g., before PreComposition rule, after PreComposition rule, before PostComposition rule, after PostComposition rule).

To Enable Pass2 Breaks

- 1 Select **Debug>Enable Pass2 Break**.

-or-

Click  in the Debug Toolbar.

Docuflex Studio reports the progress in the Output bar and moves the marker indicator in the Component Explorer.

- 2 Continue clicking the icon to process additional members.

Toggle Breakpoint

Use the Toggle Breakpoint command to place breakpoints manually on selected components. This is an effective troubleshooting mechanism because you can place a breakpoint on or near a member that's causing an error message. The debugger then steps through the suspect members so you can see the exact cause of the error.

To Toggle a Breakpoint

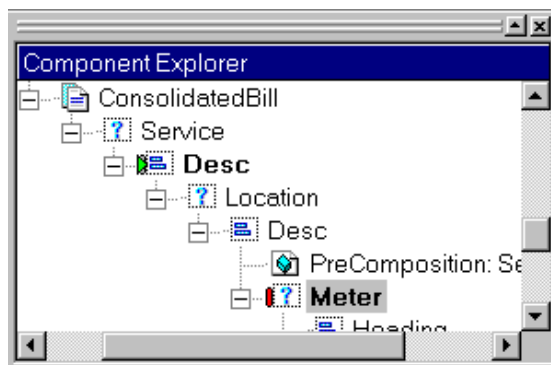
- 1 In the Component Explorer, select the member to whom you want to add or remove a breakpoint.

- 2 Select **Debug>Toggle Breakpoint**.

-or-

Click  in the Debug Toolbar.

Docuflex Studio either adds or removes a breakpoint from the selected member. When you add a breakpoint, you given two visual cues in the Component Explorer. The member designated as a breakpoint receives a red bar next to its icon and a bold font.



Clear All Breakpoints

Use the Clear All Breakpoints command to remove the breakpoints from all the members in your Component Explorer.

To Clear All Breakpoints

- Select **Debug>Clear All Breakpoints**.

Docuflex Studio removes all breakpoints from all members.

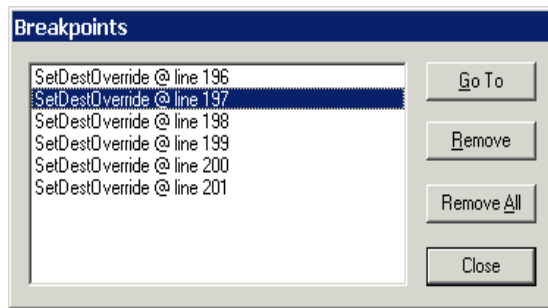
View Breakpoints

Use the View Breakpoints command to see the breakpoints you have set for the project. You can also use this command to remove individual breakpoints or all the breakpoints you have set.

To View Breakpoints

- ▶ Select **Debug>View Breakpoints**.

The View Breakpoints dialog appears:



Enable Final Breakpoint

Use the Enable Final Breakpoint command to enable the final breakpoint on all the members in your Component Explorer. When you check this menu item, it's treated as a "global" setting, is applicable to all projects, and is stored in the Windows registry.

To Enable the Final Breakpoint

- ▶ Select **Debug>Enable Final Breakpoint**.

When you check this menu item and then launch the debugger, the routine pauses after everything has been processed so you can see the final product before the routine ends.

Draw Menu

WARNING!

The Draw menu is only available for a member of type Content Form.

The Draw menu comprises the following menu options:

If you want to	See
Select a drawing object to edit	“To Select a Drawing Object” on page 248
Draw an circle or oval	“To Draw an Ellipse” on page 246
Insert a Schema data field	“To Draw a Field Box” on page 246
Draw a straight line	“To Draw a Line” on page 247
Draw a square or rectangle	“To Draw a Rectangle” on page 247
Draw a text box	“To Draw a Text Box” on page 247
Select the next drawing object on a Content Form member	“To Select the Next Drawing Object” on page 250
Configure the drawing grid	“To Configure the Grid” on page 638

Format Menu

The Format menu comprises the following menu options:

If you want to	See:
Position multiple objects	“Alignment” on page 440
Associate multiple objects	“Grouping” on page 440
Reposition an object	“Movement” on page 441
Specify the prominence of overlapping objects	“Order” on page 441
Change the orientation of an object	“Rotation” on page 442
Apply a Character Style	“Character Style” on page 442
Apply a Paragraph Style	“Paragraph Style” on page 443
Apply a Tab Style	“Tab Style” on page 444
Select a locale	“Locale” on page 445

Alignment

Use the Alignment commands to position all selected drawing objects in relation to the main object—the one with a pattern on the bounding box. You can select multiple drawing objects by using **SHIFT+CLICK** for additional objects. The options are Top, Middle, Bottom, Left, Center, and Right. You can combine alignment options to receive nine possible outcomes.

Top Left	Top Center	Top Right
Middle Left	Middle Center	Middle Right
Bottom Left	Bottom Center	Bottom Right

To Align Multiple Objects

- 1 Select more than one drawing object.
- 2 Select **Format>Alignment** plus the option you want to use.

Grouping

Use the Grouping commands to link drawing objects together and have them act as a single object, or to separate grouped objects into individual drawing objects.

You can select multiple drawing objects by clicking on the primary object and then using **SHIFT+CLICK** to select additional objects.

NOTE

If you select a Group and change a property on the Drawing Styles toolbar (e.g., BorderStyle, BorderColor, or BackgroundColor), all the objects in the group are changed. In addition, you can change the Position properties (e.g., Top, Left, Width, and Height). To make changes to any other properties, you must first Ungroup the drawing objects and edit the properties for individual objects.

To Link or Separate Objects

- Do one of the following:

To	Do this:
Link multiple drawing objects	1 Click the primary drawing object. 2 Use SHIFT+CLICK to select additional objects. 3 Select Format>Grouping>Group.
Separate linked objects	1 Click the grouped objects. 2 Select Format>Grouping>Ungroup.

Movement

Use the Movement commands to make miniscule positional adjustments, “nudges,” to a drawing object. You can nudge an object up, down, left, and right. The nudge amount is always equal to one pixel; however, the zoom factor appears to affect the amount of movement (i.e., you would have to nudge an object three times as much at 300% to appear the same as the movement at 100%).

To Adjust Drawing Object Positions

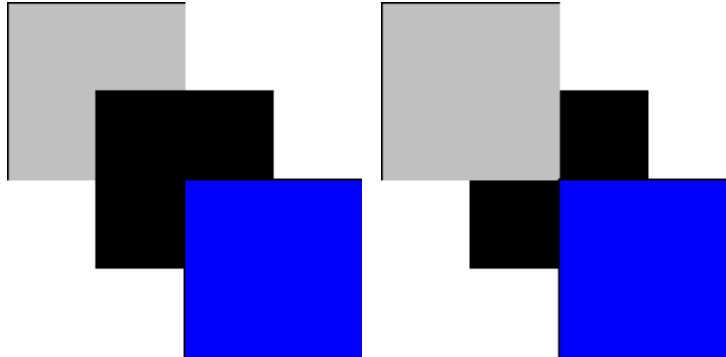
- 1 Select a drawing object to nudge.
- 2 Select **Format>Movement** plus the nudge option you want to use.
-or-
Press the desire arrow key (↑, ↓, ←, or →).

Order

Use the Order commands to specify the priority of layered objects. The options are Move to Front, Move to Back, Move Forward, and Move Backward. The Move to Front and Move to Back options are obvious—the selected drawing object is moved to either the top or bottom layer. The Move Forward and Move Backward are a little more subtle; these commands promote or demote the selected objects by one layer in the desired direction.

TIP

With only two layers, Move Forward and Move to Front yield the same results, as to Move Backward and Move to Back.



On the left side, the boxes are in ascending order—gray in back, black in the middle, and blue on top. On the right side, the black box was Moved Backward.

To Specify the Layer Order of Objects

- 1 Select a drawing object to move.
- 2 Select **Format>Order** plus the order option you want to use.

Rotation

Use the Rotation commands to rotate, or spin, a drawing object about its central axis. You can rotate an object 90 degrees to the left or right, or a full 180 degrees.

To Rotate a Drawing Object

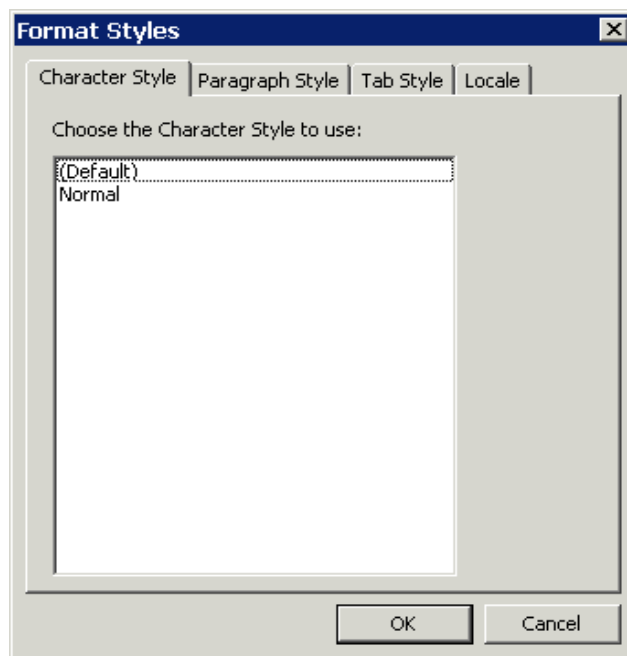
- 1 Select a drawing object to rotate.
- 2 Select **Format>Rotation** plus the rotation option you want to use.
-or-
Click **Orientation** from the Component Properties grid and select the desired rotation.

Character Style

Use the Character Style command to apply a character style to the contents of a Field or Text Box.

To Apply a Character Style

- 1 Select a Field or Text Box for which to specify a character style.
- 2 Select **Format>Character Style** and the Format Styles dialog displays.



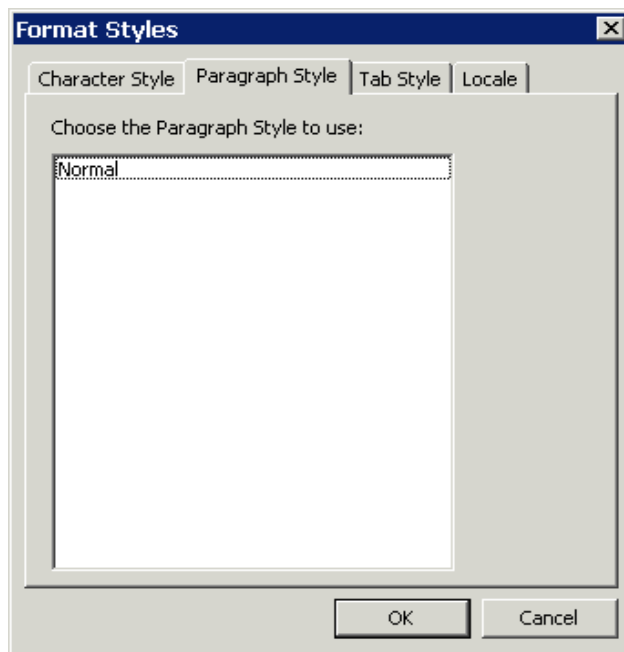
- 3 Choose the character style you want to apply, and then click **OK**.

Paragraph Style

Use the Paragraph Style command to apply a paragraph style to the contents of a Field or Text Box.

To Apply a Paragraph Style

- 1 Select a Field or Text Box for which to specify a paragraph style.
- 2 Select **Format>Paragraph Style** and the Format Styles dialog displays.



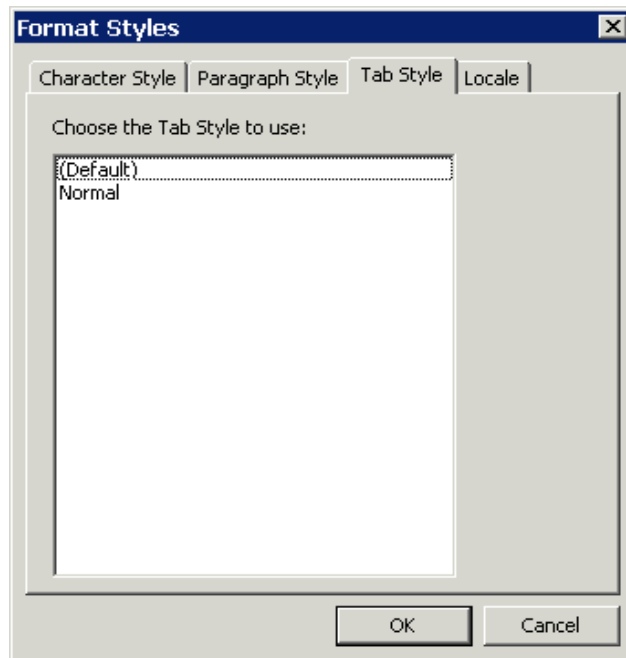
- 3 Choose the paragraph style you want to apply, and then click **OK**.

Tab Style

Use the Tab Style command to apply a tab style to the contents of a Field or Text Box.

To Apply a Tab Style

- 1 Select a Field or Text Box for which to specify a tab style.
- 2 Select **Format>Tab Style** and the Format Styles dialog displays.



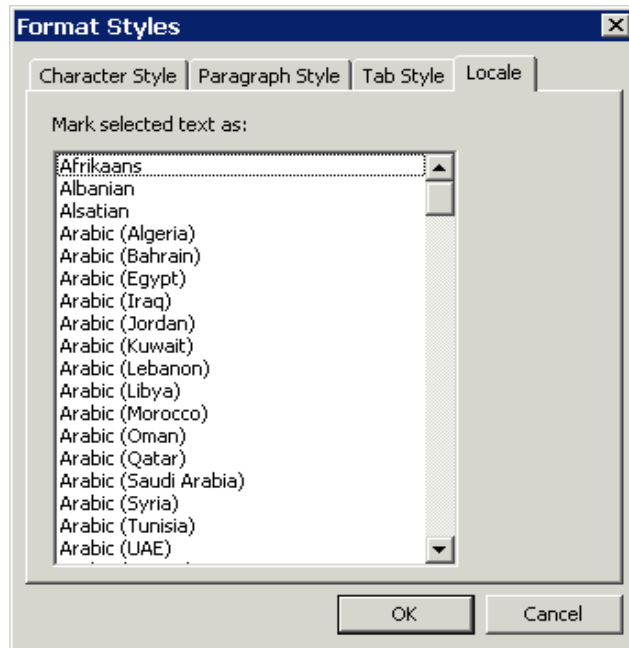
- 3 Choose the tab style you want to apply, and then click **OK**.

Locale

Use the Locale tab to set the locale of the selected text. Locales are language/country pairings used to format time, currency, and dates.

To Apply a Locale

- 1 Select a Field or Text Box for which to specify a locale.
- 2 Select **Format>Locale** and the Format Styles dialog appears.



- 3 Choose the locale you want to apply, and then click **OK**.

Insert Menu

The Insert menu comprises the following menu options:

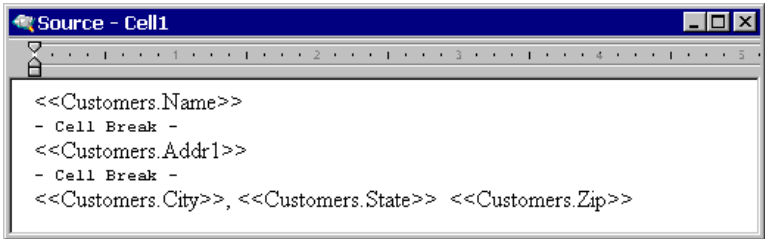
If you want to	See
Add a Cell Break to a Member	"Cell Break" on page 446
Add a variable Field	"Field" on page 446
Add a Filter for additional text	"Verbiage Filter" on page 455

Cell Break

Use the Cell Break command to indicate that you want to use a single member to place data in more than one table cell. You must ensure the table row has an adequate number of cells for the member data.

To Insert a Cell Break

- 1 In the Source window for the member, click an insertion point where you want to "break" the member and place data into the adjacent cell.
- 2 Select **Insert>Cell Break**.



The prior example takes the contents of the member and, using two cell breaks, places data into three table cells.

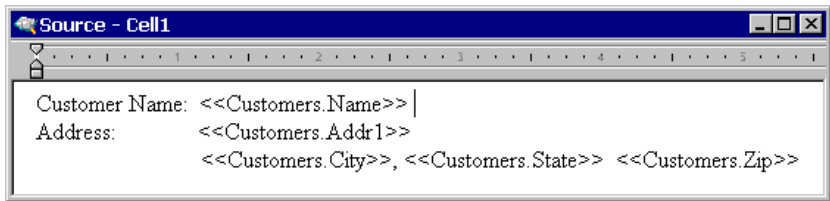
- 3 Repeat as necessary until all cells are indicated.

Field

Use the Field command to add a data mapping variable, reserved tag field, or function to a member in your document. When your document is using a data file for the "variable" information, such as account balances and mailing information, you can instruct the composition engine to search the data file for a particular piece of data and merge it with other content belonging to the member. This combination of variable and static, or fixed, content gives the composition engine a powerful ability to publish robust, personalized documents.

To Add a Variable Field

- 1 In the Component Explorer, double-click the member to which you want to add a variable field.



- 2 Place your cursor at the point you want to insert a field.

- 3 Select **Insert>Field**.
- 4 Complete the specifications for the field variable (see “Using the Field Properties Dialog” on page 447). Click **OK**.

The field variable displays at the point in the content where you inserted it. Switch to the Preview window to view the results.

Using the Field Properties Dialog

The Field Properties dialog contains all the essential elements pertaining to formatting a field variable for use in your member content. You can choose from several different types of field variables, as well as formatting and additional options to tailor each field variable for your particular project.

Because the Field Properties dialog contains several group boxes of information, this guide provides a separate topic for each group.

If you need to	Go to
Select a field style	“To Select a Field Style” on page 447
Select the type of field to insert	“Selecting the Field Type” on page 448
Select the individual field name	“Selecting the Field” on page 448
Select the format of the field	“Selecting the Field Format” on page 452
Select additional options for the field	“To Select Additional Options” on page 454
Reset the value in a list or text box	“To Reset Field Properties” on page 455

To Select a Field Style

- In the Field Style drop-down list box, select a style from the available choices. The settings on this dialog are populated with the corresponding properties selected for the Field style.

TIP

You can use a Field style as a basis and then change the necessary settings on this dialog. Any changes you make here do not affect the stored Field style.

For more information, see [“Using the Field Styles View”](#) on page 193.

Selecting the Field Type

The Field Properties dialog contains five different types of field variables. Each type requires specific options for successful results.

Field Type	Explanation
Boiler Plate Space Definition (BPSD)	Creates a BPSD field to reference a rule, schema, or reserved tag value. A BPSD is a fixed-length field variable, meaning it reserves a fixed amount of space into which the data is merged. A BPSD requires additional options (see “To Select Additional Options” on page 454) to specify the replacement characters that display to mark the place where the actual data appears.
DRAW	The DRAW field draws a line when you use it with a paragraph style that has specific properties activated. It generates a paragraph with no text, so only the line is drawn. You can draw vertical lines by specifying a BorderLineWidthLeft or BorderLineWidthRight value, as well as a BorderMarginTop or BorderMarginBottom value. You can draw horizontal lines by specifying a BorderLineWidthTop or BorderLineWidthBottom value (it is not necessary to specify a BorderMarginLeft or BorderMarginRight value). You do not need to set any other properties in the Field Properties dialog when using the DRAW field type.
FORMREF	Creates a BPSD cross-reference field for the page number of the named member. Like BPSDs, FORMREFs are fixed-length and require replacement characters. Note: To create the cross reference to a member, be sure to type the name of the member into the Field Name combo box.
LITERAL	Creates a text string with optional formatting. The LITERAL field may be used to convert any number between 0 and 255 to the corresponding character in the character set. Tip: When entering a LITERAL number, you <i>must</i> choose the Symbol format and type the number as the Sample Text (e.g., 149 returns a bullet character).
SIGNATURE	Creates an area reserved for an electronic signature. You must specify the Height and Width of the area you want to create. For more information, see “Working With Docuflex to Produce PDF” on page 123.
Tag Reference (TAGREF)	Creates a BPSD cross-reference field for the page number of the named BPSD field. Like BPSDs, TAGREFs are fixed-length and require replacement characters.
Variable Space Definition (VSD)	Creates a VSD field to reference a rule, schema, or reserved tag value. Unlike fixed-length variables, VSDs are variable in length, meaning they can expand and contract to fit the incoming data more accurately. VSDs also do not require replacement characters.
VSDREF	Creates a BPSD cross-reference field for the page number of the named VSD field. Like BPSDs, VSDREFs are fixed-length and require replacement characters.

To Select the Field Type

- In the Field Types: list box, select the type of field variable you want to use.

Selecting the Field

In addition to typing text as the content of a member, you can also use variable data to incorporate a value from the data file into the source. Docuflex Studio offers three types of variable data fields:

- Functions that return a value to a variable (e.g., Rules)
- Data Mapping variables (e.g., Schema)
- Reserved Tag variables (e.g., Tags)

Functions

Functions are available as fields that you can use within a member. The field then contains whatever value was returned to the variable within the function. The following function assigns a value to the variable SetDescription:

```
Public Function SetDescription() As String
If Service.DF$RowNumber = 1 Then
    SetDescription = "ELECTRICITY"
Else
    If Service.DF$RowNumber = 2 Then
        SetDescription = "WATER/SEWER"
    Else
        If Service.DF$RowNumber = 3 Then
            SetDescription = "IRRIGATION"
        Else
            SetDescription = "SAT-TV"
        End If
    End If
End If
End Function
```

In the Source window of the desired member, you can direct the composition engine to assign the SetDescription value to the member:

Service: <<SetDescription>>

Data Mapping Variables

In the Source window of a text-based member, you can extract data from the data file and merge it into the text for publishing.

Data mapping variables include a grid-style icon for an at-a-glance visual clue. Data mapping variables also are named so you can quickly identify the row and column in the data file from which they originate. For example,

Location.Address1

means that you want the data that's present in row "Address1" of column "Location", or

	Location
Address1	123 Main St.

Reserved Tag Variables

Reserved Tags provide information known only by Docuflex Studio. You can use these tags in a script or as variable data fields in your document project.

Reserved Tag Name	Description
DCP.ALT.CURRENT.DATE	Current date, formatted as MM/DD/YYYY
DCP.BEG.PAGE.NUMBER	The beginning page number on which the current (non-TOC entry) member resides
DCP.COLUMN.NUMBER	The number of the column being processed in the current frame (all frames have at least one column)
DCP.CPD.FILE.DOCLEN	Length of the dataset within the Stacked DCD
DCP.CPD.FILE.NAME	Name of the Stacked DCD (*.DCD)
DCP.CPD.FILE.POSITION	Byte offset of the dataset within the Stacked DCD
DCP.CURRENT.DESTINATION	Name of current output channel for current recipient
DCP.CURRENT.OS	Reports which Operating System Docuflex is running. Values are "AIX", "LINUX", or "Windows".

Reserved Tag Name	Description
DCP.CURRENT.RECIP.NAME	Current Recipient Name, defined as a column called "Name" in the data file
DCP.CURRENT.RECIP.TYPE	Current recipient type (e.g., "Normal")
DCP.CURRENT.SHEET.COUNT	The number of sheets for the output channel. The count is accurate up to the sheet being processed.
DCP.CURRENT.SHEET.COUNT.BIT.1- DCP.CURRENT.SHEET.COUNT.BIT.15	The value of DCP.CURRENT.SHEET.COUNT is converted into a 15-bit binary number. The bits are numbered from 1 to 15, beginning at the right. Any bit value that is 1 causes the value of the tag to be a Dash Code=ON value (underscore character). Any bit value that is 0 causes the value of the tag to be a Dash Code=OFF value (blanks). Dash codes are used commonly with automated finishing and mailing equipment.
DCP.CURRENT.VERBIAGE	The value of the verbiage filter(s) to be applied to member content
DCP.DASH.CODES.OFF	Signal to initiate dash (bar) codes
DCP.DASH.CODES.ON	Signal to terminate dash (bar) codes
DCP.DATASET.NAME	Name of the data set in the data file, equivalent to a Mergeset ID
DCP.DATASET.NUMBER	Number of the current data set in the data file
DCP.DATE	Date used for Effective Date processing, formatted as MM/DD/YY
DCP.DATE.RUN	Current date, formatted as MM/DD/YY
DCP.DOC.AUTHOR	An empty field into which you can store the document's author
DCP.DOC.KEYWORDS	An empty field into which you can store the document's keywords
DCP.DOC.SUBJECT	An empty field into which you can store the document's subject
DCP.DOC.TITLE	An empty field into which you can store the document's title
DCP.FOOTNOTE.NUMBER	The footnote number within the entire document
DCP.FOOTNOTE.NUMBER.INCR	The footnote number within the entire document. The number is INCRemented each time you access it
DCP.FOOTNOTE.NUMBER.PAGE	The footnote number on the current page
DCP.FOOTNOTE.NUMBER.PAGE.INCR	The footnote number on the current page. The number is INCRemented each time you access it.
DCP.FRAME.NAME	The name of the current frame
DCP.HL.01 - DCP.HL.16	Specifies the indentation level of the heading in a list (Heading Level)
DCP.IN.LAST.COLUMN	Value of 0 or 1 to indicate if the composition engine is processing the last column in a frame (all frames have at least one column)
DCP.INSTANCE.NUMBER	The unique "instance number" of this Docuflex session as determined by the CURRENCY_FILE
DCP.LL.01 - DCP.LL.16	Specifies the indentation level of the items in a list (List Level)

Reserved Tag Name	Description
DCP.MEMBER.NAME	Name of the current member
DCP.MEMBER.TEXT	Text of the current member. Docuflex Studio places text in the tag in this order: 1 Any text in the member's BookmarkText property. 2 Any text generated into the first row of output from the member (including resolved tags). 3 The member name. Docuflex Studio will not place text in the tag if it resides as a member in a TOC Entry. The tag remains unchanged until the next member which can generate the tag is processed.
DCP.NEXT.PAGE.NUMBER	One more than DCP.PAGE.NUMBER
DCP.NEXT.SECTION.PAGE.NUMBER	One more than DCP.SECTION.PAGE.NUMBER
DCP.OUT.FILE.DOCLEN	Length of the output file
DCP.OUT.FILE.NAME	Name of the output file
DCP.OUT.FILE.POSITION	Position (byte offset) in the output file
DCP.PAGE.NUMBER	"Current" document page number
DCP.PARA.BEG.PAGE.NUMBER	(Paragraph-level TOC entries) The document page number of the paragraph that triggered the entry
DCP.PARA.SECT.BEG.PAGE.NUMBER	(Paragraph-level TOC entries) The section page number of the paragraph that triggered the entry
DCP.PARA.TEXT	(Paragraph-level TOC entries) The text of the paragraph that triggered the entry
DCP.POL.COUNT	Number of documents in the project
DCP.PREV.PAGE.NUMBER	One less than DCP.PAGE.NUMBER
DCP.PREV.SECTION.PAGE.NUMBER	One less than DCP.SECTION.PAGE.NUMBER
DCP.PRODUCT	Name of the Skywire Software product in use
DCP.PROJECT.NAME	Name of the project (*.DDP)
DCP.REF.DDP.ORDER	Allows reordering and conditional composition of referenced projects
DCP.SECTION.BEG.PAGE.NUMBER	The beginning page number <i>in this section</i> on which the current (non-TOC entry) member resides, as opposed to the physical page number
DCP.SECTION.NAME	Name of the current section
DCP.SECTION.NUMBER	Number of the current section
DCP.SECTION.PAGE.NUMBER	Page number within the current section
DCP.SECTION.TOTAL.PAGES	Number of pages in the current section
DCP.SHEET.COUNT	Total number of sheets for output channel. The total is valid as of last recipient/dataset processed.
DCP.SHEET.NUMBER	The number of the current physical sheet in the current document
DCP.SSI.COUNT	Number of Single-Sided Images in the output file
DCP.TIME	Current time
DCP.TOTAL.COLUMNS	Total number of columns in the current frame (all frames have at least one column)

Reserved Tag Name	Description
DCP.TOTAL.PAGES	Total number of pages for the current document
DCP.TOTAL.SHEETS	Total number of physical sheets of paper for the current document
DCP.TRAY.COUNT.01 - DCP.TRAY.COUNT.16	Number designation of the physical trays on the printer to which the project is routed (defined via TRAYDEFS)
DCP.VALIDATION_ERRORS	Total number of field validation errors encountered during document composition. At this time, the Thin Client is the only application utilizing the DCP.VALIDATION_ERRORS reserved tag. For more information, see “ Displaying Field Validation Errors ” on page 14 of the <i>Docuflex Thin Client</i> guide.
DCP.VERSION	Version and build information

To Select the Field

- In the Field Name: drop-down list box, select the field you want to use:
 - **Rule** (only functions are displayed)
 - **Schema** field (e.g., table.column from the data file)
 - Reserved Data **tag** (e.g., DCP.ALT.CURRENT.DATE)

NOTE

If you select a function for which you’ve defined parameters, supply the value(s) in the Value column of the **Parameters to Pass:** grid. For more information about the columns in this grid, see page 224.

Selecting the Field Format

Docuflex Studio provides several formatting masks which allow you to change the look of the incoming data for your needs. The mask changes the appearance of the data, but does not change the data itself. The table below discusses the various formatting masks:

Format	Explanation
Alphabetic Lowercase (!* <i>alphabetic</i>)	Converts a number to its corresponding lower-case, alphabetic character. If the incoming data is 2, for example, this mask displays b.
Alphabetic Uppercase (!* <i>ALPHABETIC</i>)	Converts a number to its corresponding upper-case, alphabetic character. If the incoming data is 2, for example, this mask displays B.
Capital (!* <i>Caps</i>)	Capitalizes the first letter of each word in a text string. If the incoming data is “julie tanner”, for example, this mask displays “Julie Tanner”.
Card Text (!* <i>CardText</i>)	Converts a number to cardinal text. If the incoming data is 1234.56, for example, this mask displays “one thousand two hundred thirty five”. Note: Floating point numbers are rounded and processed as integer numbers.
Currency (\$,##0.00;(\$,##0.00))	Displays a number with a currency symbol. If the incoming data is 1234.56, for example, this mask displays either \$1,234.56 or, in the case of a negative number, (\$1,234.56).
Decimal (#,##0.00;(#,##0.00))	Similar to Currency, Decimal displays a number with a specified number of decimal places. If the incoming data is 1234.56, for example, this format displays either 1,234.56 or, in the case of a negative number, (1,234.56).

Format	Explanation
Dollar Text (!* <i>DollarText</i>)	Converts a number to dollar text. If the incoming data is 1234.56, for example, this format displays “one thousand two hundred thirty four and 56/100”.
First Capital (!* <i>FirstCap</i>)	Capitalizes the first letter of the first word in a text string. If the incoming data is “weekly report on sales”, for example, this mask displays “Weekly report on sales”.
Hexadecimal (!* <i>Hex</i>)	Displays a number in hexadecimal format. If the incoming data is 458, for example, this mask displays 1CA.
Lowercase (!* <i>Lower</i>)	Converts all letters in a text string to lower-case letters. If the incoming data is “DOCUMENTATION IS FUN”, for example, this mask displays “documentation is fun”.
Number (#,##0;(#,##0))	Displays a number as an integer (e.g., whole number). If the incoming data is 1234.56, for example, this mask displays either 1,235 or, in the case of a negative number, (1,235). Note: Floating point numbers are rounded and processed as integer numbers.
Ordinal Number (!* <i>Ordinal</i>)	Displays a number in ordinal arabic text. If the incoming data is 30, for example, this mask displays 30th.
Ordinal Text (!* <i>OrdText</i>)	Converts a number to ordinal text. If the incoming data is 1234.56, for example, this mask displays “one thousand two hundred thirty-fifth”. Note: Floating point numbers are rounded and processed as integer numbers.
Repeat (!* <i>Repeat c</i>)	<i>You can use this mask if you want to publish a footnote denoted with a symbol instead of a number.</i> Specifies a character to be repeated a corresponding number of times, depending on the value being formatted (i.e., You must replace the c with a symbol). If the incoming value for DCP.FOOTNOTE.NUMBER is 3, for example, and you’ve specified that you want to repeat an asterisk symbol (*), this mask provides a footnote preceded by three asterisks, ***.
Roman Lowercase (!* <i>roman</i>)	Converts a number to its corresponding lower-case, Roman-numeral text. If the incoming data is 1234.56, for example, this mask displays mcccxxv. Note: Floating point numbers are rounded and processed as integer numbers.
Roman Uppercase (!* <i>ROMAN</i>)	Converts a number to its corresponding upper-case, Roman-numeral text. If the incoming data is 1234.56, for example, this mask displays MCCXXXV. Note: Floating point numbers are rounded and processed as integer numbers.
SelectChar (!* <i>SelectChar ccc</i>)	<i>You can use this mask if you want to publish a footnote denoted with a symbol instead of a number, where the numeric value being formatted acts as an index to select one of the characters.</i> Specifies a string of characters to use as a footnote marker symbol, one of which becomes the marker symbol depending on the value being formatted (i.e., You must replace the ccc with symbols; you can enter more than three). If the incoming value for DCP.FOOTNOTE.NUMBER is 3, for example, and you’ve specified that you want to use symbols of @, #, \$, and %, where @=1, #=2, \$=3, and %=4, then this mask provides a footnote preceded by a dollar sign (\$).

Format	Explanation
Symbol (! * <i>SYMBOL</i>)	Displays a single character in the ASCII character set. If the incoming data is 130, for example, this mask displays é. Note: Floating point numbers are rounded and processed as integer numbers. Also, hexadecimal values are supported with the format “0xn” or “0Xn”, where the hexadecimal number <i>n</i> is preceded by “0x” or “0X” (a zero followed by the letter “x” or “X”).
Trim (! * <i>Trim</i>)	Trims spaces from both the right- and left-hand sides of a test string. If the incoming data is “ This is a test ”, for example, this mask displays “This is a test”.
Trim Left (! * <i>LTrim</i>)	Trims spaces from the left-hand side of a text string. If the incoming data is “ This is a test ”, for example, this mask displays “This is a test ”.
Trim Right (! * <i>RTrim</i>)	Trims spaces from the right-hand side of a text string. If the incoming data is “ This is a test ”, for example, this mask displays “ This is a test”.
Uppercase (! * <i>Upper</i>)	Converts all letters in a text string to upper-case letters. If the incoming data is “documentation is fun!”, for example, this mask displays “DOCUMENTATION IS FUN!”.

To Select the Field Format

- In the Format: scroll box, select the field format you want to use. The actual formatting string is displayed beneath the Format scroll box.

TIP

If you want to combine multiple field formats, just select additional formatting masks. Each additional mask is appended (or added) to the previous mask(s). If you change your mind or need to start over, select (None).

-or-

Type the formatting mask you want to use into the text box beneath the Format scroll box.

You can include multiple occurrences of a data field in a single member and uniquely format each occurrence.

Selecting Additional Options

The Field Properties dialog offers additional formatting options for use with various tag types. Some tags, such as BPSD tags, require you to type additional options, while others, such as DRAW tags, do not require any.

To Select Additional Options

- 1 (BPSD, TAGREF, and VSDREF only) In the Replacement Characters: text box, type the number of characters equal to the maximum width of the field. Your choices for replacement characters include @, #, ^, and “ (e.g., “at” symbol, pound sign, caret, and quotation mark). You are free to choose your own replacement characters, but you can only use one character for the entire length of the string.

BPSD, TAGREF, and VSDREF fields are static, and must be formatted to accommodate the longest piece of data targeted for the field. Even if only one customer’s last name is 15 letters in length, for example, the field must be 15 characters wide so the longest last name fits.

- 2 In the Sample Text: text box, you may type a descriptive term for the field (e.g., “Last Name” versus <<Account.LastName>>). By default, Docuflex Studio displays the name of the data file field, reserved tag, or function in the Source window.

Using sample text gives an accurate representation of the field width, especially for fields that are completed at the very end of the composition process. Also, if your sample text represents the maximum width of the field, you'll receive a WYSIWYG display in the Preview window for easier layout planning.

- 3 (TAGREF and VSDREF only) In the Instance: text box, type the number which coincides with the correct occurrence of the field you want the composition engine to locate.

If you want to find the page number of a component that occurs in several places in your document, for example, you can type a number other than zero to find the correct page number (e.g., if you want the page number of the component the second time it appears, you should type a 2 in the Instance: text box).

- 4 Disable the Mandatory check box if the composition engine should ignore a situation where no data exists to populate the field.

If you indicate that the presence of data is mandatory and no data is found during composition:

- The tag is filled with blanks
- You'll receive an error message
- The output is routed to an error queue

To Reset Field Properties

- Place your cursor in any individual box and click **Reset** if you want to revert to the value stored in the Field style.
- or-
- Click **Reset All** if you want to cancel any changes you've made in this dialog and revert to stored values.

Verbiage Filter

Use the Verbiage Filter command to label various alternate messages to be dynamically chosen based on filter criteria. Within a single member, for example, you can customize and store multiple text messages.

NOTE

You must define a filter before you can insert one into the document. For more information about defining and using compound verbiage filters, see “[Filters](#)” on page 393.

To Insert a Verbiage Filter

- 1 Click an insertion point in the Source window of the member in which you want to insert a filter.
- 2 Select **Insert>Verbiage Filter**.

The Select Verbiage Filters dialog displays.

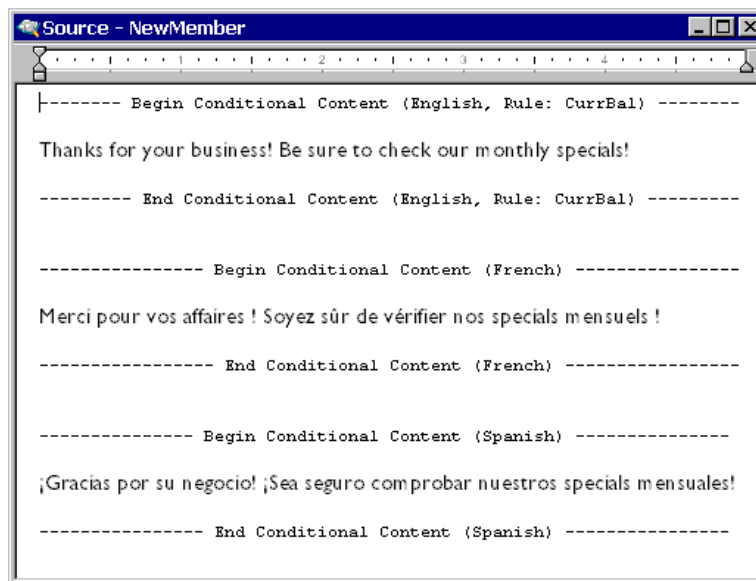


- 3 Enable the check box next to the filter for which you want to specify text.

TIP

You can enable more than one filter if you want the same message to apply to multiple filters.

- 4 In the Inclusion Rule drop-down list box, select the rule to apply to this filter.
- 5 Click **OK** to insert the filter(s); otherwise, click **Cancel**.
- 6 Type the message you want to display for the filter(s).



Tools Menu

The Tools menu comprises the following menu options:

If you want to	See
Compile the project to ensure that all processing and inclusion rules are working correctly.	" Compile " on page 457
Ensure that all spelling is correct in the document	" Check Spelling " on page 457
Create a wizard to streamline the creation of members in a project	" Solutions Wizard " on page 469
Edit the environment settings	" Environment Manager " on page 480
Customize Tool bar and menu options	" Customize " on page 490
Customize environment-related Docuflex Studio settings	" Options " on page 494

Compile

Use the Compile command to integrate any changes you've made to the project. If you add a User Data variable or Rule, for example, you should compile the project to incorporate the changes.

To Compile a Project

- ▶ Select **Tools>Compile**.
- or-
- Press **F7**.

Check Spelling

NOTE

Before you perform a spell check on your document, be sure to specify the main language of the dictionary (see "[To Edit the Options](#)" on page 460).

Use the Check Spelling command to launch the built-in spell checking application. The spell checker is available for members with ContentType=Content Form, Content Text, or Text, and you can indicate the member(s) for which you want to check the spelling by highlighting it/them in the Component Explorer. The spell checker honors the following conditions:

- If any of the selected members contain content or text, then those members are checked first. You'll then be asked if you want to check the remaining eligible members.
- If none of the selected members contain content or text, then all of the eligible members are checked.

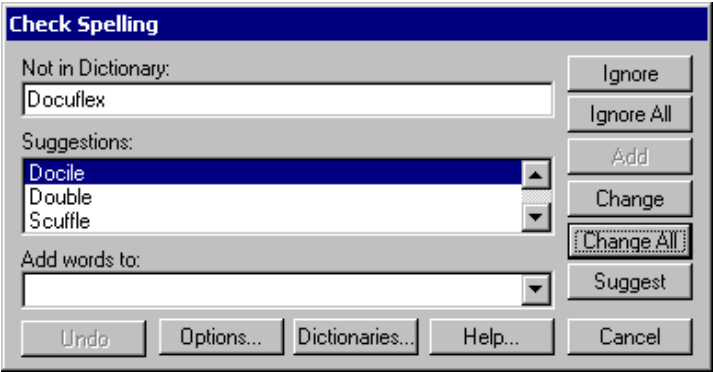
You're prompted for any words or phrases that are not listed in the "current" dictionary, including misspelled or repeated words. You can then add the word to your dictionary if it does not exist, ignore the word if it's for one-time use, or make the correction and change the word. You can also make changes to the Options that control the characteristics of the spell checker and modify your current dictionary.

The spell checker is an invaluable tool for helping you to give the best possible impression to your clients. Nothing ruins an otherwise powerful document quicker than a misspelled word or other typographical error. Be aware, however, that the spell checker cannot distinguish between correctly-spelled but incorrectly-used words (e.g., for vs. fore, then vs. than).

To Display the Check Spelling Dialog

- 1 In the Component Explorer, select the item(s) to be checked.
- 2 Select **Tools>Check Spelling**.

The Check Spelling dialog box displays.



The Not in Dictionary text box indicates that a misspelled word has been detected. The word is considered misspelled because it either could not be located in any open dictionaries or was marked with an exclude action. You can edit the word in this box or select a suggestion from the list, then click **Change** to correct the word, or click **Ignore** to skip the word.

The Suggestions scroll box contains a list of suggested replacements for the word reported as misspelled. Subsequent clicks of **Suggest** may yield more suggestions. The word selected in the Suggestions list will be the replacement when you click either **Change** or **Change All**, unless you edited the word in the Not in Dictionary box.

The Add words to: drop-down list box indicates to which user dictionary words will be added when you click **Add**. The Add words to: list shows all user dictionaries currently open. You can open or close other dictionaries via the Dictionaries dialog (see “[Editing the Dictionary](#)” on page 462), which is accessible by clicking **Dictionaries**.

Because the Check Spelling dialog contains several options, this guide provides a separate topic for each option.

If you need to	Go to
Perform an action on the highlighted word	“To Edit the Highlighted Word” on page 458
Edit the spell checker options	“To Edit the Options” on page 460
Edit the current dictionary	“Editing the Dictionary” on page 462

To Edit the Highlighted Word

- The Check Spelling dialog displays if a word requiring your attention is detected. You can use the dialog to specify whether the word should be ignored or replaced. Note that the labels of some buttons and text boxes in the dialog change according to the context:

Button / List / Box	Function
Add	Causes the reported word to be added to the dictionary selected in the Add Words To list. Use the Add button if a correctly-spelled word you use often is reported as a misspelling (e.g., your family name). If the word is not used frequently, you may want to select the Ignore or Ignore All buttons instead. This button is enabled only if a user dictionary has been selected in the Add Words To list.

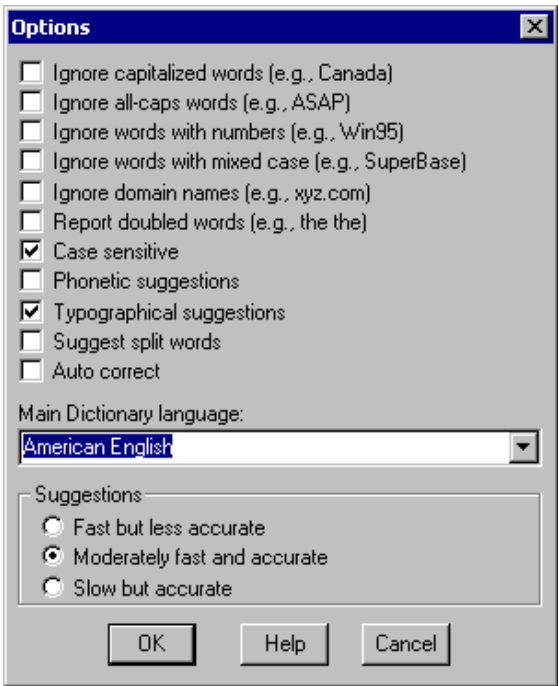
Button / List / Box	Function
Add Words To list	Indicates which user dictionary words will be added to when you select the Add button. The Add Words To list shows all user dictionaries currently open. You can open or close other dictionaries via the Dictionaries Dialog, which is accessible by selecting the Dictionaries button.
Cancel	Stops the current spelling check.
Capitalization box	Contains an uncapitalized word that exists in the dictionaries in capitalized form only. You can edit the word in this box or select a suggestion from the list, then click the Change button to correct the word, or press the Ignore button to skip the word.
Change	Causes the reported word to be replaced. If the problem word was edited, the edited word is used as the replacement. Otherwise, the selected suggestion is used as the replacement. Only this occurrence of the reported word is replaced. If you want this and all following occurrences of the word replaced, select the Change All button.
Change All	Causes this and all following occurrences of the reported word to be replaced. If the problem word was edited, the edited word is used as the replacement. Otherwise, the selected suggestion is used as the replacement. If you want only this occurrence of the word to be replaced, use the Change button. If the reported word is one you frequently misspell, you might consider adding it to a user dictionary via the Dictionaries Dialog. You can display the Dictionaries dialog by selecting the Dictionaries button.
Consider Changing box	Contains a word which may be misspelled or otherwise incorrect, and is presented with a candidate replacement word. You can change the word by selecting the Change button, or skip it by selecting the Ignore button.
Delete	Removes the word from the text. This button appears when a doubled word has been detected, or when the contents of the problem-word box are deleted.
Dictionaries	Causes the Dictionaries Dialog to be displayed. You can use the Dictionaries dialog to open or close user dictionaries, and to edit the contents of user dictionaries (see “ To Display the Dictionaries Dialog ” on page 462).
Ignore	Causes this occurrence of a misspelled word to be skipped. If the same misspelled word appears later, it will be reported again.
Ignore All	Causes this and all further occurrences of a misspelled word to be skipped. You might use this button if the word reported as a misspelling is actually spelled correctly. If the word is one you use frequently, you may wish to ignore it permanently by selecting the Add button.
Not in dictionary box	Indicates that a misspelled word was detected. The word is considered misspelled because it could not be located in any open dictionaries, or was marked with an exclude action. You can edit the word in this box or select a suggestion from the list, then click the Change button to correct the word, or press the Ignore button to skip the word.
Options	Displays the Options Dialog. You can use the Options dialog to set spelling-checker options (see “ To Edit the Options ” on page 460).
Suggest	Search more thoroughly for suggested replacements for the current misspelled word. Each time you press the Suggest button, a “deeper” search is made. The Suggest button is disabled once all possible suggestions have been located.
Suggestions list	Contains a list of suggested replacements for the word reported as misspelled. Subsequent presses of the Suggest button may yield more suggestions. The word selected in the Suggestions list will be used as the replacement when the Change or Change All buttons are pressed, unless the word in the problem box was edited.

Button / List / Box	Function
Undo	Removes the last change made. The Undo button can be pressed several times to remove the last several changes.
Undo Edit	Remove any changes made to the text in the problem box. This button appears only if the text in the problem box has been changed.

To Edit the Options

- 1 Click **Options** on the Check Spelling dialog box.

The Options dialog box displays.



- 2 Click any of the following buttons:

Button / List / Box	Function
Ignore Capitalized Words	When enabled, any words beginning with a capital letter are ignored (i.e., are skipped over without being checked). You might enable this option if the text being checked contains many proper names.
Ignore All-Caps Words	When enabled, any words containing all capital letters are ignored (i.e., are skipped without being checked). You might enable this option if the text being checked contains many acronyms.
Ignore Words with Numbers	When enabled, any words containing embedded digits are ignored (i.e., are skipped without being checked). Examples of such words include <i>WinXP</i> and <i>Q4</i> . You might enable this option if the text being checked contains many code words or other symbols containing digits.
Ignore Words with Mixed Case	When enabled, any words containing an unusual mixture of upper- and lower-case letters are ignored (i.e., are skipped without being checked). Examples of such words include <i>MicroHouse</i> and <i>CapsLock</i> . You might enable this option if the text being checked contains many variable names or other symbols which use case changes to distinguish words.
Ignore Domain Names	When enabled, any words that appear to be Internet domain names (such as <i>wintertree-software.com</i>) are ignored (i.e., are skipped without being checked).
Report Doubled Words	When enabled, any word appearing twice in a row is reported via the Check-Spelling Dialog.

Button / List / Box	Function
Case Sensitive	When enabled, a distinction is made between capitalized and non-capitalized words. For example, <i>canada</i> is considered different from <i>Canada</i> , so <i>canada</i> would be reported as a misspelling. When the option is disabled, <i>canada</i> and <i>Canada</i> are considered identical. Note that the performance of the spelling checker will be reduced if this option is disabled.
Phonetic Suggestions	When enabled, suggestions are made based on phonetic (sounds-like) similarity to the misspelled word. This option tends to improve suggestions for badly misspelled words. Enabling this option will increase the time required to locate suggestions. Note that either this option or the Typographical Suggestions option must be enabled or no suggestions will be offered.
Typographical Suggestions	When enabled, suggestions are made based on typographical (looks-like) similarity to the misspelled word. This option is appropriate for people who are generally good spellers. Note that either this option or the Phonetic Suggestions option must be enabled or no suggestions will be offered.
Suggest Split Words	When enabled, two separate words will be suggested as a replacement for a misspelling containing two joined words. For example, <i>is the</i> would be suggested as a replacement for <i>isthe</i> .
Auto Correct	When enabled, words marked with "Auto Change" actions will automatically be changed to their specified replacements. When disabled, you will be prompted before the words are changed.
Main Dictionary Language	This option allows you to set the language of the main dictionary used to check spelling. The list shows only languages for which dictionaries are installed on your system. To check spelling in a different language, select the language in the list.
Suggestions	Determines the speed and accuracy of the initial search for suggested replacements for misspelled words. When a misspelled word is detected, a search is automatically made for suggestions. This option controls the speed and accuracy of this automatic search. Pressing the Suggest button in the Check-Spelling Dialog causes an increasingly more accurate (but slower) search for suggestions.
OK	Closes the Options Dialog, and saves any changes made to the option settings.
Cancel	Closes the Options Dialog, and discards any changes made to the option settings.

- 3 In the Main Dictionary language drop-down list, select the language in which you're composing the document.

This option allows you to set the language of the main dictionary used to check spelling. The list shows only languages for which dictionaries are installed on your system. To check spelling in a different language, select the language in the list.

If you do not choose a specific language, the default is American English. The system includes dictionaries for other languages including British English, French (European), and French (Canadian).

- 4 If you want to modify the sensitivity level of the Suggestion feature, click one of the option buttons in the Suggestions group box.

The buttons determine the speed and accuracy of the initial search for suggested replacements for misspelled words. When a misspelled word is detected, a search is automatically made for suggestions. Clicking **Suggest** in the Check Spelling dialog causes an increasingly more accurate (but slower) search for suggestions.

- 5 Click **OK** to save your changes or **Cancel** to exit without saving.

The Check Spelling dialog displays again.

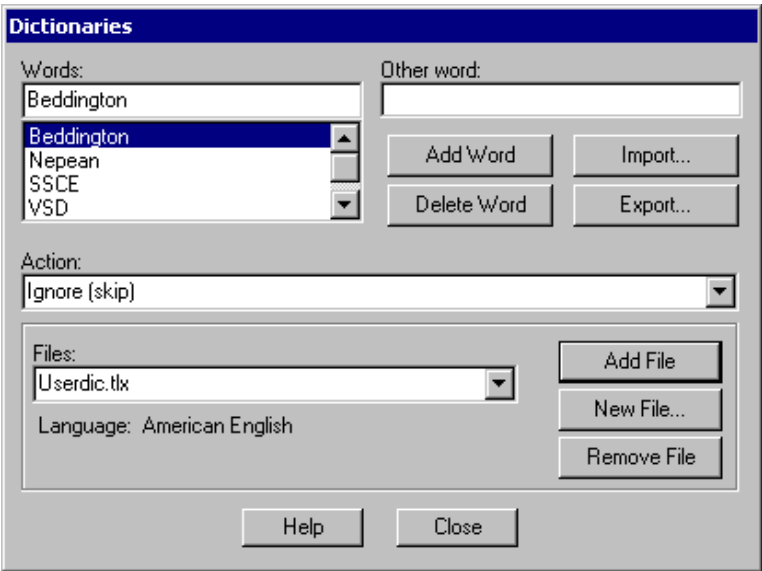
Editing the Dictionary

The spell checking application contains tools for completely maintaining your dictionaries. With the various routines, you can create new dictionaries, modify existing ones, and delete outdated or obsolete dictionaries.

The Dictionaries dialog allows you to open and close user dictionaries, and to edit the contents of an open user dictionary. The contents of dictionaries are saved in disk files. You can open some or all of your user dictionary files at any time. Only open dictionaries are searched during a spelling check.

To Display the Dictionaries Dialog

- Click **Dictionaries** on the Check Spelling dialog box.
- The Dictionaries dialog box displays.



Because the Dictionaries dialog contains several options, this guide provides a separate topic for each option.

If you need to	See
Add a word	“To Add a Word” on page 463
Add an “Other” word	“To Add an Other Word” on page 463
Delete a word	“To Delete a Word” on page 463
Delete an “Other” word	“To Delete an Other Word” on page 463
Import the contents of a dictionary file	“To Import a Dictionary” on page 464
Export the contents of the active dictionary to a file	“To Export a Dictionary” on page 465
Select the Action	“To Select the Action” on page 465
Select the active dictionary	“To Select the Active Dictionary” on page 467
Add a dictionary file to the list of open dictionaries	“To Add an Existing Dictionary” on page 467
Create a dictionary file	“To Create a Dictionary” on page 468
Remove a dictionary file from the list of open dictionaries	“To Remove a Dictionary” on page 469

To Add a Word

CAUTION

You must be careful that you're adding the word to the correct dictionary. To make sure that the dictionary you intend to edit is active, see ["To Select the Active Dictionary"](#) on page 467.

- 1 In the Words text box, type the word you want to add to the dictionary.
- 2 If you want to associate another word with this word, see ["To Add an Other Word"](#) on page 463.
- 3 If you want to select an Action other than the default, see ["To Select the Action"](#) on page 465.
- 4 Click **Add Word**.

To Add an Other Word

The Other word text box contains an alternate word or phrase associated with the currently selected word. The Other word is used in the "Auto change" and "Conditionally change" actions to supply a replacement word or phrase.

CAUTION

You must be careful that you're adding the Other word to the correct dictionary. To make sure that the dictionary you intend to edit is active, see ["To Select the Active Dictionary"](#) on page 467.

- 1 In the Words text box, type the word you want to add to the dictionary.
-or-
In the Words scroll box, select the word to which you want to associate the Other word.
- 2 In the Other word text box, type the word or phrase you want to associate with the current word (i.e., you can associate *to be determined* with *TBD*).
- 3 Click **Add Word**.

The spell checking application associates the word with the current word in the active dictionary.

To Delete a Word

CAUTION

You must be careful that you're deleting the word from the correct dictionary. To make sure that the dictionary you intend to edit is active, see ["To Select the Active Dictionary"](#) on page 467.

- 1 In the Words scroll box, select the word you want to delete from the dictionary.
- 2 Click **Delete Word**.

To Delete an Other Word

CAUTION

You must be careful that you're deleting the Other word from the correct dictionary. To make sure that the dictionary you intend to edit is active, see ["To Select the Active Dictionary"](#) on page 467.

- 1 In the Words scroll box, select the word for which you want to remove the associated word or phrase.

- 2 In the Other word text box, highlight the entire contents and press **DELETE**.
- 3 Click **Add Word**.

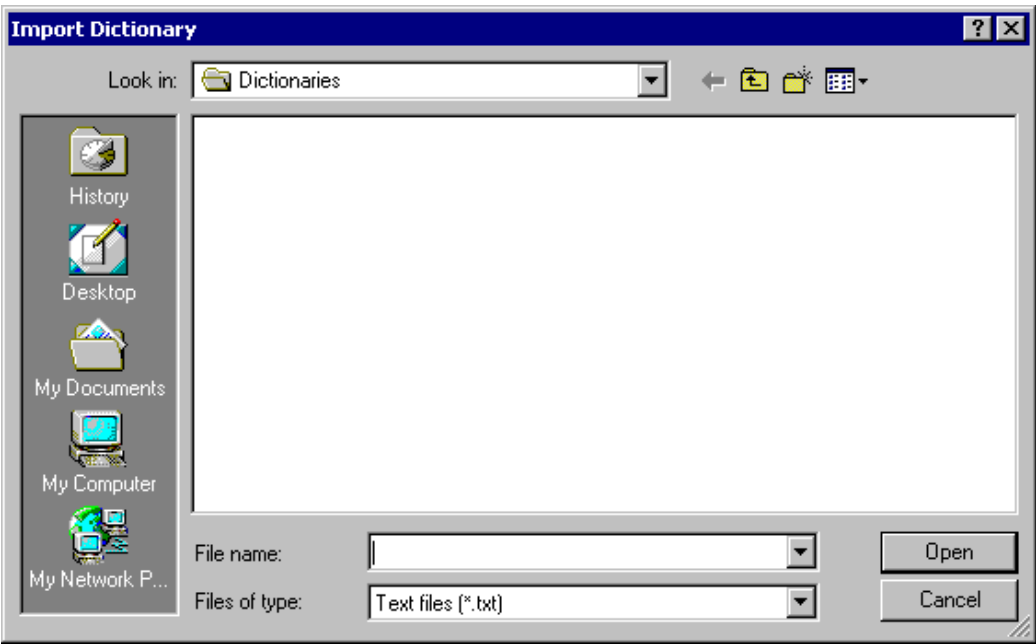
To Import a Dictionary

CAUTION

When you import a dictionary, you must understand that you’re *adding* the contents of another dictionary to the active dictionary. Therefore, you must be careful that you’re adding words to the correct dictionary. To make sure that the dictionary you intend to edit is active, see “[To Select the Active Dictionary](#)” on page 467.

- 1 Click **Import** on the Dictionaries dialog box.

The Import Dictionary dialog box displays.



- 2 Do the following, as required:

If	Do this
The incorrect drive or folder shows in the Look in text box	Select the arrow on the right of the Look in: text box, and then choose the drive and/or folder where the dictionary file is located.
The correct folder doesn't show in the Look in list box	In the Look in: list box, scroll to see more folders, or double-click a root folder to see its subfolders.
The correct dictionary file name doesn't show in the Look in list box	In the Look in: list box, double-click the correct folder to see its contents.
The name of the dictionary file doesn't show in the File name text box	In the Look in: list box, click to select the dictionary file and place it in the File name: text box.
You want to import the dictionary file indicated by the current specifications	Click Open .

The entire contents of the imported dictionary are added to the active dictionary and you’re returned to the Dictionaries dialog box.

To Export a Dictionary

- 1 Click **Export** on the Dictionaries dialog box.

The Export Dictionary dialog box displays.



- 2 Do the following, as required:

To	Do this
Specify a different folder to hold the dictionary file	Select the arrow on the right of the Save in: drop-down list, and then choose a different drive and/or folder.
Enter the name of the file to hold the dictionary	In the File name: text box, type the name of the file (the dialog will automatically append the .txt extension to the name).
Save the dictionary file using the current specifications	Click Save .

The entire contents of the active dictionary are saved to a plain text file and you're returned to the Dictionaries dialog box.

To Select the Action

The Action drop-down list box contains various “actions” that are associated with words in the dictionary. The action tells the spelling checker what to do when it finds a word in the dictionary.

- Select the arrow on the right of the Action text box, and then choose any one of the following actions:

Action	Behavior
Auto change (use case of checked word)	This action allows you to replace automatically one word with another. If you often type “recieve” instead of “receive,” for example, you might enter the word “recieve” (with “receive” as the Other word) and “Auto change (use case of checked word)” as the action. The spelling checker automatically corrects “recieve” wherever it appears. If “recieve” was capitalized (Recieve), the spelling checker would automatically replace it with “Receive.” Note: The replacement is made automatically only if the “Auto Change” option is enabled (see the Options dialog for information on the Auto Change option).
Auto change (use case of other word)	This action allows you to replace automatically one word with another, always with the same case pattern as the other word. This action is useful for automatically expanding abbreviations. You could enter the word “TBD,” for example, with “to be determined” as the Other word and “Auto change (use case of other word)” as the action. The spelling checker automatically replaces “TBD” with “to be determined” wherever it appears. Note: The replacement is made automatically only if the “Auto Change” option is enabled (see the Options dialog for information on the Auto Change option).
Conditionally change (use case of checked word)	The same as “Auto change (Use case of checked word),” except you’re prompted to make the change(s).
Conditionally change (use case of other word)	The same as “Auto change (Use case of other word),” except you’re prompted to make the change(s).
Ignore (skip)	This action tells the spelling checker that the word is spelled correctly, and so can be skipped. This is the most common action.
Exclude (treat as misspelled)	This action tells the spelling checker that the word is misspelled, even if it is listed in another dictionary. Words marked with this action will never be offered as suggestions for misspelled words, and they will be reported as misspellings when they are encountered by the spelling checker. Note: The spelling checker looks up words in user dictionaries in the order in which they appear in the Files list. If you want to exclude a word, make sure it doesn't appear in a previous user dictionary.

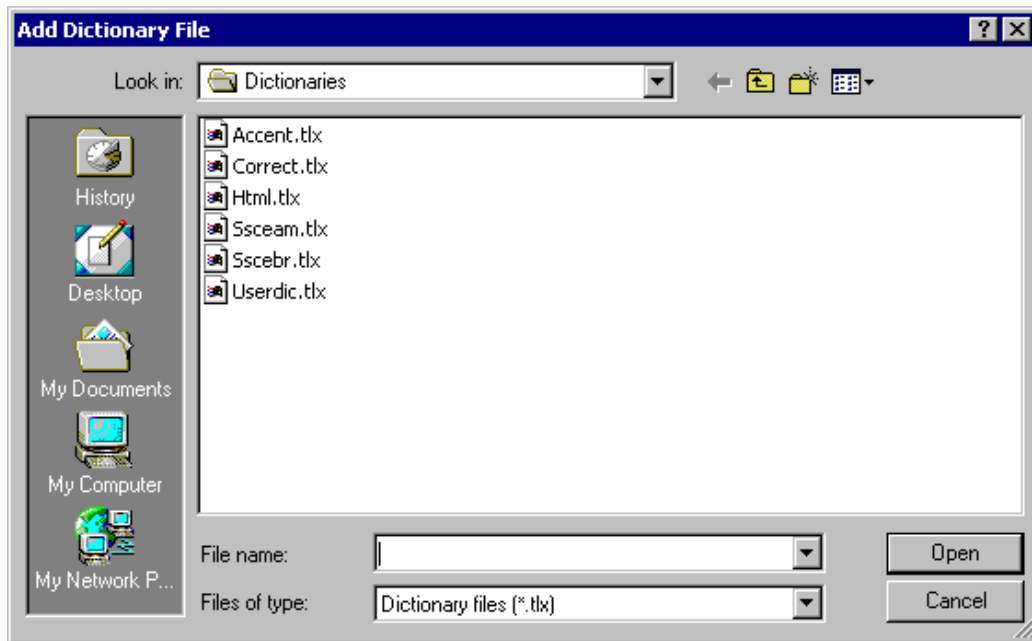
To Select the Active Dictionary

- In the Files text box, use the drop-down arrow to select the dictionary file you want to use as the main dictionary.

To Add an Existing Dictionary

- 1 Click **Add File** to add an existing dictionary file to the spell checker's list of available dictionaries.

The Add Dictionary File dialog box displays.



TIP

You are free to use a customized dictionary file from another application. Doing so might reduce the need to duplicate your efforts in setting up the spell checker.

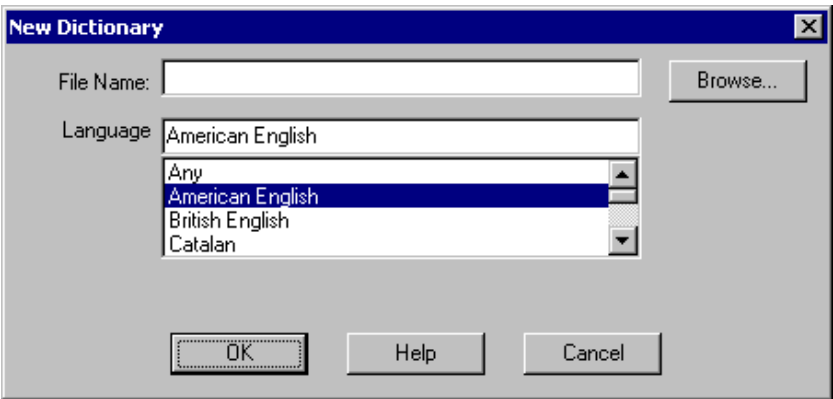
- 2 Do the following, as required:

If	Do this
The incorrect drive or folder shows in the Look in text box	Select the arrow on the right of the Look in: text box, and then choose the drive and/or folder where the dictionary file is located.
The correct folder doesn't show in the Look in list box	In the Look in: list box, scroll to see more folders, or double-click a root folder to see its subfolders.
The correct dictionary file name doesn't show in the Look in list box	In the Look in: list box, double-click the correct folder to see its contents.
The name of the dictionary file doesn't show in the File name text box	In the Look in: list box, click to select the dictionary file and place it in the File name: text box.
You want to import the dictionary file indicated by the current specifications	Click Open .

The new library file displays in the Files drop-down list box and you're returned to the Dictionaries dialog box.

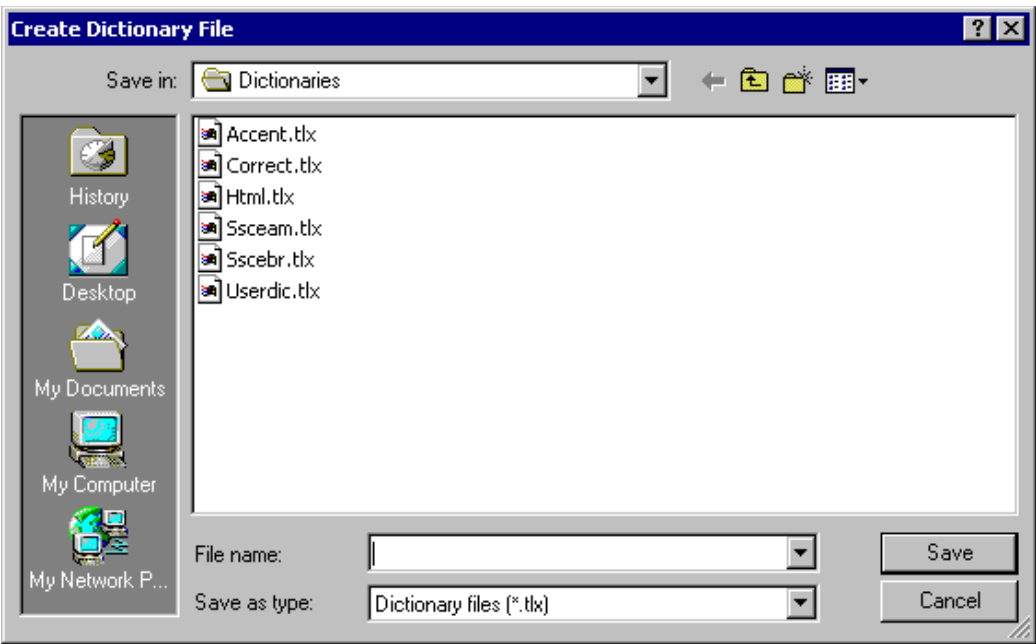
To Create a Dictionary

- 1 Click **New File** to create a dictionary.
The New Dictionary dialog box displays.



- 2 In the File Name text box, enter the directory path and file name you want to assign to the new dictionary.
-or-
Click **Browse**.

The Create Dictionary File dialog box displays:



Do the following as required:

To	Do this
Specify a different folder to hold the dictionary file	Select the arrow on the right of the Save in: drop-down list, and then choose a different drive and/or folder.
Enter the name of the file to hold the dictionary	In the File name: text box, type the name of the file (the dialog will automatically append the .tlx extension to the name).
Save the dictionary file using the current specifications	Click Save .

CAUTION

If you select the name of an existing dictionary file (*.tlx), you'll be prompted to overwrite that name with a new, blank dictionary.

Click **Save**. The dialog closes and returns to the New Dictionary dialog box, where the path and file name you've specified display in the File Name text box.

- 3 Select the arrow on the right of the Language drop-down list box, and then choose the language in which you want to compose the dictionary.

If the desired language is not displayed in the list, select **Any**.

- 4 Click **OK** to create the dictionary or **Cancel** to exit without creating.

To Remove a Dictionary

- 1 Select the arrow on the right of the Files text box, and then choose the dictionary file you want to remove from the spell checker's list of available dictionaries.
- 2 Click **Remove File**.

The dictionary file is removed from the list; however, the file is not deleted from the disk.

Solutions Wizard**WARNING!**

The Solutions Wizard routine is targeted to a "project designer" or someone in a similar capacity.

The Solutions Wizard menu option is only active if you're editing a Docuflex Document Template (*.ddt) file, which would then be the basis for a new project.

Solutions wizards provide a project designer with the tools to create a customized setup routine for particular types of members. The designer can

- create an entire project, complete with Sections, formatting Styles, Overflow Definitions, processing Rules, and Page Definitions, save it as a template file, then create custom wizards for use in establishing all of the necessary types of members that contain the content.
- or-
- open an existing template file and add wizards.

When a user creates a project based on a template containing wizards, the user is only allowed to create members, and only create those members specified in the wizard. All other document components are disabled, thus exerting a measure of control over the types of components that can be created and reducing the number of Component Properties for which a user supplies values.

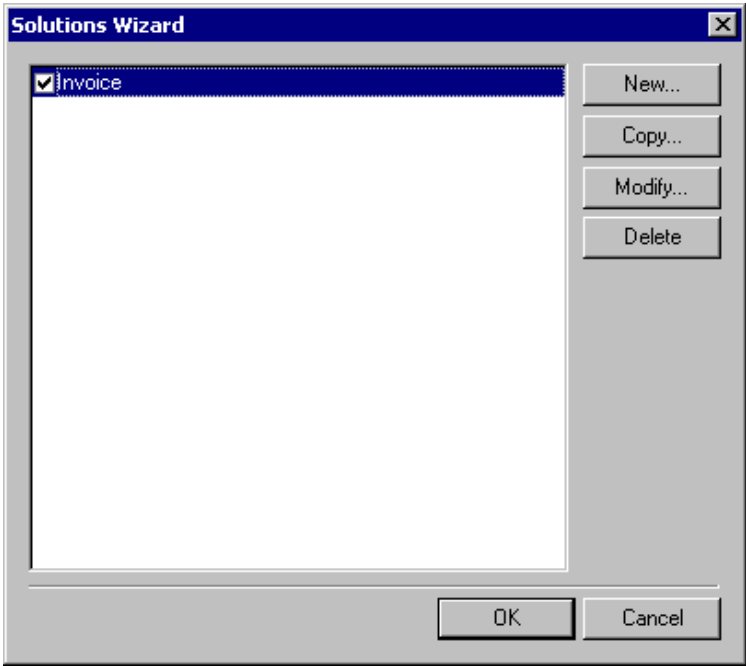
This feature helps to make the setup quicker and simplifies the process of supplying values for required properties.

To Display the Solutions Wizard Dialog

WARNING!

You must be editing a Docuflex Document Template (*.ddt) file to create a Solutions Wizard.

- ▶ Select **Tools>Solutions Wizard**.
The Solutions Wizard dialog box appears.

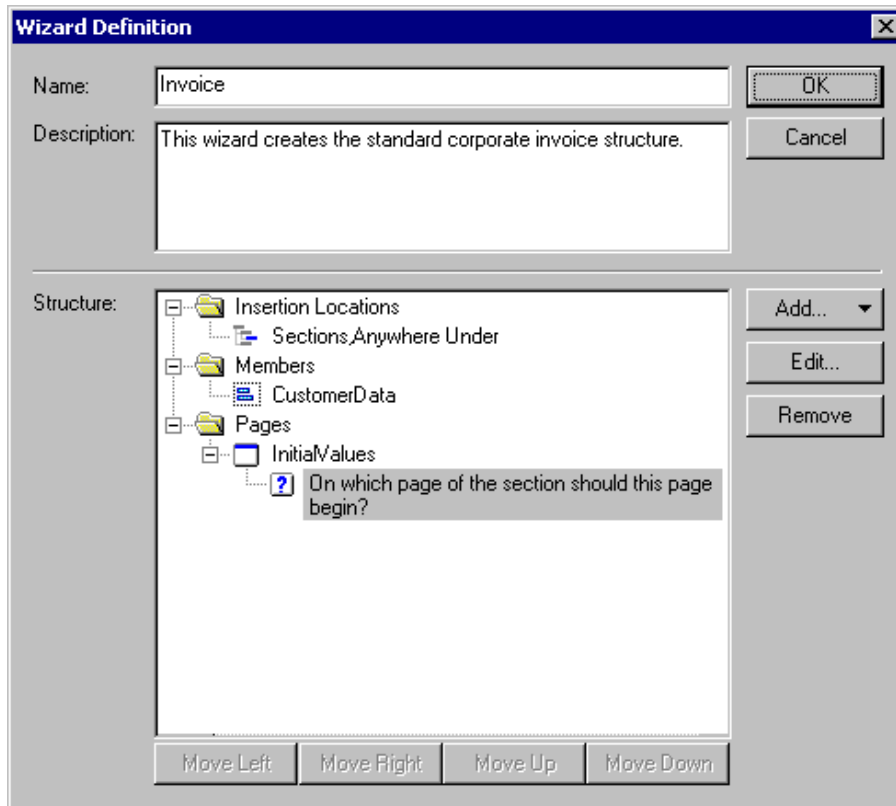


Because the Solutions Wizard dialog box contains multiple operations, this guide provides a separate topic for each.

If you need to	See
Create a wizard	“To Create a Solutions Wizard” on page 471
Copy an existing wizard	“To Copy a Wizard” on page 480
Modify an existing wizard	“To Modify a Wizard” on page 480
Delete a wizard	“To Delete a Wizard” on page 480
Specify the wizards to display	“To Select the Wizards to Display” on page 480
Save or close the dialog	“To Save or Close the Solutions Wizard Dialog” on page 480

To Create a Solutions Wizard

- Click **New** and the Wizard Definition dialog displays.



Because the Wizard Definition dialog box contains multiple group boxes of specifications, this guide provides a separate topic for each group.

If you need to specify the	Go to
Name of the wizard	“To Name the Wizard” on page 472
Meaningful description of the wizard’s purpose	“To Describe the Wizard” on page 472
Structure or layout of the wizard	“Specifying the Structure of the Wizard” on page 472
Saving or closing of the dialog	“To Save or Close the Wizard Definition Dialog” on page 480

To Name the Wizard

- ▶ In the Name text box, type a name for the wizard. This name is displayed in the Title Bar of the initial dialog box after the wizard is started.

To Describe the Wizard

- ▶ In the Description text box, type a meaningful description of the purpose of the wizard. This description is displayed in the Title Bar of the initial dialog box after the wizard is started.

Specifying the Structure of the Wizard

In the Structure group box in the lower portion of the dialog, you specify several categories for the wizard, including insertion locations, members, and pages and their question(s). You can fully define settings in these categories from this single box by freely arranging and rearranging the order of the settings.

To Specify the Structure of the Wizard

- ▶ Do any of the following:

To	See this topic:
Specify one or more Insertion Locations of the wizard	“Specifying the Insertion Location” on page 472
Specify the type(s) of member(s) to create	“Specifying the Members” on page 474
Specify the pages containing questions which prompt the user for property values	“Specifying the Pages” on page 477
Specify questions eliciting property values	“Specifying the Questions” on page 478

Specifying the Insertion Location

The Insertion Locations folder controls the component area(s) where a user can use the wizard, including one or more of the following:

- Document Segments
- Overflow Definitions
- Sections

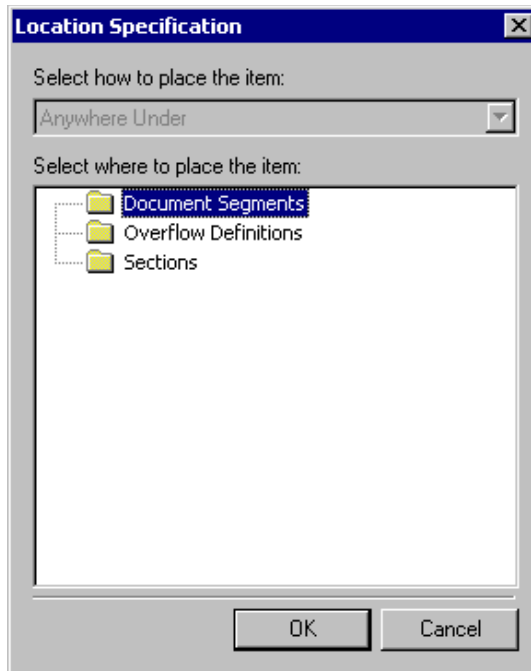
To Specify the Insertion Location

- ▶ Do any of the following:

To	See this topic:
Create an Insertion Location	“To Create an Insertion Location” on page 473
Modify an Insertion Location	“To Modify an Insertion Location” on page 474
Remove an Insertion Location	“To Remove an Insertion Location” on page 474

To Create an Insertion Location

- 1 Click **Add>Add Insertion Position** and the Location Specification dialog box displays.

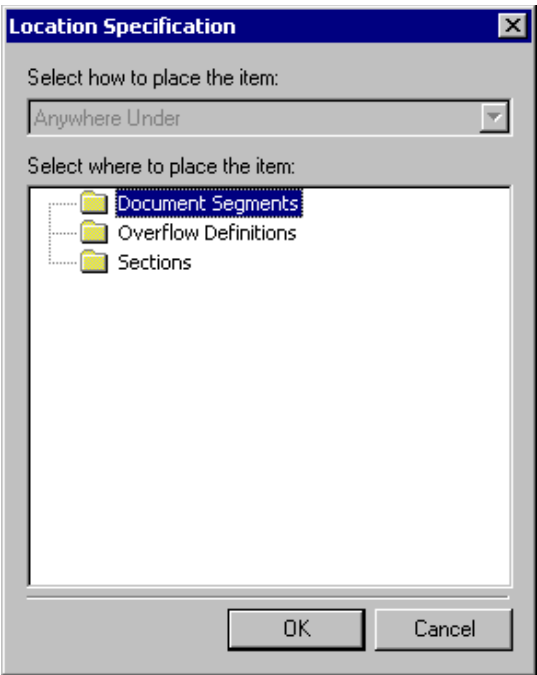


- 2 In the Select how to place the item: drop-down list box, indicate the relationship between the wizard and the selected component (i.e., the location where you're allowing for the use of the wizard within component categories). Depending on the level of the selected component, the choices include some or all of the following:
 - After—the wizard is placed immediately after the selected component.
 - Anywhere After—the wizard can be placed anywhere after the selected component, but on the same level (e.g., must be a sibling).
 - Anywhere Before—the wizard can be placed anywhere before the selected component, but on the same level (e.g., must be a sibling).
 - Anywhere Under—the wizard can be placed anywhere under the selected component, including at the child level or below. This is the default selection and is the least restrictive of all the choices.
 - As Child Of—the wizard can be placed as a child of the selected component (e.g., on a new, subordinate level).
 - Before—the wizard is placed immediately before the selected component.
- 3 In the Select where to place the item: hierarchy, navigate the tree listing to locate the precise position for the wizard.
- 4 Click **OK**.

Docuflex Studio returns you to the Wizard Definition dialog box.
- 5 Repeat steps 1 through 4 until you've added all the necessary Insertion Locations.

To Modify an Insertion Location

- 1 Select the Insertion Location you want to modify, and then click **Edit**.
The Location Specification dialog box displays.



- 2 Follow the steps for creating Insertion Locations, beginning with “Step 2” on page 473.

To Remove an Insertion Location

- Select the Insertion Location you want to remove, and then click **Remove**.

Specifying the Members

The Members folder contains the types of members created by the wizard. You can create any number of members per wizard.

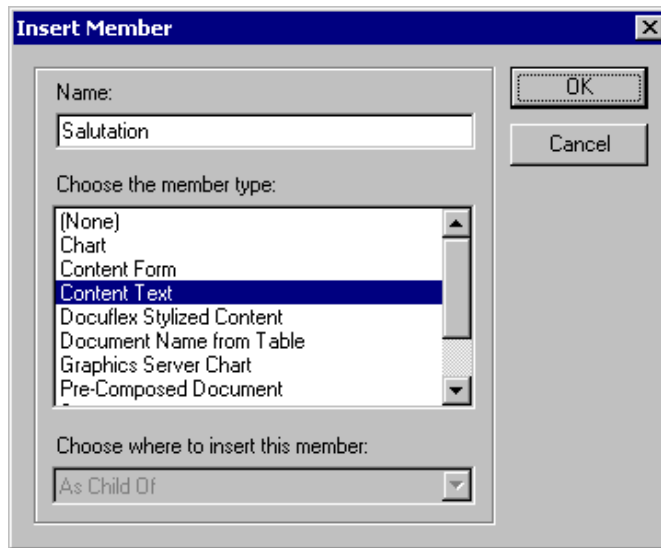
To Specify the Members

- Do any of the following:

To	See this topic:
Create a Member	“To Create a Member” on page 475
Modify Member properties	“To Modify a Member’s Component Properties” on page 476
Remove a Member	“To Remove a Member” on page 476
Rearrange the Members	“To Rearrange the Members” on page 476

To Create a Member

- 1 Click **Add>Add Member** and the Insert Member dialog box displays.



- 2 In the Name text box, type a name for this Member.
- 3 In the Choose the member type: scroll box, select the type of Member to create.
- 4 In the Choose where to insert this member: drop-down list box, select the relationship between the new Member and the existing ones (i.e., the relationship between the members created by the wizard). Depending on the level of the existing Member, the choices include some or all of the following:
 - After—the Member is placed immediately after the existing Member.
 - As Child Of—the Member is placed as a child of the existing Member (e.g., on a new, subordinate level).
 - Before—the Member is placed immediately before the existing Member.
- 5 Click **OK**.

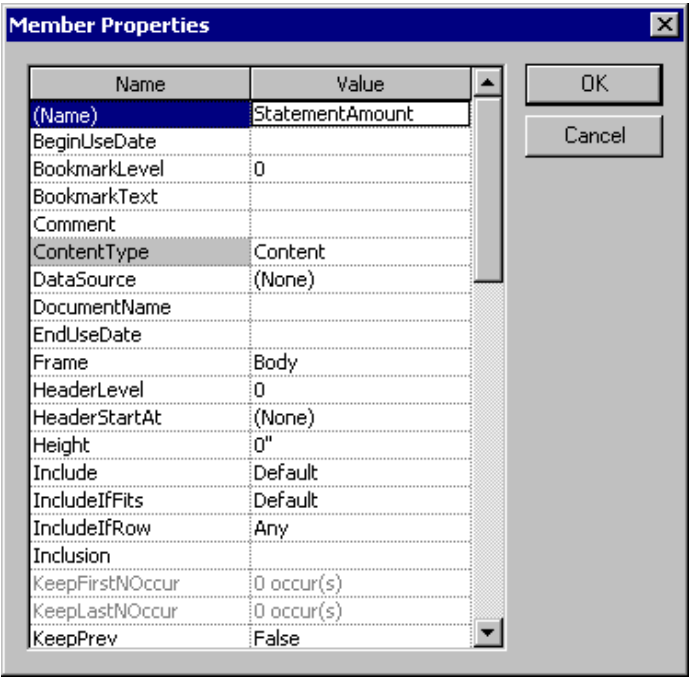
Docuflex Studio returns you to the Wizard Definition dialog box.
- 6 Repeat steps 1 through 5 until you've added all the necessary Members.

To Modify a Member's Component Properties

As the project designer, you can create the wizard to add members with pre-defined properties—all properties except those that absolutely cannot be anticipated.

- 1 Select the Member you want to modify, and then click **Edit**.

The Member Properties dialog box displays.



- 2 Locate the Properties you want to modify and supply the correct Values.
- 3 Click **OK**.
Docuflex Studio returns you to the Wizard Definition dialog box.
- 4 Repeat steps 1 through 3 until you've modified all the necessary Member Properties.

To Remove a Member

- Select the Member you want to remove, and then click **Remove**.

To Rearrange the Members

- 1 Select the Member whose position you want to modify.
- 2 Do any of the following:

To Place the Member	Do this:
Before the previous Member	Click Move Up .
After the next Member	Click Move Down .
As a new sibling of the parent	Click Move Left .
As a new sibling of a child	Click Move Right .

Specifying the Pages

The Pages folder contains the Pages on which a user supplies property values in response to Questions posed by the wizard.

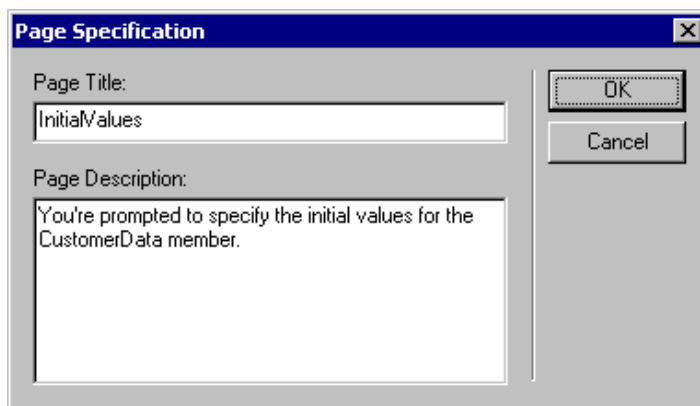
To Specify the Pages

- Do any of the following:

To	See this topic:
Create a Page	“To Create a Page” on page 477
Modify a Page	“To Modify a Page” on page 477
Remove a Page	“To Remove a Page” on page 477
Rearrange Pages or Questions	“To Rearrange Pages or Questions” on page 479

To Create a Page

- 1 Click **Add>Add Page** and the Page Specification dialog box displays.



- 2 In the Page Title text box, type the title you want to display in the Title Bar of this page.
- 3 In the Page Description text box, type the description you want to display for this page.
- 4 Click **OK**.
Docuflex Studio returns you to the Wizard Definition dialog box.
- 5 Repeat steps 1 through 4 until you've added all the necessary Pages.

To Modify a Page

- 1 Select the Page you want to modify, and then click **Edit**.
The Page Specification dialog box displays.
- 2 Follow the steps for creating a Page, beginning with “[Step 2](#)” on page 477.

To Remove a Page

- Select the Page you want to remove, and then click **Remove**.
Docuflex Studio removes the Page.

Specifying the Questions

The Questions prompt the user to supply the values of various member properties. These values are then saved to the member and control it's behavior in the document.

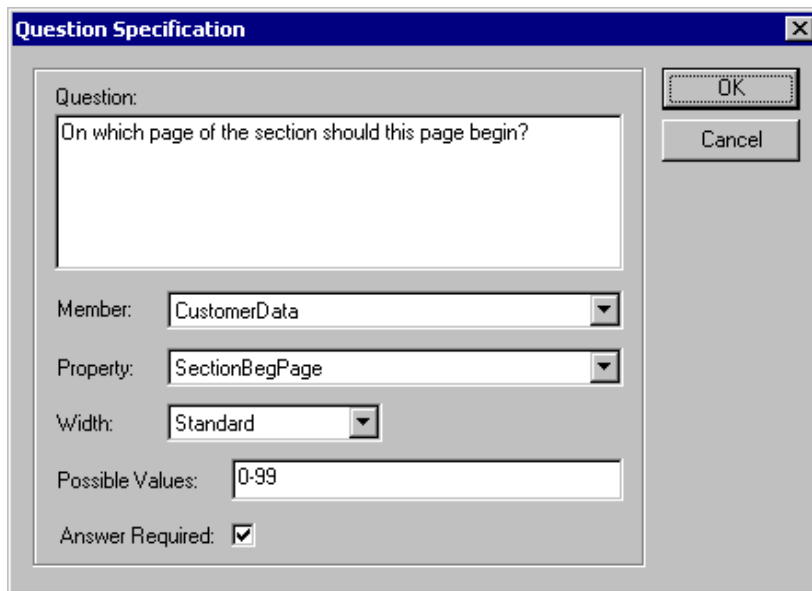
To Specify the Questions

- Do any of the following:

To	See this topic:
Create a Question	“To Create a Question” on page 478
Modify a Question	“To Modify a Question” on page 479
Remove a Question	“To Remove a Question” on page 479
Rearrange Pages or Questions	“To Rearrange Pages or Questions” on page 479

To Create a Question

- 1 Select the page to which you want to add a Question.
- 2 Click **Add>Add Question** and the Question Specification dialog box displays.



The image shows a 'Question Specification' dialog box. It has a title bar with a close button. Inside, there's a 'Question:' label followed by a text box containing 'On which page of the section should this page begin?'. To the right of the text box are 'OK' and 'Cancel' buttons. Below the text box are four fields: 'Member:' with a dropdown menu showing 'CustomerData', 'Property:' with a dropdown menu showing 'SectionBegPage', 'Width:' with a dropdown menu showing 'Standard', and 'Possible Values:' with a text box containing '0-99'. At the bottom, there's a checkbox labeled 'Answer Required:' which is checked.

- 3 In the Question text box, type the question that describes the value you want the user to supply.
- 4 In the Member drop-down list box, select the Member about which you're asking this question.
- 5 In the Property drop-down list box, select the Component Property whose value you're seeking.

TIP

The Width drop-down list box is only available if the Property you've chosen contains numeric values.

- 6 In the Width drop-down list box, select the width of the answer field (e.g., it should be long enough to accept the desired numeric response):
 - Standard—the most-common-sized box for accepting entries. This width is acceptable for most numeric property fields.
 - Full—The box spans the full width of the wizard’s dialog.
- 7 In the Possible Values control, do one of the following:

For properties requiring a Do this:

Numeric value	Specify any constraints on what are the valid values (e.g., you could specify a valid range, such as “0-99”, making sure you omit the quotation marks). If left blank, <i>any</i> value is considered valid at the time of entry, regardless of whether it’s valid for the property.
Specific parameter	Check the valid parameters from the list of all available parameters. If left blank, <i>all</i> available parameters are displayed.

- 8 Enable the **Answer Required** check box if the answer for this question is mandatory.
- 9 Click **OK**.
Docuflex Studio returns you to the Wizard Definition dialog box.
- 10 Repeat steps 1 through 9 until you’ve added all the necessary Questions.

To Modify a Question

- 1 Select the Question you want to modify, and then click **Edit**.
The Question Specification dialog box displays.
- 2 Follow the steps for creating a Question, beginning with “**Step 3**” on page 478.

To Remove a Question

- Select the Question you want to remove, and then click **Remove**.

To Rearrange Pages or Questions

- 1 Select the Page or Question whose position you want to modify.
- 2 Do any of the following:

To Place the Page or Question	Do this:
Before the previous Page or Question	Click Move Up .
After the next Page or Question	Click Move Down .

To Save or Close the Wizard Definition Dialog

- ▶ Click **OK** to save your wizard definitions or **Cancel** to exit without saving.

Docuflex Studio returns you to the Solutions Wizard dialog.

To Copy a Wizard

- 1 Select the wizard you want to copy, then click **Copy**.

The Wizard Definition dialog displays with the same information as the old wizard and a name of "Copy_Of_old wizard name."

- 2 Type the name you want to assign to the copy.

The Solutions Wizard copies the existing wizard and creates another with the name you supplied.

To Modify a Wizard

- 1 Select the wizard you want to edit, then click **Modify**.

The Wizard Definition dialog displays.

- 2 Follow the steps for creating a wizard definition beginning on page 471.

To Delete a Wizard

- ▶ Select the wizard you want to delete, then click **Delete**.

To Select the Wizards to Display

You can create several wizards and choose to display a subset on the template. This provides a convenient way to create a "master" list of wizards, then pick-and-choose the ones you want to display on a template for a certain target audience (e.g., you could use the Save As... command to create several templates).

- ▶ Enable the wizards you want to include in the template by placing a check in the box next to the name.

When you save the template, only the wizards you selected are saved.

To Save or Close the Solutions Wizard Dialog

- ▶ Click **OK** to save the changes within the Solutions Wizard or **Cancel** to exit without saving.

Environment Manager

Use the Environment Manager command to maintain the environment settings Docuflex Studio stores in its environment file.

WARNING!

If you send or receive environment files from other sites, make sure you're using the same operating system. This is particularly important in locating the *isi.ini* file, located in the base Windows directory. On Windows 2000, the directory is C:\WINNT. On Windows XP, the directory is C:\WINDOWS.

If the *isi.ini* file cannot be located, you'll receive a warning message from Docuflex Studio that the Docuflex Engine could not be initialized.

An environment file can contain one or more environments which can be configured for specific platforms, such as Win32 or UNIX. The behavior of the Environment Manager application will change slightly, based on the selected platform of the environment—thus allowing you to define properties not currently available in the Win32 platform.

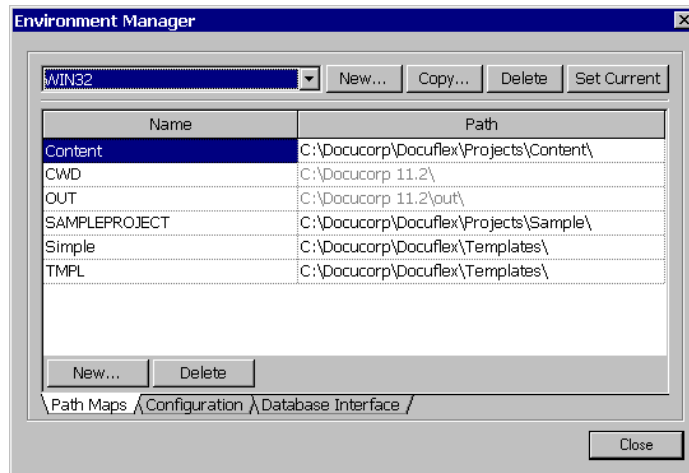
Most Skywire Software applications use the environment files to control and configure access to resources such as printers, fonts, error files, trace logging, projects, and templates.

TIP

You can load the Environment Manager in stand-alone mode by launching the *envmgr.exe* application.

To Display Docuflex Studio Environments

- Select **Tools>Environment Manager**.



Using the Environment Manager Dialog and Views

The Environment Manager dialog box contains several views. You specify environment settings under these views.

To Use an Environment Manager View

- Do any of the following:

To	Go to this topic
Maintain path maps to Docuflex Studio projects	“Using the Path Maps View” on page 482
Specify settings for printer definitions, fonts, and various status files	“Using the Configuration View” on page 484
Define database interfaces	“Using the Database Interface View” on page 486
Manage entire environments	“Managing Environments” on page 488

To Save or Close the Environment Manager Dialog

- Do one of the following:

To	Do this
Apply the specifications you've provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without applying the specifications you've provided	Click Cancel .

Using the Path Maps View

Use the first view in the Environment Manager dialog box to add, edit, and delete path maps, which provide Docuflex with a consistent method of accessing files.

Docuflex uses path maps to locate and load templates, projects, and pre-composed members (see “What is a Member?” on page 149). The Installation CD of Docuflex Studio contains a Docuflex environment file (e.g., *docuflex.dde*) that consolidates path maps into one, convenient location. You can use the Environment Manager to maintain these settings.

Prior to saving the first Docuflex Studio project, you must record a path map specification for your project. Docuflex Studio checks to make sure that a path map exists for each template, project, and pre-composed member. If you need to open a template or project created on another workstation, you need to define a path map to its current location so Docuflex Studio can access it.

The path map name converts a fully-qualified path name into an internal format stored within a Docuflex project.

EXAMPLE

A project file referenced by the SAMPLEPROJECT path map resembles the following:

C:\Docucorp\Docuflex\Projects\Sample\SampleProject.ddp

When the path map is converted to the internal format, it resembles the following:

%SAMPLEPROJECT%SampleProject.ddp

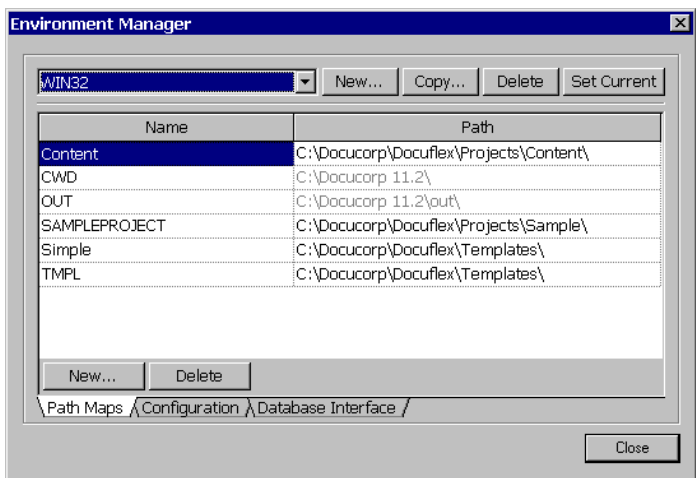
By storing the file name in this format, you can easily change the location of a project file by editing the directory pointed to by the SAMPLEPROJECT path map.

The Path Maps view is comprised of the following keyword and its value.

Keyword	Value
Name	The data path to the folder containing, among other things, a project, template, or document resource. Docuflex requires a path map for each individual resource, so you're likely to have several path map names.

To Display the Path Maps View

- If the Path Maps view is not already showing in the Environment Manager dialog box, click on the **Path Maps** tab.

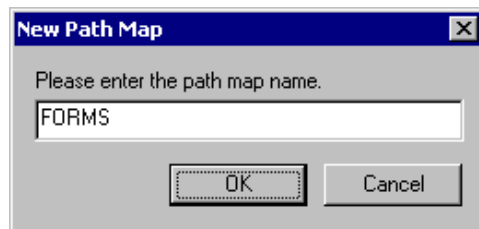


Because you can perform multiple tasks on the Path Maps view, this guide provides a separate topic for each task.

If you need to	Go to this topic
Add a path map	“To Add a Path Map” on page 483
Edit a path map	“To Edit a Path Map” on page 483
Delete a path map	“To Delete a Path Map” on page 483
Save or close the Path Maps view	“To Save or Close the Environment Manager Dialog” on page 481

To Add a Path Map

- 1 Click **New** and the New Path Map dialog displays.



- 2 Type the name of the path map and then click **OK**.
- 3 Do one of the following:

If you're working in this environment	This action takes place:
WIN32	The Environment Manager displays the Browse for Folder dialog. 1 Navigate the tree to select the folder in which the external resource is stored. 2 Click OK and you're returned to the Path Maps view.
UNIX	You're returned to the Path Maps view with the default value of <code>./</code> displayed.

To Edit a Path Map

- 1 In the Name column, select the path map you want to edit.
- 2 In the Path column, do one of the following:

If you're working in this environment	Do this:
WIN32	1 Click  to browse for the new folder. 2 Click OK and you're returned to the Path Maps view.
UNIX	■ Type the new path.

To Delete a Path Map

- 1 In the Name column, select the path map you want to delete.
- 2 Click **Delete**.

Using the Configuration View

Use the second view in the Environment Manager dialog box to configure environment settings, such as error files, fonts, logging, printer definitions, and trace files.

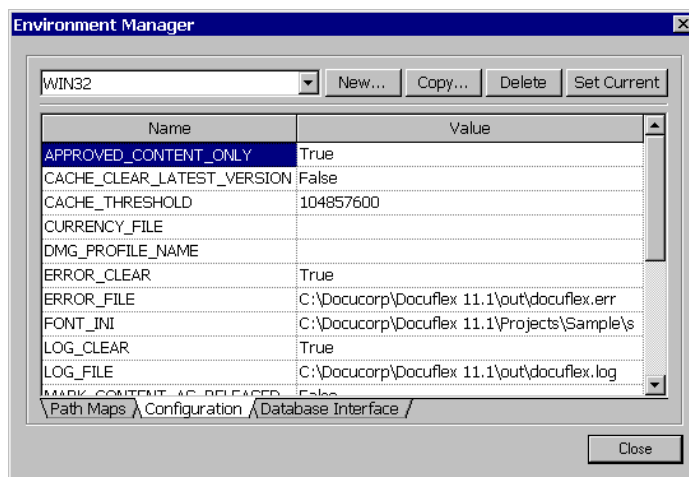
The Configuration view is comprised of the following keywords and corresponding values.

Keyword	Value
APPROVED_CONTENT_ONLY	<i>True</i> confirms that a Documanager file has its Content Management State set to “Approved.” A non-approved file generates an error during the composition pass. To use this feature, you must have Read access on the Documanager Server.
CACHE_CLEAR_LATEST_VERSION	<i>True</i> clears the latest versions of documents held in the Forms Manager cache and queries Documanager for newer content. This setting is intended for use with Skywire Software’s Internet Document Server (IDS).
CACHE_THRESHOLD	The maximum amount (in bytes) of RAM to use for keeping data. Exceeding the maximum cache threshold causes the least-used data to be removed from RAM. Note: Use extreme caution when modifying these values. A low value can adversely affect performance.
CURRENCY_FILE	The path and file name that gives multiple sessions of Docuflex Studio unique identities, so all files are maintained separately (see “ Operating Multiple Sessions of DFLXCOMP ” on page 519).
DMG_PROFILE_NAME	(required for Documanager processing) The name of the profile containing configuration information for connecting to the Documanager Server. The profile is created with the Documanager Profile Generator utility (DMGPROFILE.EXE).
ERROR_CLEAR	<i>True</i> leaves the error file intact and appends any new messages to the end, while <i>False</i> erases the error file each time you execute the composition engine.
ERROR_FILE	The path and file name to which the composition engine stores error messages encountered during processing.
FONT_INI	The path and file name containing the font information for the printer you’re using with the composition engine.
LOG_CLEAR	<i>True</i> leaves the log file intact and appends any new messages to the end, while <i>False</i> erases the log file each time you execute the composition engine.
LOG_FILE	The path and file name to which the composition engine records each step performed during processing.
MARK_CONTENT_AS_RELEASED	<i>True</i> updates the Documanager file’s Content Management State to “Released” during the composition pass. To use this feature, you must have Write access on the Documanager Server.
MAX_FORMSIZE_CACHE	The maximum amount (in bytes) of data to keep in RAM during the composition pass. Any data larger in size is removed from RAM after use by Docuflex. Note: Use extreme caution when modifying these values. A low value can adversely affect performance.
PRINTDEF_INI	The path and file name containing the settings for the printer you’re using with the composition engine.
TRACE_CLEAR	<i>True</i> leaves the trace file intact and appends any new messages to the end, while <i>False</i> erases the trace file each time you execute the composition engine.
TRACE_FILE	The path and file name to which the composition engine records tracing messages which are useful for troubleshooting unexpected processing results.

Keyword	Value
TRACE_INI_NAME	The path and file name of a separate file for holding tracing messages.
VIRT_FLAG	<i>True</i> enables memory virtualization, in which the composition engine limits the number of physical pages of the DCD that are held in memory at one time.
VIRT_FILE_SIZE	Determines the maximum size of the virtual files that are being written to disk. By default, this property is set to 2 GB meaning that, once a single virtual file has reached this capacity, a new virtual file is created for continued virtualization.
VIRT_PAGE_THRESHOLD	The number of physical pages that are held in memory before any virtualization occurs. The default value is 750 pages. After the threshold is met, the contents of memory is written to a disk file.

To Display the Configuration View

- If the Configuration view is not already showing in the Environment Manager dialog box, click on the **Configuration** tab.



Because you can perform multiple tasks on the Configuration view, this guide provides a separate topic for each task.

If you need to	Go to this topic
Decide whether to erase error, log, and trace files at the beginning of each session (e.g., ERROR_CLEAR)	“To Enable or Disable File Erasing” on page 485
Specify the location of error, log, and trace files	“To Specify File Locations” on page 486
Save or close the Configuration view	“To Save or Close the Environment Manager Dialog” on page 481

To Enable or Disable File Erasing

- 1 In the Name column, select the file for which you want to decide whether to erase.
- 2 In the Value column, click the drop-down arrow and select one of the following:
 - *True*—erase the file at the beginning of each editing session
 - *False*—append information from the current session to the end of the file

To Specify File Locations

- 1 In the Name column, select the file for which you want to specify a location.
- 2 In the Value column, click  to browse for the new folder.
- 3 Click **OK** and you're returned to the Configuration view.

NOTE
If you're defining an environment for a platform other than Win32, you can manually enter the location and name of the required files.

Using the Database Interface View

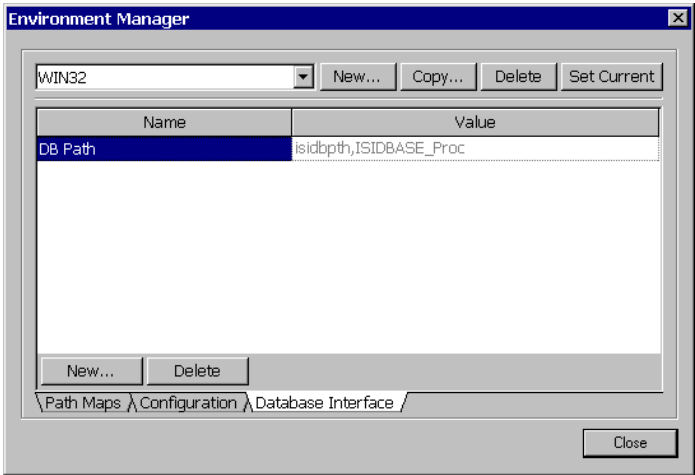
Use the third view in the Environment Manager dialog box to define one or more database interfaces. Each of the database interfaces (e.g., DB Path, Documange, Flat File, and VLAM) defines a unique method for accessing documents in the forms cache.

NOTE
If you're an "advanced user," you can add your own, custom interface.
The Database Interface view is comprised of the following keyword and its value.

Keyword	Value
Name	The module and program name for accessing the database.

To Display the Database Interface View

- If the Database Interface view is not already showing in the Environment Manager dialog box, click on the **Database Interface** tab.

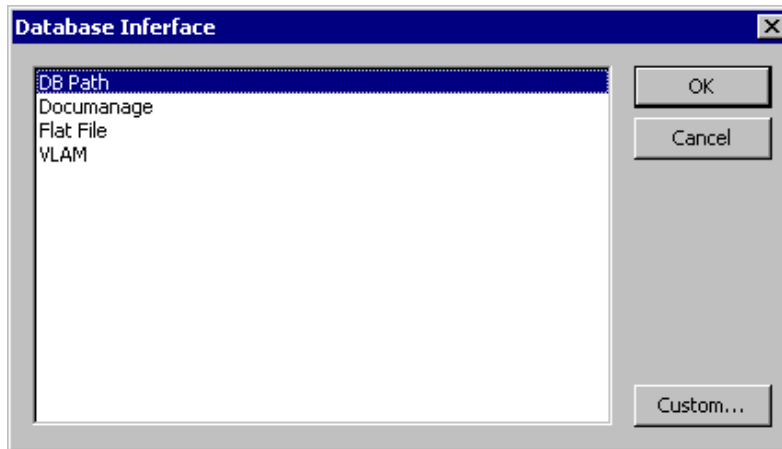


Because you can perform multiple tasks on the Database Interface view, this guide provides a separate topic for each task.

If you need to	Go to this topic
Add a predefined interface	"To Add a Predefined Interface" on page 487
Add a custom interface	"To Add a Custom Interface" on page 487
Delete an interface	"To Delete an Interface" on page 488
Save or close the Database Interface view	"To Save or Close the Environment Manager Dialog" on page 481

To Add a Predefined Interface

- 1 Click **New** and the Database Interface dialog displays.

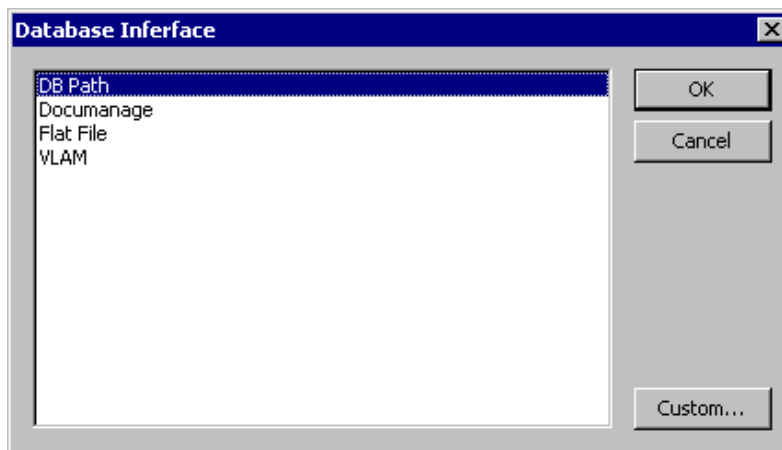


This list displays the remaining available database interfaces.

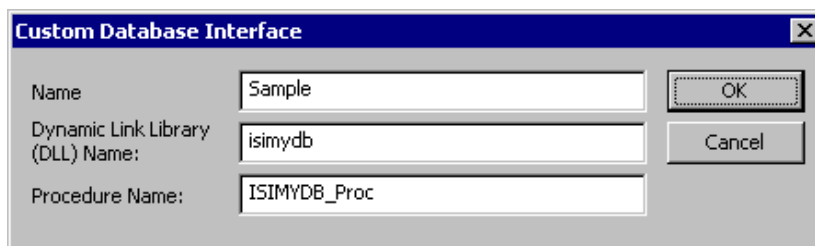
- 2 Select the desired database interface from the list box.
- 3 Click **OK** and you're returned to the Database Interface view.

To Add a Custom Interface

- 1 Click **New** and the Database Interface dialog displays.



- 2 Click **Custom** and the Custom Database Interface dialog displays.



- 3 In the Name text box, type a name for your custom interface.
- 4 In the Dynamic Link Library (DLL) Name: text box, type the name of the DLL.

- 5 In the Procedure Name: text box, type the name of the procedure within the DLL.

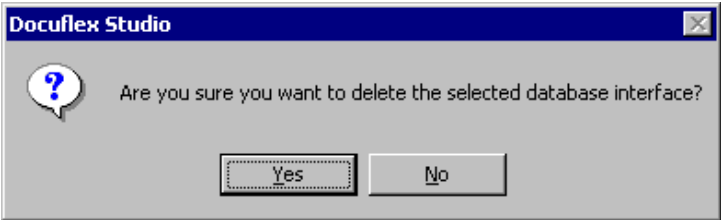
WARNING!

You *must* type the correct dynamic link library name and procedure name (the entry point in the DLL); otherwise, you'll experience problems when attempting to access the forms cache.

- 6 Click **OK** and you're returned to the Database Interface view.

To Delete an Interface

- 1 In the Name column, select the database interface you want to delete.
- 2 Click **Delete** and you're prompted to confirm your decision.



- 3 Click **OK** and you're returned to the Database Interface view.

Managing Environments

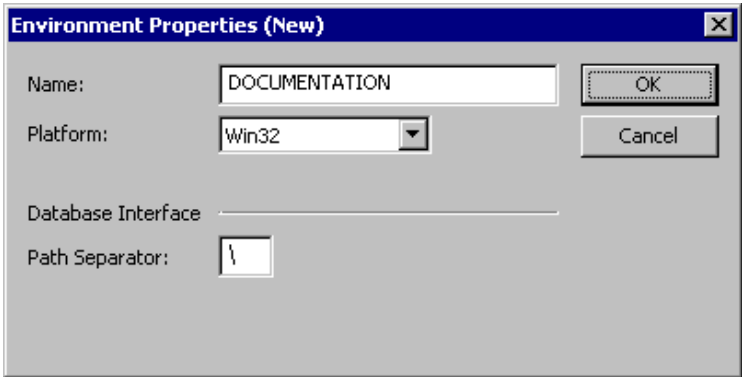
The Environment Manager enables you to create one or more environments, which is useful if you need to create unique environments for specific platforms or to quickly change from one set of path maps, configurations, and database interfaces to another.

Because you can perform multiple tasks in the Environment Manager, this guide provides a separate topic for each task.

If you need to	Go to this topic
Add an environment	"To Add an Environment" on page 488
Copy an environment	"To Copy an Environment" on page 489
Delete an environment	"To Delete an Environment" on page 489
Make an environment "current"	"To Set the Current Environment" on page 490
Save or close the Environment Manager	"To Save or Close the Environment Manager Dialog" on page 481

To Add an Environment

- 1 Click **New** and the Environment Properties (New) dialog displays.



- 2 In the Name: text box, type the name of the environment.

NOTE

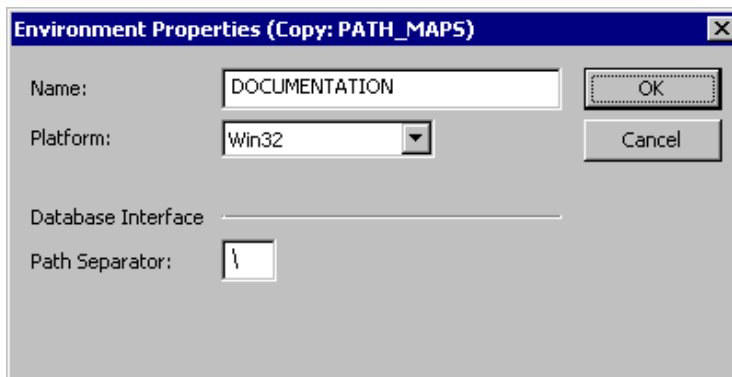
You cannot create an environment with the same name as an existing one.

- 3 In the Platform: drop-down list box, select the platform for this environment (such as Win32 or UNIX).
- 4 In the Path Separator: text box, type the character appropriate for the platform.
- 5 Click **OK** and you're returned to the Environment Manager dialog.

To Copy an Environment

You can easily create an environment, based on an existing one, by using the copy feature. By copying an environment, you can create an environment and make modifications without having to completely rebuild.

- 1 From the environment name drop-down list box, select the environment you want to copy.
- 2 Click **Copy** and the Environment Properties (Copy: *name*) dialog displays.



- 3 In the Name: text box, type the name of the environment.

NOTE

You cannot create an environment with the same name as an existing one.

- 4 In the Platform: drop-down list box, select the platform for this environment (such as Win32 or UNIX).
- 5 In the Path Separator: text box, type the character appropriate for the platform.
- 6 Click **OK** and you're returned to the Environment Manager dialog.

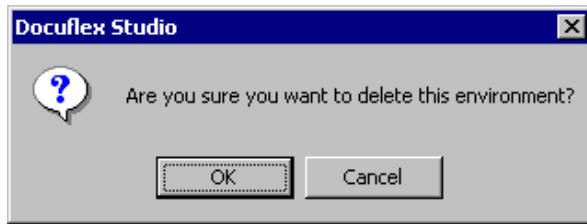
To Delete an Environment

- 1 From the environment name drop-down list box, select the environment you want to delete.

TIP

You cannot delete an environment if it's designated as the "current" one. For the current environment, both **Delete** and **Set Current** are disabled.

- 2 Click **Delete** and you're prompted to confirm your decision.



- 3 Click **OK** and you're returned to the Environment Manager dialog.

To Set the Current Environment

When the environment file contains more than one environment, you can select the one you want to use as the default. Docuflex and other applications use the "current" environment for locating necessary resources.

TIP

If you're editing the "current" environment, **Set Current** is, obviously, disabled.

- 1 From the environment name drop-down list box, select the environment you want to use as the default.
- 2 Click **Set Current**.

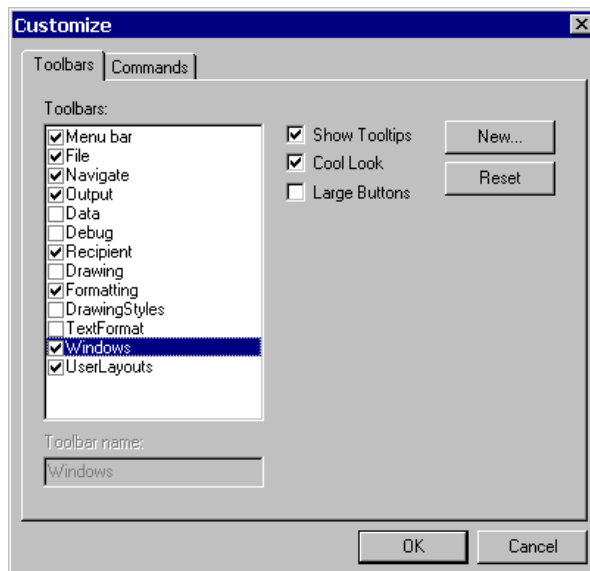
Customize

Use the Customize command to specify default settings for viewing toolbars, and create custom toolbars specific to your work environment.

To Customize Toolbars

- Select **Tools>Customize**.

The Customize dialog displays.



Using the Customize Dialog and Views

The Customize dialog box contains multiple views. You complete an option by specifying general operating parameters under these views.

To Use a Customize View

- Do any of the following:

To	Go to this topic:
Specify the characteristics and display status of the various toolbars	“Using the Toolbars View” on page 491
View the commands represented by each toolbar icon	“Using the Commands View” on page 493

To Save or Close the Customize Dialog

- Do one of the following:

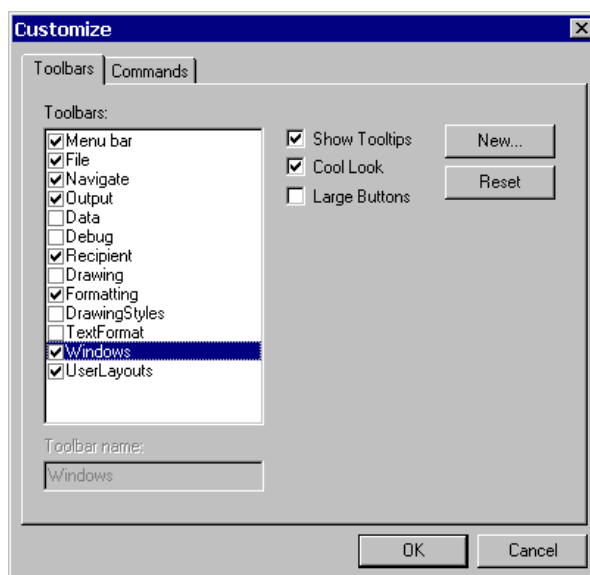
To	Do this
Apply the specifications you’ve provided without closing the dialog box	Click Apply .
Apply the specifications you’ve provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without applying the specifications you’ve provided	Click Cancel .

Using the Toolbars View

Use the first view in the Customize dialog box to specify the display appearance of the toolbars, as well as the presence or absence of each toolbar.

To Display the Toolbars View

- If the Toolbars view is not already showing in the Customize dialog box, click on the **Toolbars** tab.



Because the Toolbars view contains several group boxes of specifications, this guide provides a separate topic for each group.

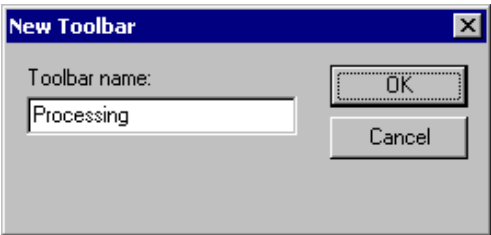
If you need to	Go to this topic
Specify whether to display toolbars and define display characteristics for ALL toolbars	“To Toggle the Display and Characteristics of Toolbars” on page 492
Create a custom toolbar	“To Create a Custom Toolbar” on page 492
Saving or closing of the Toolbars view	“To Save or Close the Customize Dialog” on page 491

To Toggle the Display and Characteristics of Toolbars

- 1 In the Toolbars list box, check each toolbar you want to display. Likewise, uncheck each toolbar you want to hide. If a check mark appears in the check box, this toolbar displays, and vice versa.
- 2 Check **Show Tooltips** if you want Docuflex Studio to display a short description of each toolbar icon and selection or list box.
- 3 Check **Cool Look** if you want Docuflex Studio to display the toolbar icons without visible borders.
- 4 Check **Large Buttons** if you want the icons magnified for easier recognition.
- 5 (Custom toolbars only) The Toolbar name text box displays the file name for each custom toolbar. As soon as you highlight the custom toolbar in the Toolbars list box, you can change its name here.

To Create a Custom Toolbar

- 1 Click **New** and Docuflex Studio displays the New Toolbar dialog box.



- 2 In the Toolbar name text box, type a descriptive name for the new toolbar.
- 3 Click **OK** to save the toolbar; otherwise, click **Cancel** to exit without saving. Docuflex Studio displays the new toolbar in its own window.



- 4 Click-and-drag icons or menu options to build your new, custom toolbar (see [“Using the Commands View”](#) on page 493).



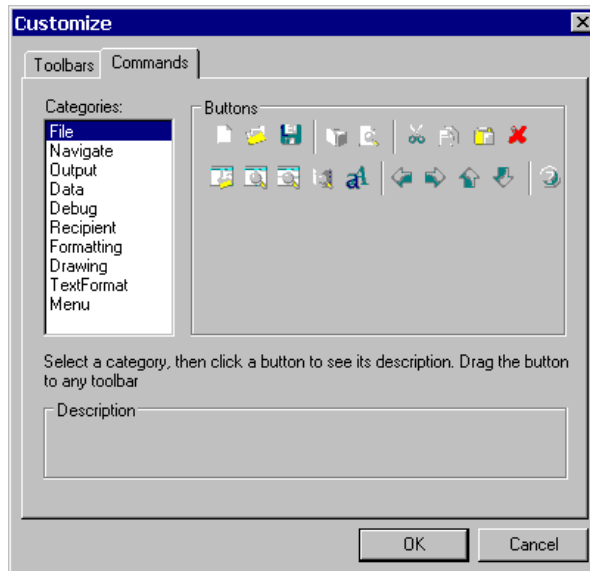
- 5 Click **OK** to end your customizing session.

Using the Commands View

Use the second view in the Customize dialog box to see an explanation of each icon on the various standard toolbars, and select icons to populate custom toolbars.

To Display the Commands View

- If the Commands view is not already showing in the Customize dialog box, click on the **Commands** tab.



Because the Commands view contains several group boxes of specifications, this guide provides a separate topic for each group.

If you need to	Go to this topic
View an explanation of each icon and menu item	“To View Icon Explanations” on page 493
Click-and-drag icons or menu items to a toolbar	“To Place Icons on Toolbars” on page 494
Saving or closing of the Commands view	“To Save or Close the Customize Dialog” on page 491

To View Icon Explanations

- 1 Select an item in the Categories list box.
Its icons are displayed in the Buttons group box.
- 2 Click an icon in the Buttons group box.
Its explanation is displayed in the Description group box.

To Place Icons on Toolbars

- 1 Browse through the items in the Categories list box until you've located the desired icon or menu item in the Buttons group box.
- 2 Click the desired icon or menu item and drag it onto the new toolbar.

CAUTION

Use extreme caution when you move icons and menu items in your interface. You can drag icons from existing toolbars to other toolbars; you can also rearrange the order of menu options, such as File, Edit, and so on.

If you make a mistake while customizing the toolbars, choose one of the following actions:

- Click-and-drag the offending icon or menu item off of the toolbar (e.g., drag it to the Title Bar).
- Select the toolbar from the Toolbars view and click either **Reset** (for the standard toolbars) or **Delete** for custom toolbars.

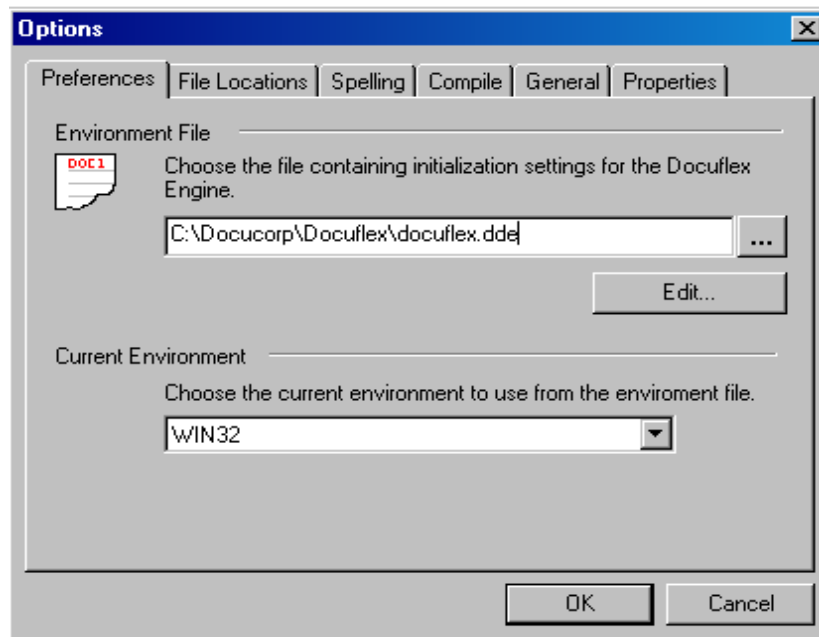
Options

Use the Options command to specify several default Docuflex Studio options for use when composing and proofing your document. The Options dialog and all of its properties are used to manage “environment-related” information. This information is not project-specific, so it applies to all sessions.

To Specify Docuflex Studio Options

- Select **Tools>Options**.

The Options dialog displays.



Using the Options Dialog and Views

The Options dialog box contains several views. You complete an option by specifying general operating parameters under these views.

To Use an Options View

- ▶ Do any of the following:

To specify	Go to this topic
The initialization file and current environment	“Using the Preferences View” on page 495
File locations	“Using the File Locations View” on page 496
Spell Checking settings	“Using the Spelling View” on page 498
Document compilation settings	“Using the Compile View” on page 499
Autosave settings	“Using the General View” on page 500
The properties to appear on the Custom tab	“Using the Properties View” on page 501

To Save or Close the Options Dialog

- ▶ Do one of the following:

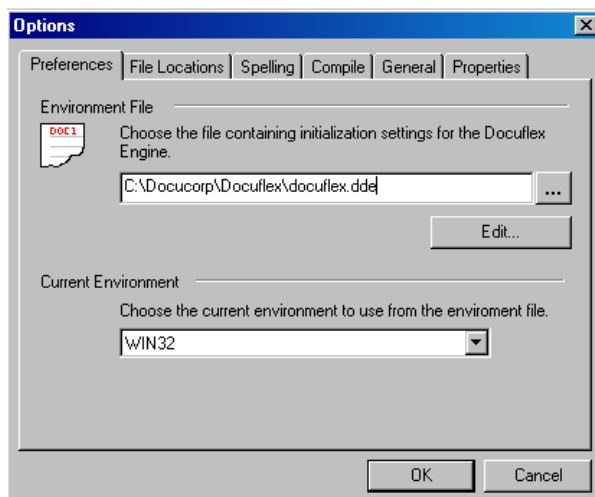
To	Do this
Apply the specifications you’ve provided and return to Docuflex Studio	Click OK .
Return to Docuflex Studio without applying the specifications you’ve provided	Click Cancel .

Using the Preferences View

Use the first view in the Options dialog box to specify the name and location of the initialization file for this project, as well as the current environment.

To Display the Preferences View

- ▶ If the Preferences view is not already showing in the Options dialog box, click on the **Preferences** tab.



Because the Preferences view contains several group boxes of specifications, this guide provides a separate topic for each group.

If you need to	Go to this topic
Specify the name and location of the file containing settings crucial to the Composition Engine	“To Specify the Initialization File” on page 496
Make changes to the environment	“To Make Changes to the Environment” on page 496
Select the current environment from the environment file	“To Select the Current Environment” on page 496
Save or close the Preferences view	“To Save or Close the Options Dialog” on page 495

To Specify the Initialization File

- ▶ In the Environment File text box, type the name and location of the file containing initialization settings for the Composition Engine.
- or-
- Click  to browse the selection of initialization files.

To Make Changes to the Environment

- ▶ Click **Edit** and the Environment Manager displays (see [“Managing Environments” on page 488](#)).

To Select the Current Environment

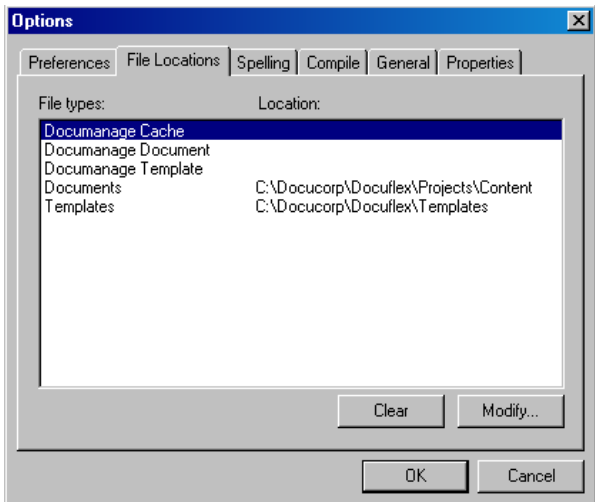
- ▶ In the Current Environment drop-down list box, select the environment you want to use.
- If you need to edit the current environment, see [“Managing Environments” on page 488](#). If you need to add an environment, see [“To Add an Environment” on page 488](#).

Using the File Locations View

Use the second view in the Options dialog box to specify the path names and locations of the support files for the project.

To Display the File Locations View

- ▶ If the File Locations view is not already showing in the Options dialog box, click on the **File Locations** tab.



The included file types are as follows:

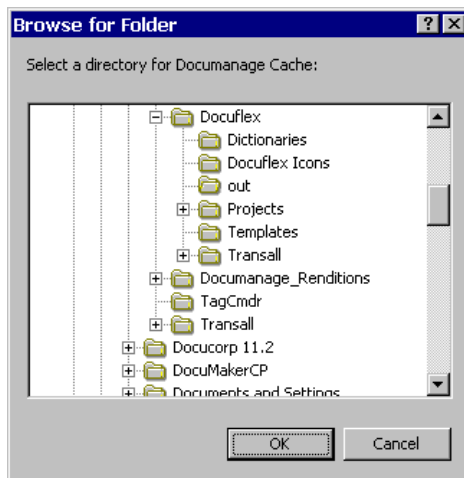
- Documange Cache—this entry specifies the default location of “local” Documange files on your workstation.
- Documange Document—this entry specifies the default location of project files (e.g., *.DDP) to use for the **File>Open>Documange** and **File>Save As>Documange** dialogs.
- Documange Template—this entry specifies the default location of templates (e.g., *.DDT) to use for the **File>New>Documange** dialog.
- Documents—this entry specifies the default location of project files (e.g., *.DDP) to use for the **File>Open>File System** and **File>Save As>File System** dialogs.
- Templates—this entry specifies the default location of templates (e.g., *.DDT) to use for the **File>New>File System** dialog.

Because the File Locations view contains several group boxes of specifications, this guide provides a separate topic for each group.

If you need to specify the	Go to this topic
Path name of files that support your project	“To Specify File Locations” on page 497
Saving or closing of the File Locations view	“To Save or Close the Options Dialog” on page 495

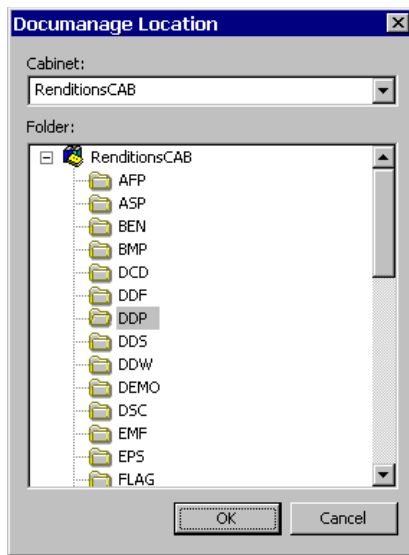
To Specify File Locations

- 1 From the file listing, select the File type you want to change, and then click **Modify**.
- 2 If you’re modifying the locations for Docuflex Templates, Docuflex Documents, or the Documange Cache, the Browse for Folder dialog displays.



Navigate the tree listing to locate the directory where you want Docuflex Studio to search for the files, and then click **OK**.

- 3 If you're modifying the locations for Documange Templates and Documange Documents, the Documange Location dialog displays.



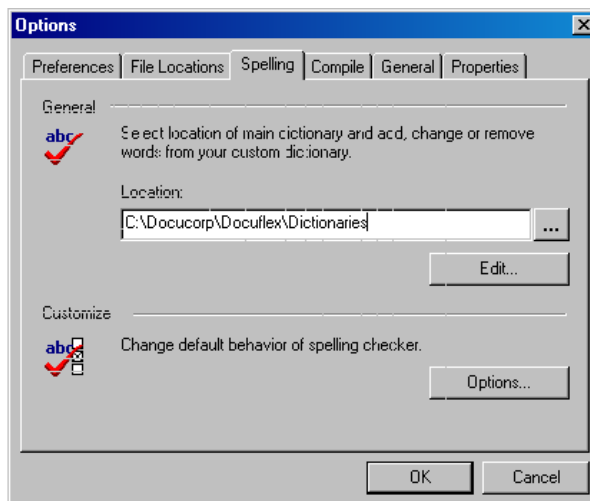
Select the appropriate Cabinet and Folder for the location of your files, and then click **OK**.

Using the Spelling View

Use the third view in the Options dialog box to customize the dictionary and select some default characteristics for the spell checking application.

To Display the Spelling View

- If the Spelling view is not already showing in the Options dialog box, click on the **Spelling** tab.



Because the Spelling view contains several group boxes of specifications, this guide provides a separate topic for each group.

If you need to	Go to this topic
Select the location of the main dictionary	“To Select the Location of the Main Dictionary” on page 499
Make changes to or customize the contents of the main dictionary	“To Edit the Main Dictionary” on page 499
Change the default settings of the Spell Checker	“To Edit the Options” on page 460
Closing or saving the Spell Checking view	“To Save or Close the Options Dialog” on page 495

To Select the Location of the Main Dictionary

- In the Location text box, type the path where you want to store the main or default dictionary.

-or-

Click  and use the Select Directory dialog to navigate to the correct location.

To Edit the Main Dictionary

- 1 Click **Edit** to display the Dictionaries dialog box.
- 2 Continue with the procedure discussed on page 462.

Using the Compile View

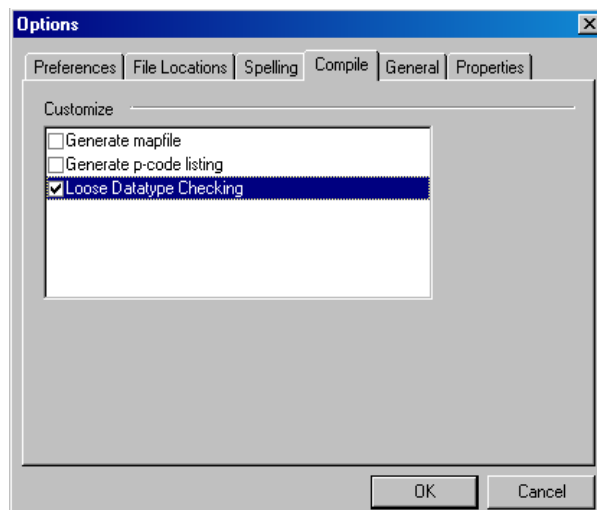
Use the fourth view in the Options dialog box to instruct the compiler to generate additional reports containing information about your document. The compiler can

- generate a data map, with the filename extension of **.map**
- generate a P-Code listing, with the filename extension of **.pco**
- relax its strict enforcement of compatible data types

The two reports are text files, so you can view them with any text editor.

To Display the Compile View

- If the Compile view is not already showing in the Options dialog box, click on the **Compile** tab.



Because the Compile view contains several group boxes of specifications, this guide provides a separate topic for each group.

If you need to	Go to this topic
Customize Docuflex compiler settings	“To Customize Compiler Settings” on page 500
Closing or saving the Compile view	“To Save or Close the Options Dialog” on page 495

To Customize Compiler Settings

- 1 Enable **Generate mapfile** to create a symbol map, similar to a COBOL “d-list”.
The symbol map does not indicate where in the memory of the load module the data landed, like in COBOL, but specifies the symbols and where they point for data buckets.
- 2 Enable **Generate P-Code listing** to create the PCO file or create it in a different directory.
The PCO listing is a dump of the P-Code assembler generated by the compiler.
- 3 Disable **Loose Datatype Checking** to enable strict datatype type checking.
The Loose Datatype Checking feature tells the compiler to generate code automatically converting the data types of variables on-the-fly so you will not receive a “mismatched data type” compile time error.

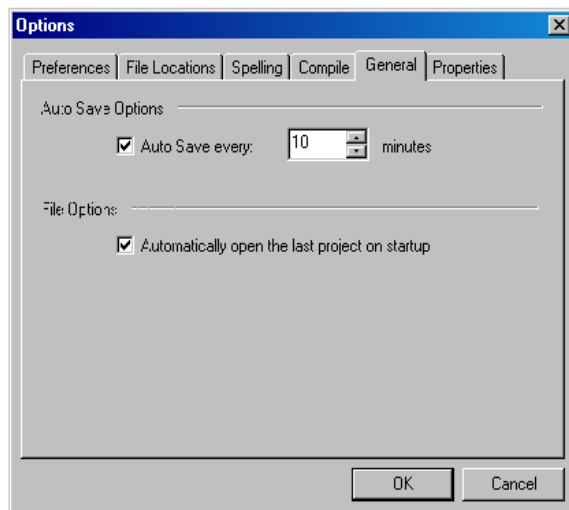
Using the General View

Use the fifth view in the Options dialog box to set the auto save options to save your work at regular intervals. Auto Save automatically creates a backup copy of your work based on a time interval you specify. If, for instance, you experience a power outage while working, Studio will restore the latest backup copy when you restart Studio.

Under File Options you can specify whether to open the last project on startup.

To Display the General View

- If the General view is not already showing in the Options dialog box, click on the **General** tab.



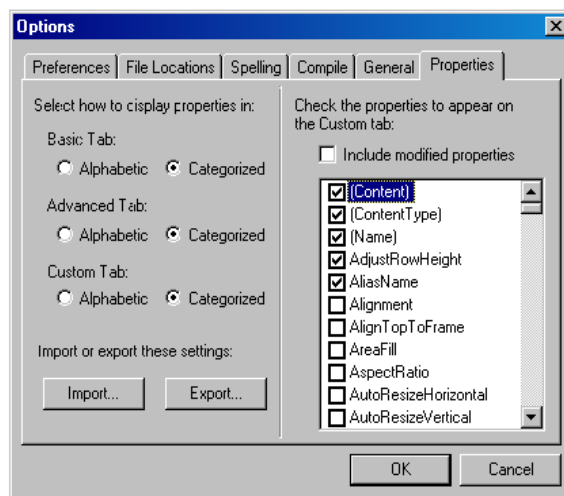
Using the Properties View

Use the sixth view in the Options dialog box to:

- display properties under the Basic, Advanced, and Custom tab of the Component Properties according to the following views:
 - **Alphabetic** - a listing of all properties in alphabetical order, or
 - **Categorized** - a grouping of all properties in their functional categories.
- select the properties that will appear under the Custom Tab including properties that have been modified.
- import/export the selected properties settings in order to decrease the setup time on other computers.

To Display the Properties View

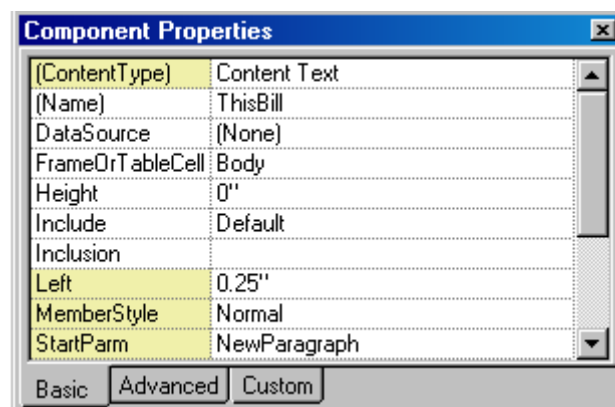
- ▶ If the Properties view is not already showing in the Options dialog box, click on the **Properties** tab.



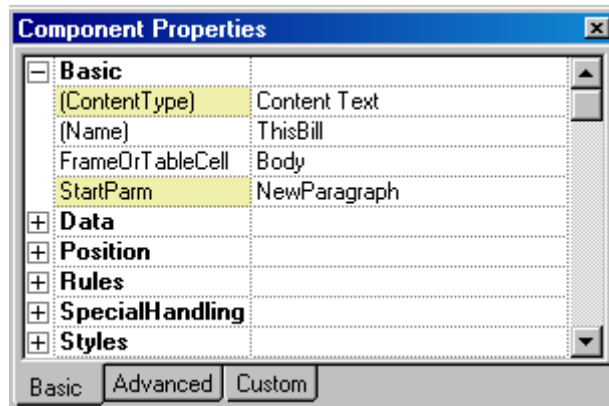
To Select How to Display Properties Under the Basic, Advanced, and Custom Tab in Component Properties

- 1 Select the radio button next to the desired display settings for each tab.
- 2 Click **OK**.

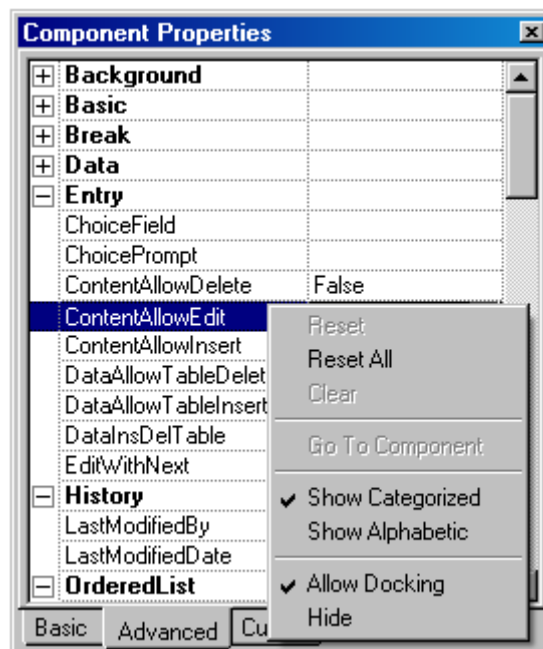
Depending on your selection, the properties in Component Properties will be displayed according to the “Alphabetic” view:



...or by “Categorized” view:



The view can also be changed at anytime within Component Properties by selecting the desired view from the right-click menu:



To Select the Properties to Display Under the Custom Tab

- 1 Check the boxes next to the individual property names. Check the “Include modified properties” box to include any properties that have been modified.
- 2 Click **OK**.

To Import/Export Properties Settings

The Import and Export buttons allow users to import and export a standard text file containing properties settings. This option is useful in the event that if a user switches to another machine they can simply export the properties files and then import the file to a new machine. It is also helpful if your Docuflex administrator wishes to create and use standard properties settings that can be shared with other Docuflex users.

Window Menu

The Window menu comprises the following menu options:

If you want to	See
Close the active window	"Close" on page 503
Close all windows	"Close All" on page 503
Place windows in a overlapping sequent	"Cascade" on page 503
Place windows next to each other from left to right	"Tile Horizontally" on page 503
Place windows next to each other from top to bottom	"Tile Vertically" on page 504
Switch between the open windows	"Switching Windows" on page 504

Close

Use the Close command to close the window that's currently active (e.g., Layout, Preview, Report, Rule, or Source).

To Close a Window

- ▶ Select **Window>Close**.

Close All

Use the Close All command to close all open windows (e.g., Layout, Preview, Report, Rule, and Source).

To Close All Windows

- ▶ Select **Window>Close All**.

Cascade

Use the Cascade command to stagger the display of the windows in an overlapping manner. Each window is slightly offset so you can see the window beneath it.

To Cascade Windows

- ▶ Select **Window>Cascade**.

Docuflex Studio resizes the windows and stacks them on top of each other.

Tile Horizontally

Use the Tile Horizontally command to place the windows side by side from top to bottom. Docuflex Studio takes up to three windows, stretches them so they're wider than they are tall, and uses all available space not taken up by the various windows.

NOTE

Once you exceed three windows, Tile Horizontally and Tile Vertically achieve the same results.

To Tile Horizontally All Open Windows

- ▶ Select **Window>Tile Horizontally**.

Docuflex Studio stretches the windows horizontally and stacks them from top to bottom.

Tile Vertically

Use the Tile Vertically command to place the windows side by side from left to right. Docuflex Studio takes up to three windows, stretches them so they're taller than they are wide, and uses all available space not taken up by the various windows.

NOTE

Once you exceed three windows, Tile Horizontally and Tile Vertically achieve the same results.

To Tile Vertically All Open Windows

- ▶ Select **Window>Tile Vertically**.

Docuflex Studio stretches the windows vertically and stacks them from left to right.

Switching Windows

All open windows are displayed in a list at the bottom of the Window menu. You can select the window that you want to make active.

To Switch Between Open Windows

- ▶ Choose the window you want to work in from the list at the bottom of the Window menu.

Help Menu

The Help menu comprises the following menu options:

If you want to	See
View the Help system	“Docuflex Studio Help” on page 505
View information about your current version	“About Docuflex Studio” on page 505

Docuflex Studio Help

Use the Docuflex Studio Help command to view the compiled HTML help system for Docuflex Studio.

To View the Help System

- 1 Select **Help>Docuflex Studio Help**.
-or-
Press **F1**.
The Docuflex Studio help system displays.
- 2 Use the navigation buttons to explore the help system.

About Docuflex Studio

Use the About Docuflex Studio command to view the copyright information and the current version and release number.

To View the About Box

- 1 Select **Help>About Docuflex Studio**.
The About Docuflex Studio dialog displays.
- 2 Click **More** for additional copyright information or **OK** to return to Docuflex Studio.

The Composition Engine

Basics

The Composition Engine is the behind-the-scenes workhorse of Docuflex Studio. When you open the Preview window to view your document, the Composition Engine has already performed its main task—composing your document.

What are Passes?

The Composition Engine executes three “passes” when it creates your document. In each of these passes, the Composition Engine adheres to the various constraints you’ve specified in your project, such as processing rules, overflow definitions, and document content contained in members:

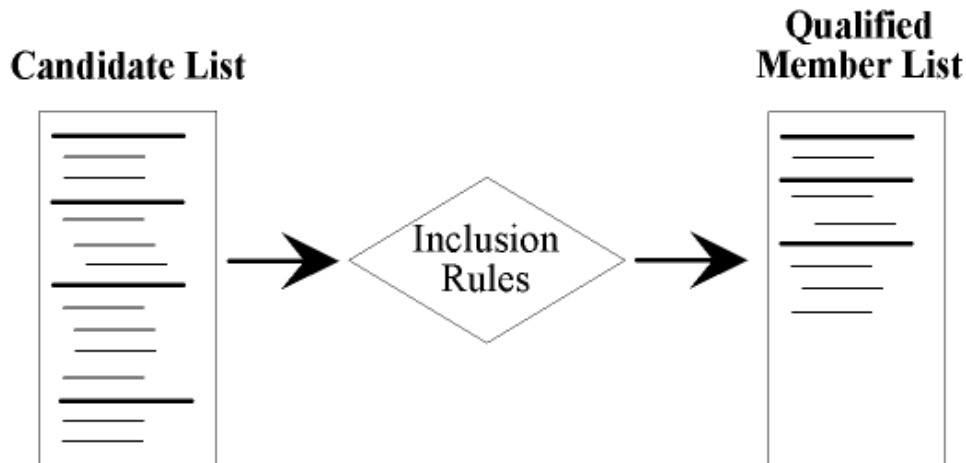
- Pass 1—Inclusion rules are evaluated and a list of members to be composed is accumulated.
- Pass 2—Members are composed and most fields (tags) are resolved. Some tags cannot be resolved until Pass 3 (Finishing).
- Pass 3—“Total” tags and cross-reference tags, including *DMG.REF.F.XXX* and *DMG.REF.B.XXX*, are resolved.

Pass 1 (Inclusion)

The first pass is also referred to as the Inclusion Pass. At first, all members are considered as “candidates” for possible inclusion in the document. The Composition Engine scans through the candidates and determines which ones to discard based on their inclusion rules. All of the candidates that satisfy their inclusion rules are placed on the “selected” list.

NOTE

The Overflow Definition members that are selected in this pass are still eligible for inclusion at composition event processing time.



Pass 2 (Composition)

The second pass is also referred to as the Composition Pass. Composition determines the:

- Page definition currently in effect
- First valid page in the page definition that's valid.

Some of the decisions being made are, for example: Is this member on the first page of the section? What's the first page in the page definition that's valid on page one? Is the frame to which the member is assigned contained on that page?

Composition includes such page layout events as new columns and pages. During this pass, the Composition Engine publishes the Overflow Definition members, since they're based on the properties `BeginPage`, `BeginColumn`, `EndColumn`, and `EndPage`.

Pass 3 (Finishing)

The third and final pass is also referred to as the Finishing Pass. During this pass, the Composition Engine “finishes” the tasks that were impossible until the document was completely laid out, including the correct page numbers for the table of contents, index, and cross-references to certain pages.

During Pass 3, all pages have been composed and the totals are known. The following tags are all classified as Pass 3 tags:

- *DCP.TOTAL.XXX* and *DMG.TOTAL.XXX* (except *DCP.TOTAL.COLUMNS*)
- *DCP.CURRENT.SHEET.COUNT*
- Post processing by *DFLXOUT* (Values such as barcodes that are not known during composition):
 - *DCPPP.XXX*

Pass 3 tags can't be replaced until the document has been completely composed. You must classify these tags as BPSD, or VSD with Sample Text defined in the Field Properties dialogue box (see “[Using the Field Properties Dialog](#)” on page 447).

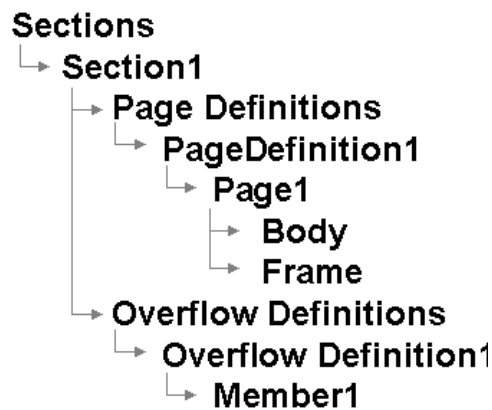
In Pass 3, it is also possible to compose additional content on each page that depends upon an accurate value for *DCP.TOTAL.PAGES*. Content such as barcodes or decorative page numbering may be defined in an Overflow Definition with a *WhenUsed* value of “FinishPage” to indicate that the content in the Overflow Definition will compose in Pass 3. Pass 3 content should target a dedicated frame that was not used during Pass 2 composition since Pass 3 content will appear in a new instance of the requested frame. The new frame instance will overlay any existing instance, so using a frame like *Body* in both Pass 2 and Pass 3 would not be desirable. This “FinishPage” feature may eliminate the need to use *DCPPP.XXX* tags in *DFLXOUT* for some types of barcodes.

How Does the Composition Engine Compose the Document?

The Composition Engine follows a very rigid structure when it begins to compose your document for viewing, printing, or archiving. The Composition Engine:

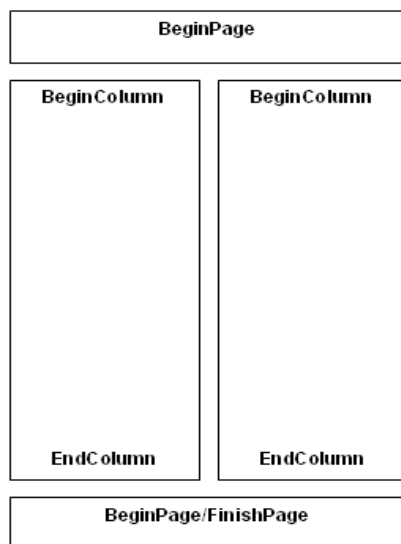
- 1 Advances to the first Section and determines the Page Definition to which this Section is assigned.
- 2 Examines the appropriate Page Definition and identifies the first eligible Page Layout, based on the *SectionBegPage* and *SectionEndPage* properties.
- 3 Locates all the frames on the first eligible Page Layout and lays out the structure, based on the dimensions of the frames.
- 4 Determines whether this Section specifies an Overflow Definition.
If an Overflow Definition is specified, the Composition Engine decides whether the Overflow Definition is a candidate, based on the *WhenUsed* property.
- 5 Proceeds to the primary frame and begins composition.

The following illustration presents the structure in an outline format:



The WhenUsed property consists of five possible options—BeginPage, BeginColumn, EndColumn, EndPage, or FinishPage (for more information on FinishPage, refer to “[Pass 3 \(Finishing\)](#)” on page 509).

Of course, every page has a beginning and an ending, as do columns. But what you must keep in mind, and what is frequently overlooked, is that every frame also has at least one column. In the Component Properties for frames, the ColumnCount property defaults to 1 column(s). When assigning an Overflow Definition, you must be careful to link the definition to the correct member and place the member in the proper frame.



DFLXCOMP

DFLXCOMP is a command-line executable, i.e. the composition engine, that composes the documents you created in Docuflex Studio. *DFLXCOMP* uses the data file from Transall and the document project from Docuflex Studio to create the final documents. *DFLXCOMP* has no graphical interface and is meant to be run from a batch file.

To see usage information, type “**dflexcomp.exe /?**” on the command line:

```
Usage: dflexcomp.exe dde= env= ddf= ddp= effdate= opt= recip=
Usage: dflexcomp.exe ini= env= ddf= ddp= effdate= opt= recip=
dde= (preferred) full pathname of environment file (docuflex.dde)
ini= (outdated parm) fullpath name of the application dflexout.ini file
    default: docuflex.ini
env= (optional) the docuflex.ini section name of the path maps for
    resources
    default: [PATH_MAPS]
ddf= (optional, if using noddff) full path name of the Docuflex data file
    created by Transall
ddp= full path of the Docuflex document project
effdate= (optional) effective date as YYYYMMDD/today/disabled
opt= (optional) noddff, nostix
    opt=noddff - running with no Docuflex Data File
    opt=nostix - running with no Stacked Index
recip= (optional) restrict composition to specific recipient type
out= (optional) override the output filename for any recipients
    processed
```

TIP

To ensure backward compatibility, **dflex32.exe** (the old name for the composition engine) is still available so you do not have to modify existing batch files when running composition.

Sample Syntax

The following sample depicts the syntax of *DFLXCOMP*:

```
dflexcomp dde=c:\docucorp\docuflex\docuflex.dde
ddf=c:\docucorp\docuflex\projects\newdata.ddf
ddp=c:\docucorp\docuflex\projects\myproj.ddp
effdate=20060502 [env=OfficePC]
opt=noddff opt=nostix recip=recipient_name
out=file_name tdm=ServerName:PortNumber:JobName
```

where:

Keyword	Value
dde= -or- ini=	The full path and file name of the <i>docuflex.dde</i> or other environment file. Note: You can still use the older <i>ini=</i> parameter to reference the <i>Docuflex.ini</i> file.
ddf=	The full path and file name of the Docuflex data file produced by Transall.
ddp=	The full path and file name of the Docuflex document project file produced by Docuflex Studio.
effdate=	The date on or after which current forms are included (see “ To Specify Effective Date Processing ” on page 406). The valid values are as follows: ■ YYYYMMDD—enable effective date processing as the specified date ■ today—enable effective date processing for today's date ■ disabled—(default) disable effective date processing

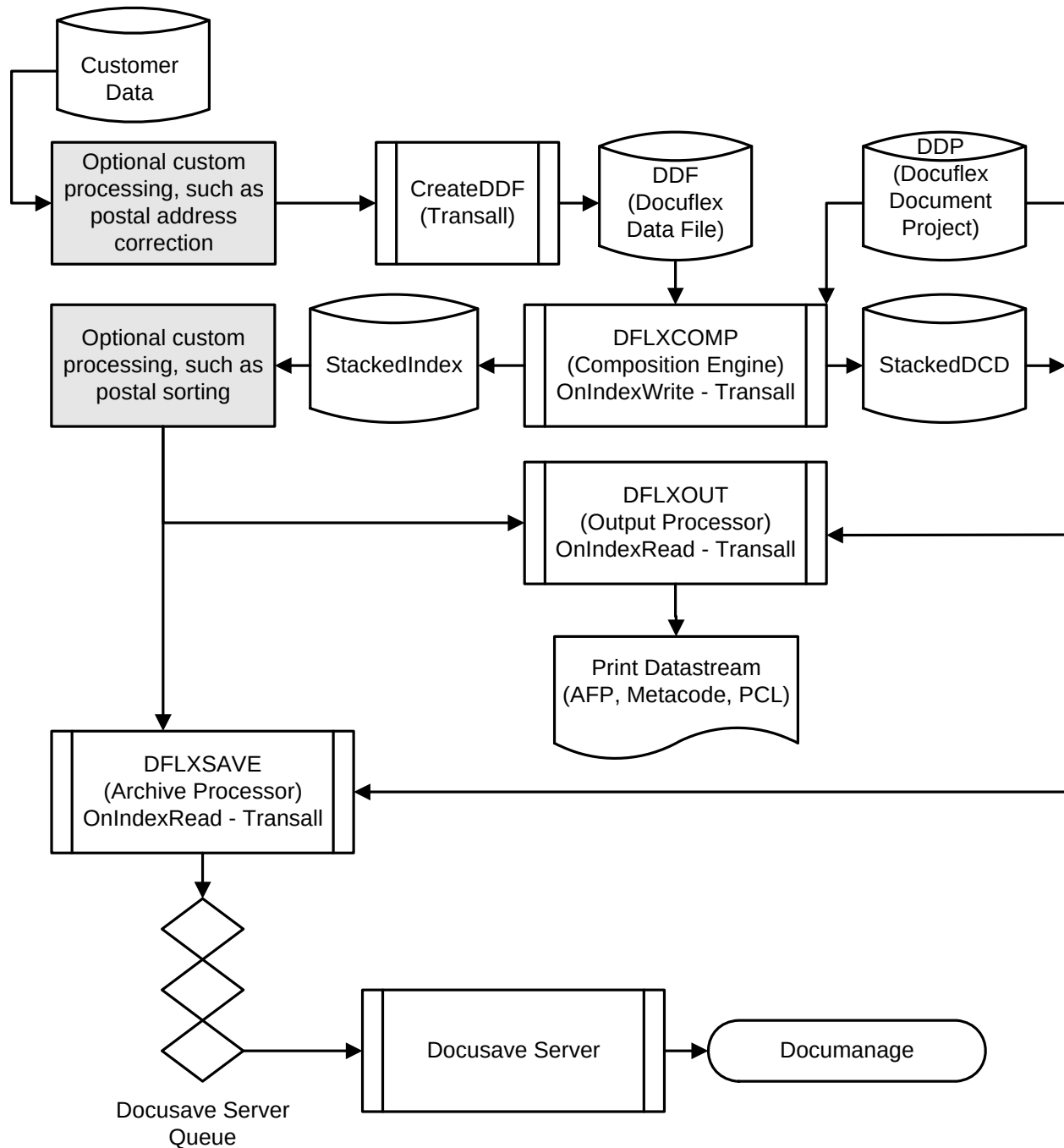
Keyword	Value
env=	The environment (env) parameter indicates that path maps for resources are located in a <i>specific</i> section of the indicated <i>Docuflex.ini</i> file, not the default section of [PATH_MAPS]. In the above sample syntax, Docuflex searches for a section in the <i>Docuflex.ini</i> file called [Environment - OfficePC]. Use Windows Notepad or any other text editor to create this section and its path maps in the <i>Docuflex.ini</i> file. One use of the environment parameter is to create separate sections for path maps of different operating systems. You can define these sections within the same <i>Docuflex.ini</i> file and share them across platforms (i.e., indicate the desired section with env=xxx).
opt=	The keyword representing an optional processing characteristic. The current options are as follows: ■ nodd—operating <i>DFLXCOMP</i> with NO Docuflex Data File (see “Operating DFLXCOMP with NoDDF” on page 515) ■ nostix—operating <i>DFLXCOMP</i> with NO STacked IndeX (see “StackedIndex” on page 534). Even though you specify the <i>nostix</i> option, <i>DFLXCOMP</i> still generates a “stacked” DCD file that you can process through <i>DFLXOUT</i> (see “Sample Syntax” on page 527).
recip=	The keyword allowing you to process a single recipient in your Docuflex project.
out=	This parameter overrides the output filename for any recipients processed. If you do not specify a filename, the output is stored in the filename specified in the channel(s) in the Docuflex project. Tip: If the output channel is associated with a Windows print driver, specifying out=**NONE** allows the output to be directed to the location attached to the Windows print driver, rather than a specific output file.
tdm=	A TDM connection string in the format of: [ServerName]:[PortNumber]:[JobName] where: ■ ServerName—Optional parameter with Domain Name or IP address of a server where the TDM server is running. ■ PortNumber—Optional parameter with Port Number on the server on which the TDM is listening. ■ JobName—Optional parameter with Job Name of connections of which to wait for completion. For more information about the Threaded Data Manager, see “Transall Threaded Data Manager” on page 337 of the Transall user’s guide.

NOTE

You should avoid using *DFLXCOMP* to create PDF output that is written to a single file. Bookmarks and references are lost when multiple PDFs are contained in a single file.

Data Flowchart

The following flowchart illustrates *DFLXCOMP*, *DFLXOUT*, *DFLXSAVE*, and their functions within Docuflex.



CreateDDF—Generates a Docuflex data file (*.DDF) from customer data and any optional custom processing.

DFLXCOMP (Composition Engine)—Generates stacked .DCD documents and a stacked index with document details.

DFLXOUT (Output Processor)—Generates output from stacked .DCDs. Reads StackedIndex for document details about StackedDCD. Fields such as two-dimensional barcodes are applied (see “DFLXOUT Basics” on page 527).

DFLXSAVE (Archive Processor)—Separates the individual documents in a stacked .DCD file and creates a queue job for Docusave, which then archives the documents in a Documange data repository (see “DFLXSAVE Basics” on page 550).

One Transall project contains the sources, destination, and script for CreateDDF, WriteIndex, and ReadIndex. The Docuflex document project (*.DDP) contains the Transall executable for WriteIndex and ReadIndex.

Recap Log File

The Recap log file provides a status of the documents you’ve composed, formatted for printing, or archived, and writes reports in a format similar to the following:

```
-----
(Docuflex)
Transaction Error Report - System timestamp: Tue Mar 23 10:57:57 2004

==> Datasets read:           12
==> Warning count:           0
==> Error count:             0
==> Datasets written:        12

End of Transaction Error Report - System timestamp: Tue Mar 23 10:58:01 2004
Elapsed Time: 3 seconds
-----
```

The report begins with the name of the application (e.g., Docuflex), followed by the beginning timestamp.

The middle section reveals the pertinent statistics:

Datasets read:	The total number of datasets or transactions read, including any containing errors. Note: This number could be 0 if an error was encountered that prevented any datasets from being read.
Warning count:	The number of datasets containing warning messages.
Error count:	The number of datasets encountering errors.
Datasets written:	The number of datasets successfully written, including datasets containing Warning level messages.

The ending timestamp is reported for the current application, followed by the elapsed time in seconds. This time span includes the interval from when the first dataset was read to when the last dataset was written. Because of rounding, the elapsed time

Each application writes either to its own file or to a common one. If you’re writing to the same file, you’ll probably want to use RECAP_CLEAR=0 so that the recap log file just produced by one application will not be deleted by another application.

If you do not specify a RECAP_FILE setting in the appropriate *Docuflex.ini* file, then no recap log file is created for that application. If you include a RECAP_FILE but no RECAP_CLEAR setting, then a recap log file is created but will not be cleared between executions (e.g., the default value for RECAP_CLEAR is 0).

Operating DFLXCOMP with NoDDF

Docuflex supports a processing mode, NoDDF, that does not read a Docuflex Data File (*.DDF). Instead, Docuflex acquires data “on-the-fly” from data sources defined to a Transall project. The advantage of this feature is that no DDF needs to be written and passed to Docuflex in the publishing process. Since there is no DDF required, this file does not have to be deleted after the publishing process, thus making for a cleaner processing environment.

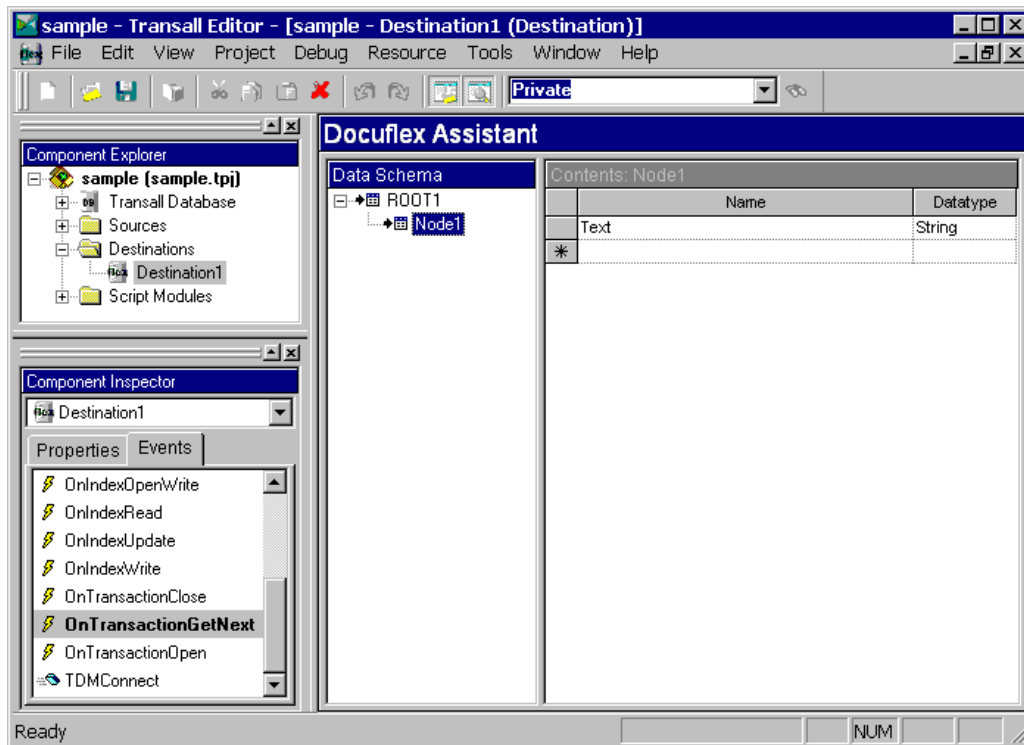
Configuring DFLXCOMP for NoDDF

Operating Docuflex with NoDDF requires a Transall project to collect data, just like operating with a DDF. The Transall project should be defined and tested *with a DDF* on the workstation where Docuflex will operate in NoDDF mode. This testing insures that this workstation has access to the various data sources tapped by Transall to feed data to Docuflex. You should view the DDF results from testing this Transall project in Docuflex Studio to ensure that the correct data is being made available when Docuflex is later operated with NoDDF.

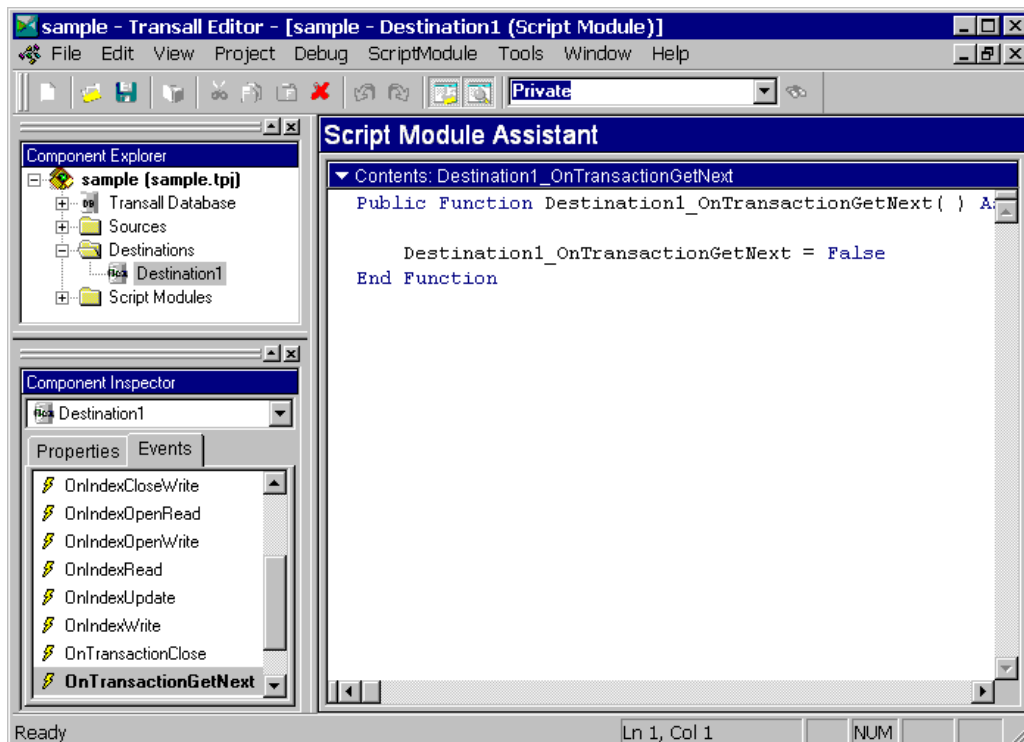
Once the Transall project is complete and tested with the Docuflex project via Docuflex Studio, you'll need to make a small change to the Transall project to enable it to feed data to Docuflex with NoDDF; namely, defining the OnTransactionGetNext, OnTransactionOpen, and OnTransactionClose event scripts to the Transall project's Data Destination for Docuflex.

To Configure DFLXCOMP for NoDDF

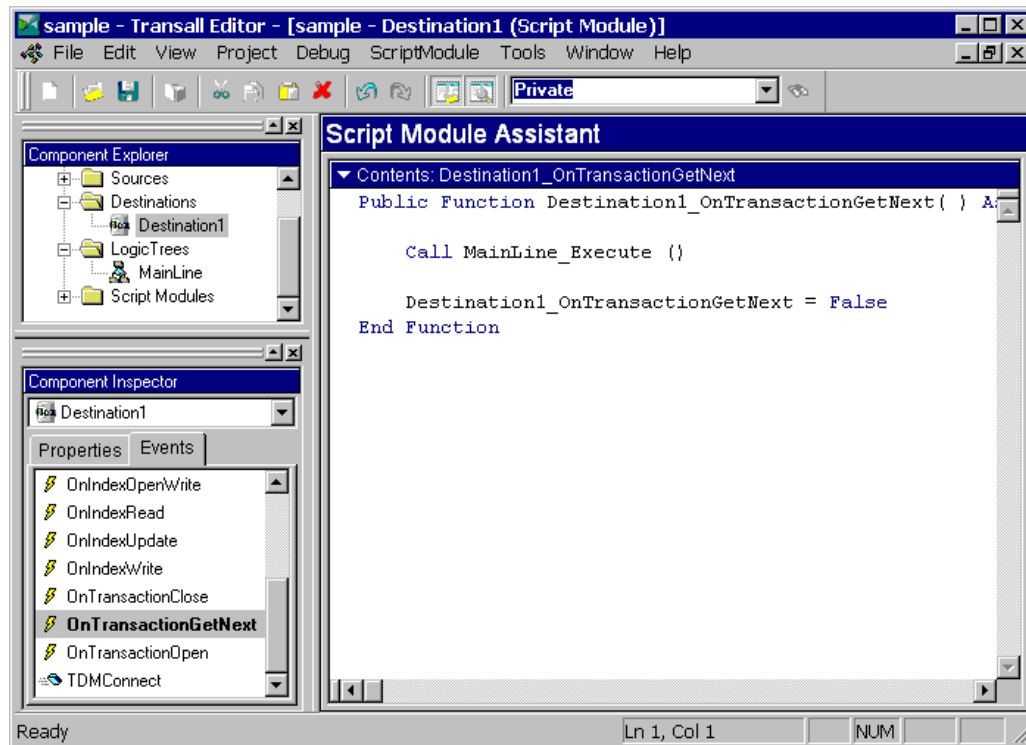
- 1 In the Transall editor, double-click on the Data Destination name to open the Docuflex Assistant.



- 2 Double-click the OnTransactionGetNext event. Transall displays the Script Module Assistant:



- 3 Add a call to invoke the Execute event of the LogicTree that loads data to Docuflex (e.g., “MainLine”).



IMPORTANT!

Note that the OnTransactionGetNext event returns False. This result is important because it tells Docuflex that there are no more datasets to process from Transall.

- 4 Double-click the **OnTransactionOpen** and **OnTransactionClose** events for the Docuflex data destination.

If the data sources in your Transall project are using the default “Automatic” OpenMode, you do not have to modify the OnTransactionOpen and OnTransactionClose event scripts. If you’re using “Manual” OpenMode for any of your data sources, however, then you’ll need to call the Open event scripts for these data sources in the OnTransactionOpen script and the Close event scripts in the OnTransactionClose script.

- 5 Define the Transall project as the Post-Processing Library to your Docuflex project.
 - a Open Docuflex Studio and right-click the “References” node in the Component Explorer.
 - b Select **Add>Reference** from the context menu.
 - c In the Add Reference dialog box, select the compiled Transall Executable (*.tex) module for your Transall project. *This activity copies the Transall executable file's contents into the Docuflex project file (*.ddp).*
 If you update or recompile the Transall project, you can reopen the Docuflex project and select **Update Reference** from the context menu to refresh the compiled Transall Executable in your Docuflex project.
- 6 Specify the Transall Data Destination on which Docuflex should call Events when you're operating Docuflex with NoDDF.
 - a In the Component Explorer, select the embedded Transall Executable file.
 - b In the Component Properties, select the DestinationName property and type the name of the Data Destination. These events are only called when Docuflex is running with NoDDF.

To Launch Docuflex with NoDDF

- Type the following command-line syntax to operate Docuflex with NoDDF:

```
dflexcomp ini=DocuflexEnvironment.dde
          ddp=DocuflexProject.ddp opt=noddf
```

where:

Keyword	Value
ini	The name of the file that configures the Docuflex processing environment.
ddp	The name of the Docuflex document project file produced by Docuflex Studio. Note: No .ddf file name is passed to Docuflex.
opt	A command-line parameter supplying further instructions to Docuflex. The only valid value is NoDDF.

Docuflex Calls the OnTransactionOpen event script for the Docuflex data destination in Transall when it launches. Next, Docuflex Calls the OnTransactionGetNext event script to load a transaction of data to the schema tables used by Docuflex. After Transall has loaded the schema tables with a transaction of data, Transall Calls the DDF Output routine (WriteDocumentSet) and execution is interrupted. Control is passed from Transall to Docuflex, which processes the data just loaded into the schema tables by Transall. Docuflex then returns control to Transall and Transall resumes execution just after the DDF Output routine to load the next dataset.

This cycle of passing control back and forth continues while Transall loads datasets for processing by Docuflex. When Transall has no more datasets to load, it exits the OnTransactionGetNext event script and returns a zero or False value. This value tells Docuflex that there are no more datasets for processing. Docuflex then Calls the OnTransactionClose event script for the Docuflex data destination in Transall and terminates processing.

Operating Multiple Sessions of DFLXCOMP

Docuflex uses a “currency file” to organize multiple sessions of the composition engine (e.g., several sessions of Docuflex Studio, or operating in batch mode under multiple DOS workstations, or operating under IDS). Each session can operate concurrently without interfering with other .ERR, .LOG, .TRC, and output files. The currency file protects output from one session from merging or otherwise corrupting the files written by another.

To Operate Multiple Sessions of DFLXCOMP

- Launch the Environment Manager, choose the environment file, and specify a filename for the “CURRENCY_FILE” entry on the Configuration view. *You should specify a currency file for each environment section in the file for which you want to enable this feature.)*

The currency file is an internally-controlled and -generated file. You should not modify it in any way, other than deleting it at the end of day. The file allows each session’s support files (ERROR_FILE, LOG_FILE, and TRACE_FILE) to have a unique “instance number”. The instance number is inserted immediately before the period (.) in the file extension.

EXAMPLE

If you specify an ERROR_FILE name of “c:\somepath\tuesday.err”, the first instance created by Docuflex uses the name “c:\somepath\tuesday1.err” and the second uses “c:\somepath\tuesday2.err”. When an application terminates, its instance number is then available for re-use. If an application abnormally terminates, its instance number cannot be re-used until the currency file is deleted. A new currency file is created by the first application needing an instance number.

When you specify a CURRENCY_FILE in the environment file, it overrides the ERROR_CLEAR, LOG_CLEAR, and TRACE_CLEAR entries. (These files should not be deleted while starting and stopping application instances.)

Note that there is a reserved tag available to access the instance number—“DCP.INSTANCE.NUMBER”. Transall scripts can access this tag to form unique file names when needed.

Currency File Contents

If you open the currency file, you’ll notice that the character string is as long as the number of instances running at the current time. Each character, or slot, represents a session and contains a unique number (e.g., the first slot contains a number for the first session, the second slot contains a number for the second session, and so on). If a slot is available, it contains an “A” (for “Available”). Numbers are unique for each session and range from 0 (zero) to 9.

In the following example, eight instances of the composition engine are currently running and slots 1, 4, and 7 are available—the rest are in use.

A12A45A7

Ending all applications results in a series of “A”s in the file. When a new session is started, the first slot contains a zero (0).

Composition Virtualization

The Windows operating system only accommodates up to two gigabytes (2 GB) of address space, which becomes the maximum memory allocation for application tasks. A large application is capable of composing output larger than 2 GB, therefore being unable to generate the document. The behavior of composition virtualization is controlled by three parameters in the Environment Manager:

- VIRT_FLAG—whether to use composition virtualization
- VIRT_FILE_SIZE—the maximum size of each disk file
- VIRT_PAGE_THRESHOLD—the number of pages at which a file is written

The Virtual Manager is a utility for writing a page of composed output to a temporary file or files on disk. The utility is not invoked until the number of composed pages exceeds a defined threshold. When a page exceeds the threshold and needs to be written to disk, all of its children on the document tree are written to the temporary file(s)—but the actual physical page object is not written.

A virtual token is attached to the page object to describe its virtual file, the file offset within that file, and the length of the data representing all of the page's children. The page object is then flagged as having been written to disk. After writing to the file, the page's children are deleted from memory.

Additional temporary files are created as each temporary file reaches the maximum file size of 2 GB (i.e., the maximum file size on some platforms). When attempting to access a page that is virtual, its children are read back into memory. The reason that the page itself is not written is that there are several places in the composition system with direct pointers to the physical pages and, therefore, must not be moved.

Microsoft PowerPoint Interface

NOTE

To generate PowerPoint presentations with Docuflex Studio, you must use Microsoft PowerPoint 97 or later.

The Microsoft PowerPoint Interface operates only in the Windows environment and generates a PowerPoint Presentation (PPT) file from a Docuflex Studio project. You can then use PowerPoint to

- add text, graphics, or other animation to the slides as your needs require
- customize slide transitions

Restrictions

To successfully generate Microsoft PowerPoint Presentation files, you must adhere to the following conditions:

- Multiple copies of this module must NOT be active simultaneously.
- PowerPoint must NOT be operating on the machine at the time this module is activated.

Generating PowerPoint Presentation Files

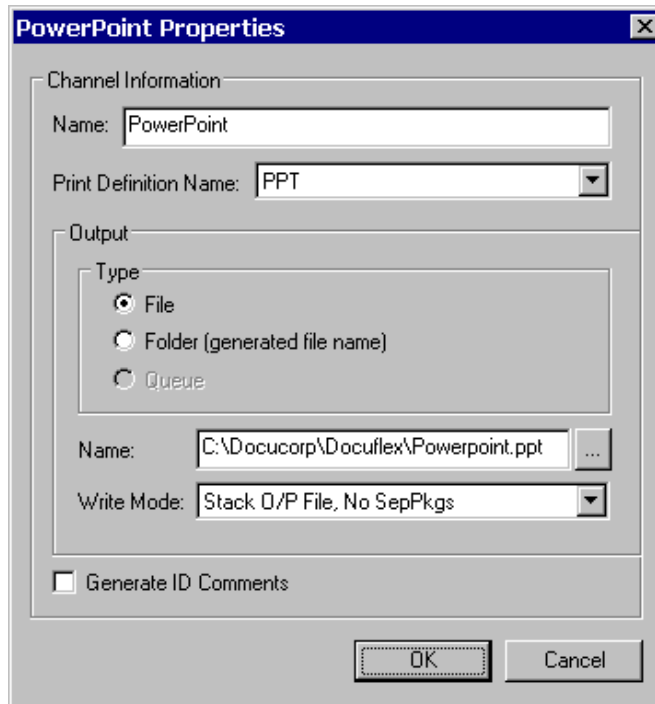
When you generate PowerPoint Presentation files, the Docuflex composition engine generates an in-memory DCD output file and then builds a corresponding PPT file.

To Generate PowerPoint Presentation Files

You must complete the following steps to generate PowerPoint Presentations from Docuflex output:

- 1 Make any necessary changes to the PowerPoint Interface (PPT) Printer Definition in the Docucorp Control Panel (see “[To Specify Advanced Options for PowerPoint Output](#)” on page 65 of the Docucorp Control Panel documentation).

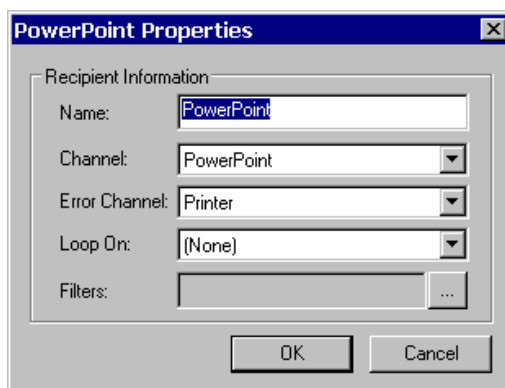
- 2 Create an output Channel to generate PowerPoint Presentation files.



In the Print Definition Name drop-down list box, be sure to select **PPT** (the PowerPoint Interface (PPT) Printer Definition from Docucorp Control Panel). For the Output Type, choose **File** and type the path and file name you want to give to the PowerPoint Presentation file. Be aware of the following file naming conditions:

- Any extension except .PPT is ignored, and .PPT is used instead. A log file warning entry is generated if a substitution or addition is made.
- Forward and backward slashes are acceptable and can be mixed.
- Double dots are accepted and move the output up one directory level.

- 3 Create a Recipient for the PowerPoint output Channel.



The Channel must specify the PowerPoint channel you created that references the PowerPoint Interface (PPT) Printer Definition from Docucorp Control Panel.

- 4 Launch the Docuflex composition engine. Be sure to include, at minimum, the DDP, DDE, and DDF parameters (see “[Sample Syntax](#)” on page 511).

For general guidelines about generating PowerPoint output, see “[Generating PowerPoint Output](#)” on page 677.

Generating Docuflex Work-In-Process Files

You can use either the Docuflex composition engine, *DFLXCOMP*, or *DFLXRULE* to generate Docuflex Work-In-Process (DWP) files directly from a project.

NOTE

The DWP generator is implemented in the same manner as an output printer driver, but it generates work-in-process files rather than composed documents.

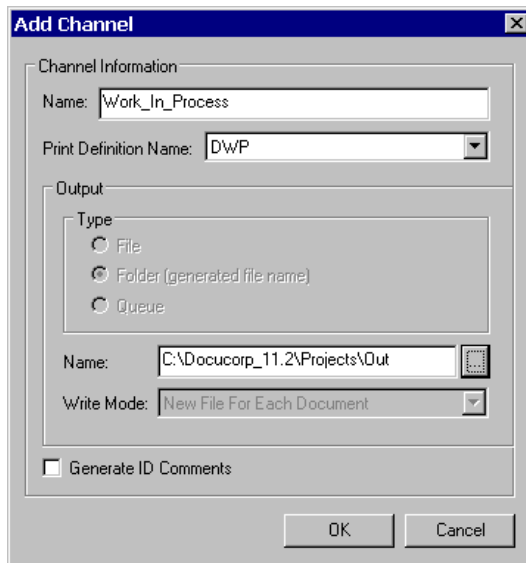
Restrictions

To successfully generate work-in-process files, you must adhere to the following condition:

- If you attempt to create work-in-process files with *DC2CPY32* or *CPYRULE*, the DWP generator will fail and display the following error message:
“Error: PDLDWP requires access to the Docuflex engine.”

To Generate Docuflex Work-In-Process Files

- 1 Create an output Channel to generate Work-In-Process files.

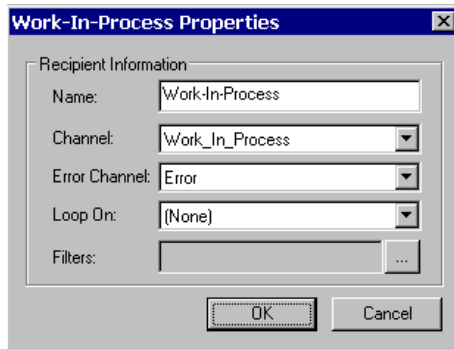


- a In the Name text box, type a descriptive name for this Channel.
- b In the Print Definition Name drop-down list box, select **DWP** (the Docuflex Work-In-Process generator).
- c In the Output Name text box, click  to locate a destination folder.
- d Click **OK** to save the Channel.

Be aware of the following conditions:

- The generated Work-In-Process file contains only one transaction.
- You can override the output channel file name for each transaction by using the Docuflex Reserved tag, DCP.OUT.FILE.NAME, in the project (see “[Overriding Channel Filenames](#)” on page 63).

2 Create a Recipient for the Work-In-Process output Channel.



- a In the Name text box, type a descriptive name for this Recipient.
- b In the Channel drop-down list box, select the Work-In-Process channel you created that references the DWP generator.
- c In the Error Channel drop-down list box, you must select an error channel.
- d Click **OK** to save the Recipient.

3 Launch the Docuflex composition engine. Be sure to include, at minimum, the DDP, DDE, and DDF parameters (see “[Sample Syntax](#)” on page 511).

Stacked DCD with Embedded Resources

Docuflex can generate Stacked DCD with the required document resources embedded (appended) in the file. This “Embedded Resources” feature enables the Cooperative Processing model, where the Docuflex composition engine is run at one location and then the Stacked Index and Stacked DCD are transmitted to a second location for viewing, printing, or some other rendering.

Any resources required by the documents in the Stacked DCD must be available for document rendering. For disk-based resources (overlays and page segments), this has been possible but fragile, since the rendering location must keep disk files synchronized with the composition location. For Documanage resources, this has not been possible since the references in the DCD documents include DocID values for resources—which cannot be duplicated from the Documanage Server at the composition location to a Documanage Server at the rendering location. Having all of the resources “embedded” in Stacked DCD allows all of the documents and required resources to be transmitted as a unit. Then, documents can be rendered at the second location without external resource requirements.

The resources are embedded in the Stacked DCD when the “EmbedResources” check box is enabled in the DCD Printer Definition (see “[To Embed Printer Resources for DCD Printers](#)” on page 50 of the *Docucorp Control Panel* user guide). The resources follow all DCD documents in the Stacked DCD and appear after a “<EOD />” (end-of-documents) marker. DFLXOUT and other programs that process Stacked DCD without a Stacked Index, by scanning for the “<DCD>” .. “</DCD>” markers, can find the “<EOD />” marker and stop processing documents.

The following example represents a Stacked DCD with four documents. The Stacked Index only tracks the four documents, and nothing following the <EOD /> marker is processed as a document.

```
<DCD>
Document 1 contents, including Resource A reference
</DCD>

<DCD>
Document 2 contents, including Resource B reference
</DCD>

<DCD>
Document 3 contents, including Resource A reference
</DCD>

<DCD>
Document 4 contents, including Resource C reference
</DCD>

<EOD />

<RESOURCES>
Resource A info
Resource B info
Resource C info
</RESOURCES>

<RESOURCE DIR>
Resource A offset/length housekeeping
Resource B offset/length housekeeping
Resource C offset/length housekeeping
</RESOURCE DIR>

<OFFSET>
Directory=nnn
</OFFSET>
```

As Document 1, Document 2, Document 3, and Document 4 are rendered, the required document resources are found within the Stacked DCD and no external resources are needed or accessed.

NOTE

Please be aware of the following conditions:

- The Embedded Resources feature requires Docuflex and Common objects 11.3.0.0 or later.
- The size of the Stacked DCD will increase with the embedded resources.
- The Docuflex composition engine limits the size of a Stacked DCD to 1GB when the Embed Resources feature is enabled to allow room for the resources.
- If a Stacked DCD with embedded resources is archived in Documanager, the embedded resources will not be archived. If the archive occurs at the composition location, this action is acceptable since the resources are already available for composition and rendering. If the archive occurs at a “remote” location, however, the archived documents may contain references to resources that cannot be resolved. Archiving documents at a remote location where the resources are known not to exist is not recommended.

The Post Processors

DFLXOUT Basics

DFLXOUT serves as a post-processing step to create output print streams from composed *.DCD* documents created by the Docuflex Composition Engine. By separating the composition process from the print stream generation process, you're given an opportunity to sort, update, or otherwise manipulate the composed documents before they're printed.

TIP

To see usage information, type “**dflexout.exe /?**” on the command line:

```
Usage: dflexout.exe ini= env= dcd= ddp=
Usage: dflexout.exe filename.ini env= dcd= ddp=
      filename.ini= full path of the application .ini file
      ini= (optional) full path of the application dflexout.ini file
              default: docuflex.ini
      env= (optional) the dflexout.ini section name of the path maps for resources
              default: [PATH_MAPS]
      dcd= (optional) name of the StackedDCD
      ddp= (optional) full path of the Docuflex document project
```

Sample Syntax

The following sample depicts the syntax of *DFLXOUT*:

```
dflexout ini=C:\Docucorp\Docuflex\dflexout.ini
      [env=OfficePC] [dcd=C:\Docucorp\Docuflex\out\out.dcd]
      [ddp=C:\Docucorp\Docuflex\Projects\myproj.ddp]
```

where:

Keyword	Value
ini= (-or- dde=)	The full path and file name of the application <i>Dflexout.ini</i> file. Note: You must provide the path and file name of an <i>.ini</i> file either through the <i>ini=</i> keyword or the <i>.ini</i> value itself.
env	The environment (env) parameter indicates that path maps for resources are located in a <i>specific</i> section of the indicated <i>Dflexout.ini</i> file, not the default section of [PATH_MAPS]. In the above sample syntax, Docuflex searches for a section in the <i>Dflexout.ini</i> file called [Environment - OfficePC]. Use Windows Notepad or any other text editor to create the appropriate section and its path maps in the <i>Docuflex.ini</i> file. One use of the environment parameter is to create separate sections for path maps of different operating systems. You can define these sections within the same <i>.ini</i> file and share them across platforms (i.e., indicate the desired section with env=xxx).
dcd	The name of a StackedDCD. If you specify this keyword, <i>DFLXOUT</i> processes without a StackedIndex. Since you're not using a Stacked Index, <i>DFLXOUT</i> needs to be informed about the output channel to which it should write. Therefore, you must verify that the desired output channel (specified in the <i>Dflexout.ini</i> file) contains the parameter DEFAULT=1 .

Keyword	Value
ddp	The full path and file name of the Docuflex document project file produced by Docuflex Studio.

Input

The key input required by *DFLXOUT* is the “stacked” *.DCD* created by the Docuflex Composition Engine. StackedDCD is a file that combines the composed documents for many recipients of many documents into one large file. An index file, termed StackedIndex, tracks the recipient documents within StackedDCD as well as desired relevant information that enhances sorting, updating, or other manipulation. Sorting should occur in StackedIndex so that *DFLXOUT* generates print streams in the desired sort order.

The only specified argument to *dflxout.exe* is a configuration initialization (*dflxout.ini*) file that contains the rest of the inputs.

Sample DFLXOUT.INI File

NOTE

You can incorporate the contents of the *Dflxout.ini* file into the *Docuflex.ini* file. If you choose this option, you must use a section header of [DFLXOUT] to distinguish the contents to the *DFLXOUT* application. Also, be sure to specify the correct *.ini* file on the command line.

- Specifies the names and locations of the *DFLXOUT* log, error, and trace files
- Specifies the source file(s) of Printer Definition (PRINTDEF) and font information (e.g., they should reside in the same file—*isi.ini*)
- Specifies the Docuflex Data Project (*.DDP) that contains the Transall code necessary to read StackedIndex
- Specifies an optional post-processing configuration *.ini* file
- Defines “Channels” that describe output print stream types and file formats

The installation of Docuflex includes a basic initialization *Dflxout.ini* file. This text file contains preliminary settings that *DFLXOUT* uses to determine the location for reporting error messages, log (or processing) files, and trace files. The file also informs *DFLXOUT* of the location of the Docuflex data project containing the Transall script for reading and writing the stacked index, the location of the stacked index itself, and the input and output channels.

```
[DFLXOUT]
; =====
; ===== General Options =====
; =====
PDL_INI=C:\WINNT\isi.ini
FONT_INI=C:\WINNT\isi.ini
PRINTDEF_INI=C:\WINNT\isi.ini
POSTPROC_INI=C:\Docucorp\Docuflex\dflxout.ini

ERROR_FILE=C:\Docucorp\Docuflex\out\dflxout.err
LOG_FILE=C:\Docucorp\Docuflex\out\dflxout.log
TRACE_FILE=C:\Docucorp\Docuflex\out\dflxout.trc
RECAP_FILE=C:\docucorp\docuflex\out\recap.log

ERROR_CLEAR=1
LOG_CLEAR=1
TRACE_CLEAR=1
RECAP_CLEAR=0
TRACE_ENABLED=0
TRACE_REPS=500
```

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```

; =====
; ==          Docuflex project file          ==
; == This DDP houses the Transall script used to write and ==
; == read the stacked index                    ==
; =====
DDP=C:\Docucorp\Docuflex\Projects\Sample\Sample.ddp
; =====
[PATH_MAPS]
SampleProject=C:\Docucorp\Docuflex\Projects\Sample\

; =====
; =====
; ===== Input CHANNEL Options =====
; =====

;[STACKED]
; ===== DCD =====
; DFLXOUT *requires* this [STACKED] section specifically
; by the name [STACKED]. This section specifies how
; to read stacked DCD. The FILE_NAME will come from the
; stacked index. If this [STACKED] section is missing,
; DFLXOUT will assume the values given here.
; OUTPUT=0
; PDL=isisdcd.dll
; PRINTDEF=PrintDef - DCD
; FILE_TYPE=2
; FILE_NAME=c:\Docucorp\Docuflex\out\good.dcd

; =====
; =====
; ===== Output CHANNEL Options =====
; =====
; These channels should have the same names as the channels
; defined in Docuflex Studio. Docuflex composition will
; create stacked DCD and track the channel name in the stacked
; index. DFLXOUT reads the channel name from the stacked index
; and locates this channel to create AFP, METACODE, PCL, etc., as
; specified here.

;[Good]
; ===== METACODE =====
; OUTPUT=1
; FILE_NAME=C:\Docucorp\Docuflex\out\samgood.met
; FILE_TYPE=3
; PDL=isismeta.dll
; PRINTDEF=PrintDef - META
; DEFAULT=1

;[Good]
; ===== AFP =====
; OUTPUT=1
; FILE_NAME=C:\Docucorp\Docuflex\out\samgood.afp
; FILE_TYPE=3
; PDL=isiafp.dll
; PRINTDEF=PrintDef - DFXAFP
; DEFAULT=1

;[Good]
; ===== PCL =====
; OUTPUT=1
; FILE_NAME=C:\Docucorp\Docuflex\out\samgood.pcl
; FILE_TYPE=1
; PDL=isihdc.dll
; PRINTDEF=PrintDef - HDC_PCL
; DEFAULT=1

```

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```
;[Error]
;; ===== METACODE =====
;OUTPUT=1
;FILE_NAME=C:\Docucorp\Docuflex\out\samerror.met
;FILE_TYPE=3
;PDL=isismeta.dll
;PRINTDEF=PrintDef - META
;DEFAULT=1

;[Error]
;; ===== AFP =====
;OUTPUT=1
;FILE_NAME=C:\Docucorp\Docuflex\out\samerror.afp
;FILE_TYPE=3
;PDL=isiafp.dll
;PRINTDEF=PrintDef - DFXAFP
;DEFAULT=1

;[Error]
;; ===== PCL =====
;OUTPUT=1
;FILE_NAME=C:\Docucorp\Docuflex\out\samerror.pcl
;FILE_TYPE=1
;PDL=isihdc.dll
;PRINTDEF=PrintDef - HDC_PCL
;DEFAULT=1
```

Keyword	Value
[DFLXOUT]	This section contains general settings for use by <i>DFLXOUT</i> , as well as the location of the Docuflex Data Project file containing the Transall script that writes and reads the stacked index.
PDL_INI	A reference to the file containing a list of the supported Printer Definition Languages, which, in turn, reference a <i>.DLL</i> file that communicates with the printer.
FONT_INI	A reference to the file containing the fonts that need to be downloaded to the printer.
PRINTDEF_INI	A reference to the file containing specific printer settings as they were configured by the Docucorp Control Panel.
POSTPROC_INI	A reference to the file containing extra processing features. The reference can point to the same <i>DFLXOUT.INI</i> in use by <i>DFLXOUT.EXE</i> . If so, <i>DFLXOUT.INI</i> only needs to contain a few extra sections (see “Optional Post-Processing INI” on page 532).
ERROR_FILE LOG_FILE TRACE_FILE RECAP_FILE	The path and file names where <i>DFLXOUT</i> records error messages, processing steps, debugging messages, and a summary of the documents you’ve formatted for printing. <i>DFLXCOMP</i> creates a step-by-step listing of all activity involved in producing the document (see “Recap Log File” on page 514).
ERROR_CLEAR LOG_CLEAR TRACE_CLEAR RECAP_CLEAR	<i>DFLXOUT</i> can either append new messages to the end of an existing file or recreate the file each time you compose the document. The valid choices are as follows: ■ 0—append new messages to existing file ■ 1—erase existing file and recreate
TRACE_ENABLED	Whether you want <i>DFLXOUT</i> to record debugging messages. The valid choices are as follows: ■ 0—do not generate debugging messages ■ 1—write debugging messages to trace file
TRACE_REPS	The maximum number of debugging messages you want <i>DFLXOUT</i> to generate before closing and reopening the trace file.
DDP=	The Docuflex Data Project containing the Transall script necessary to write and read the stacked index.
[PATH_MAPS]	This section contains one or many items containing the path to a Docuflex Data Project. You need a path map to each directory containing Docuflex <i>.DDPs</i> . <i>If you include these settings in the Docuflex.ini file, you do not need this section.</i>
[STACKED]	This section specifies how to read a stacked Docucorp Compound Document (<i>.DCD</i>).
OUTPUT	Whether this channel is designated for input or output. The only valid choice for reading <i>.DCD</i> is as follows: ■ 0—treat as input.
PDL	A reference to the <i>.DLL</i> file that reads the input <i>.DCD</i> .
PRINTDEF	A reference to the section in the source <i>.ini</i> file containing specific printer settings as they were configured by the Docucorp Control Panel.

Keyword	Value
FILE_TYPE	Specifies the input data type, which can be one of the following: ■ 0—unformatted / non-buffered (not recommended) ■ 1—unformatted / buffered ■ 2—ASCII text with CR/LF (e.g., DCD) ■ 3—IBM-style, 4-byte block and record lengths (variable block) ■ 4—Docucorp 2-byte record length in Least Significant Byte / Most Significant Byte order ■ 8—Barr Systems format with 1-byte length ■ 9—Barr Systems format with 2-byte length
FILE_NAME	The path and file name where <i>DFLXOUT</i> retrieves its input. This entry is ignored by <i>DFLXOUT</i> since the input file name comes from the stacked index.
[OUTPUT_CHANNEL_NAME]	Docuflex composes documents destined for one or multiple groups of recipients. You can use a different output channel for each group (i.e., you can designate multiple output channels as active). The output channel generally represents the printer you'll use to produce the output. The sample <i>Dflxout.ini</i> shows multiple definitions of “good” and “error” channels for different printer types. You should simply indicate the ones you want to use.
OUTPUT	Whether this channel is designated for input or output. The only valid choice for writing output is as follows: ■ 1—treat as output.
FILE_NAME	The path and file name where you want to write the print datastream containing the Docuflex output.
FILE_TYPE	Specifies the output data type, which can be one of the following: ■ 0—unformatted / non-buffered (not recommended) ■ 1—unformatted / buffered ■ 2—ASCII text with CR/LF ■ 3—IBM-style, 4-byte block and record lengths (variable block) ■ 4—Docucorp 2-byte record length in Least Significant Byte / Most Significant Byte order ■ 8—Barr Systems format with 1-byte length ■ 9—Barr Systems format with 2-byte length
PDL	A reference to the <i>.DLL</i> file that communicates with the printer.
PRINTDEF	A reference to the section in the source <i>.ini</i> file containing specific printer settings as they were configured by the Docucorp Control Panel.
DEFAULT	The output channel section <i>DFLXOUT</i> chooses when you're processing without a <i>StackedIndex</i> .

Optional Post-Processing INI

- Specifies the Insert and Envelope descriptions and weights
- Specifies the Stack Control Report
- Specifies the batch information, such as the file names to use for batches and over how many transactions are in a stack within each batch.

The section [Batch_Names] controls the root filename for stacks for each batch; be careful not to specify a filename extension. The section [StackSize] controls the number of transactions in a stack for each batch. Each of the stacks created for a batch are distinguished by a sequentially-numbered filename extension.

In the following example, each stack contains 100 transactions.

```
[Batch_Names]
AUTO=C:\Docucorp\Docuflex\projects\sample\AUTO

[StackSize]
AUTO=T;100
```

Thus, a job of 450 transactions yields these file names:

```
C:\Docucorp\Docuflex\projects\sample\AUTO.001
C:\Docucorp\Docuflex\projects\sample\AUTO.002
C:\Docucorp\Docuflex\projects\sample\AUTO.003
C:\Docucorp\Docuflex\projects\sample\AUTO.004
C:\Docucorp\Docuflex\projects\sample\AUTO.005 (only 50 documents)
```

If you only want 50 documents per stack, for example, then the [StackSize] section should specify AUTO=T;50. If there's no [Batch_Names] entry specified, *DFLXOUT* generates a time-stamped filename in the folder specified in the "Output CHANNEL Options" section of the *DFLXOUT.INI*. The FILE_NAME entry for the output channel must specify a folder with a trailing backslash and no filename.

ISI.INI

- Defines PRINTDEF and font information

***.DDP**

- Docuflex document project that contains the Transall code necessary to read StackedIndex

***.DAT**

- StackedIndex file named by Transall code (or in the [FILENAMES] section of *OPP.INI*)
- One record in StackedIndex tracks the composed output of one recipient of one document
- The required fields in the record are the StackedDCD filename, offset, length, and Channel name

***.DCD**

- StackedDCD file named by an entry in StackedIndex

Output

The output from *DFLXOUT* is one or more print stream files and a processing log. If errors occur, an error log is created. If tracing is enabled, a trace log is created.

If you're using a post-processing configuration *.ini* file, the output print streams can be separated into groupings, called batches. Each batch has one or more stacks, with a definable limit on how many transactions or pages may be in each stack. Each stack in a batch has the same root path and filename, with a sequentially numbered extension (.001, .002, .003).

If you are not using a post-processing configuration *.ini* file, the output print steam filename is specified by the [Channel] section in *Docuflex.ini*.

StackedIndex

StackedIndex parallels StackedDCD, which is created by the Docuflex Composition Engine. As Docuflex creates the output for each recipient for each document, it writes an index record in StackedIndex. *DFLXOUT* reads a record from StackedDCD to process the output of one recipient within StackedDCD.

NOTE

In certain environments, a stacked index may not be desired so it can be disabled using *opt=nostix* (for **NO ST**acked **IndeX**) on the command line of *dflxcomp.exe*. For an example of the syntax, see “[Sample Syntax](#)” on page 511.

Transall writes and reads StackedIndex by supporting xxx_OnIndexWrite and xxx_OnIndexRead events associated with a Docuflex destination in a Transall project.

The design and format (e.g., text file, ODBC or other database) of StackedIndex is very flexible and only known to Transall. There are a few fields required by *DFLXOUT*, but the field names, lengths, and positions in the index record are not dictated by *DFLXOUT*. You must define a Transall destination for StackedIndex (e.g., StackedIndexDest) that has a record with the required fields, and any other fields that a project requires for sorting or other processing. You must also define a Transall source for StackedIndex (e.g., StackedIndexSrc) that has a matching record in StackedIndexDest.

The required fields, but not necessarily these names, are:

- StackedDCD—the filename of StackedDCD, up to 255 characters
- DCDOffset—offset into StackedDCD, up to 10 characters
- DCDLen—length of DCD document, up to 10 characters
- DestName—destination name (ultimately Channel name), up to 20 characters

OnIndexWrite

Docuflex triggers the xxx_OnIndexWrite event, and the script associated with this event maps data into the fields and writes an index record. A minimal xxx_OnIndexWrite script calls StackedIndexDest-Map_Map() and StackedIndexRecDest_Write().

A basic StackedIndexDest-Map_Map() contains the following:

- StackedIndexRecDest.StackedDCD = DF\$GetTagValue("DCP.OUT.FILE.NAME")
- StackedIndexRecDest.DCDOffset = DF\$GetTagValue("DCP.OUT.FILE.POSITION")
- StackedIndexRecDest.DCDLen = DF\$GetTagValue("DCP.OUT.FILE.DOCLEN")
- StackedIndexRecDest.DestName = DF\$GetTagValue("DCP.CURRENT.DESTINATION")

The DF\$GetTagValue function acquires the information known by the Docuflex Composition Engine via reserved tags. The names of these reserved tags serve as the "contract" between Docuflex and the Transall executable that creates StackedIndex.

OnIndexRead

DFLXOUT triggers the xxx_OnIndexRead event, and the script associated with this event reads an index record and makes the data in the fields available to DFLXOUT as tags via the DF\$SetTagValue function. A basic xxx_OnIndexRead script calls StackedIndexRecSrc_Read() and issues multiple calls to DF\$SetTagValue.

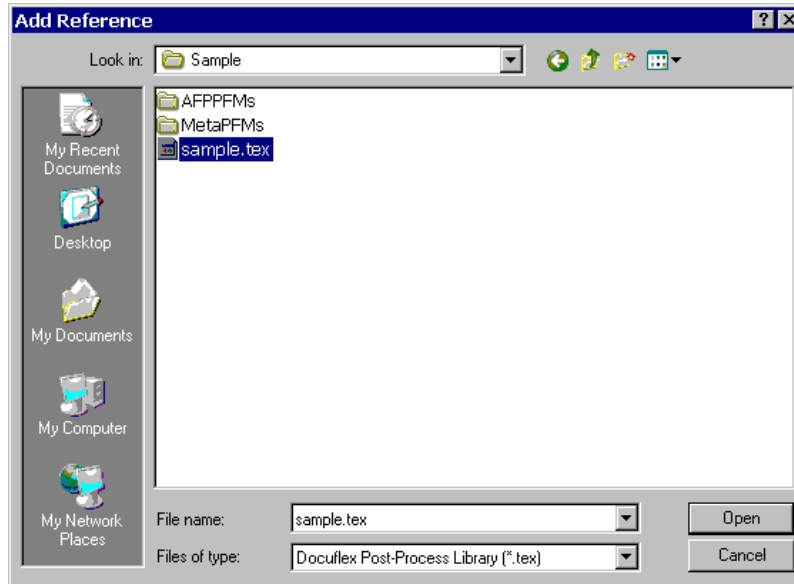
A basic xxx_OnIndexRead script contains the following function calls:

```
If StackedIndexRecSrc_Read() = True Then
  Call DF$SetTagValue( "STACKED.FILE.NAME",
    Trim$( StackedIndexRecSrc.StackedDCD ) )
  Call DF$SetTagValue( "STACKED.FILE.POSITION", "" &
    StackedIndexRecSrc.DCDOffset )
  Call DF$SetTagValue( "STACKED.FILE.DOCLEN", "" &
    StackedIndexRecSrc.DCDLen )

  Call DF$SetTagValue( "DESTNAME", Trim$( StackedIndexRecSrc.DestName ) )
End If
```

The names of these tags, set by DF\$SetTagValue, serve as the "contract" between the Transall executable that reads StackedIndex and DFLXOUT.

Both Docuflex and *DFLXOUT* need access to the Transall executable with the xxx_OnIndexWrite and xxx_OnIndexRead event scripts. Docuflex Studio imports a Transall executable (*.TEX) and specifies the Docuflex destination that has the xxx_OnIndexWrite and xxx_OnIndexRead event scripts. In Docuflex Studio, this is available from **Document>Add Reference**.



Overriding Tray Requests

Docuflex allows you to override tray requests specified in the DCD with a new tray request. The user's Tray Definitions map the tray (or feed) request on each sheet as desired. Remember that Docuflex composition assigns feeds according to the "PaperSource" property in a Page Definition.

The mechanism supported by *DFLXOUTP.W32* is that the **xxx_OnIndexRead** event may specify a value for "FEED_OVERRIDES" that specifies how feeds should be overridden (if at all). The value of "FEED_OVERRIDES" is a comma-separated list of one or more "feed=newfeed" pairs. Each value should be numeric, with the exception that you can use "all" to indicate that all feeds should be overridden. A maximum of 128 feeds is supported.

The following example lists calls to set "FEED_OVERRIDES" in xxx_OnIndexRead:

```
call DF$SetTagValue( "FEED_OVERRIDES", "all=2" )
call DF$SetTagValue( "FEED_OVERRIDES", "0=4,1=2" )
```

Reversing the Print Order of Output Pages

You can request that *DFLXOUT* reverse the order of output pages from the original composition order. *DFLXOUT* reverses the pages after all other processing has occurred (e.g., all tags substituted, all page numbering completed, and OCR codes placed).

You request the page reversal by setting "REVERSE_PAGES" to "1" for the desired transaction in the Transall **xxx_OnIndexRead** event (e.g., `DF$SetTagValue("REVERSE_PAGES", "1")`). You can choose whether to "hardwire" the value for every transaction or dynamically specify it for transactions that target a specific destination or printer.

The DFLXOUT Tag Pool

DFLXOUT utilizes a “tag pool” to allow the *destname_OnIndexRead* event in the Post-Processing Library to communicate values to DFLXOUT processing. The *DF\$SetTagValue(tag name, tag value)* function allows values to be added to the tag pool for access by DFLXOUT. DFLXOUT will query many values from the tag pool to control its behavior and control the contents of reports.

DF\$SetTagValue may also supply values that are to be published. Any DCPPP.xxx post-processing tags will not be resolved by DFLXCOMP. The logic in the *destname_OnIndexRead* event should determine the appropriate values for the DCPPP.xxx tags and supply them with DF\$SetTagValue.

The following table describes the values that DFLXOUT queries from the tag pool or post-processing INI to control its processing.

Value	Use	Published As	Required?
INDEX.TOT_PGS	Number of times to create barcode		
BARCODEVALUE	Seed value for barcode	DCPPP.BAR26X26 DCPPP.BAR26X26.TEXT (multiple occurrences according to INDEX.TOT_PGS)	
[Inserts] Ins1Desc= (1..8)		DCP.STOCKDES1I (1..8) ticket	
INDEX.INS_1_FLG (1..8)	piece report	DCP.STACKQTY1I (1..8) ticket	
INDEX.INSERT1 (1..8)		DCP.STOCKID1I (1..8) ticket	
INDEX.MAIL_ENV	piece report	DCP.STOCKIDME	
INDEX.TRAY1_NO (1..4)	formset report	DCP.STACKQTY1P (1..4) ticket	
INDEX.TRAY1 (1..4)	formset report	DCP.STOCKDES1P (1..4)	
INDEX.DMD_FD	Increment piece count		
INDEX.COMP	JobCode	DCP.JOBCODE ticket DCP.ACCOUNTCLASS DCP.TEXTACCOUNTCLASS	
INDEX.SCHD_DT	RunDate	DCPPP.BAR26X26 job sheet DCP.RUNDATE ticket DCP.JOBCODE2 ticket DCP.TEXTJOBCODE2 ticket	
INDEX.CYC_DT	CycleDate	DCP.CYCLEDATE ticket	
INDEX.SEQ	RunNumber	DCP.RUNNUMBER ticket	

Value	Use	Published As	Required?
INDEX.REC_NAME	formset report piece report		
INDEX.REC_CITY	formset report piece report	DCP.FIRSTPIECEMAIL ticket DCP.LASTPIECEMAIL ticket	
INDEX.REC_STATE	formset report piece report		
INDEX.REC_ADR1	formset report piece report	DCP.FIRSTPIECEMAIL ticket DCP.LASTPIECEMAIL ticket	
INDEX.REC_ADR2	formset report piece report		
INDEX.REC_ADR3	formset report piece report		
INDEX.REC_ADR4	formset report piece report		
INDEX.ACEERROR	formset report piece report		
INDEX.REC_ZIP	formset report piece report		
INDEX.WEIGHT1	piece report		
INDEX.TOT_IMG	formset report		
[Defaults] CompanyName=		JOB.COMPANY job sheet	
FEED_OVERRIDES			
STACKED.FILE.NAME	name of StackedDCD file		yes*
DESTNAME	name of destination (equates to a channel section in DFLXOUT.INI)		yes*
STACKED.FILE.POSITION	offset within StackedDCD where document is located		yes*
STACKED.FILE.DOCLEN	length of document		yes*, documents of zero length are skipped

Value	Use	Published As	Required?
INDEX.BCH_NM	batch name		no, default is DESTNAME
INDEX.PRT_FLG	should dflxout print?		no, default is 1
INDEX.MAILER	name of flat mailer cover page		
INDEX.CPY_CNT	copy count		no, default is 1
	stack number	DCP.STKNUM ticket	
	stack count	DCP.TOTALSTK ticket	
	transaction count	DCP.TRANCOUNT ticket	
	piece count	DCP.PIECECOUNT ticket	
	batch name	DCP.BCHNAME ticket	
	mail env quantity	DCP.STACKQTYME ticket	

*These values are automatically determined when the StackedIndex is defeated by providing the name of a StackedDCD as an argument to DFLXOUT.

Processing Without a StackedIndex

Docuflex typically references a Docuflex Data Project (DDP) containing a Transall Post-Processing Library (TEX) that includes **xxx_OnIndexOpenRead**, **xxx_OnIndexRead** and **xxx_OnIndexCloseRead** events. DFLXOUT calls those IndexRead events to process the StackedIndex and learn the StackedDCD file name and document offsets within the StackedDCD.

DFLXOUT has been enhanced to accept the name of a StackedDCD as a command-line argument and will process without a StackedIndex. DFLXOUT scans the StackedDCD looking for the <DCD version=x > markers to learn the offset of each document within the StackedDCD. The scanning takes a bit of time and is less efficient than using a StackedIndex. The key for specifying the StackedDCD is “**dcd=**”.

When processing without a StackedIndex, DFLXOUT chooses the output channel section in DFLXOUT.INI that has a “DEFAULT=1” entry. If no section has a “DEFAULT=1” entry, then the name of the output channel will be “OUTPUT”.

The sample syntax for operating DFLXOUT with a StackedDCD named on the command-line resembles the following:

```
dflexout.exe dflexout.ini dcd=out\out.dcd
```


NOTE

When processing without a `StackedIndex` and, consequently, the `xxx_OnIndexRead` event, many `DFLXOUT` features are unavailable, including batches, copy counts, barcodes, tray overrides, and a statistics report.

Additional Features

In addition to the main objective of producing print stream files from composed `.DCD` documents, `DFLXOUT` implements a few features to assist in the distribution and mailing of the documents. Some of these features are enabled by specifications taken from the post-processing configuration `.ini` file.

Multiple Copy Support

By default, `DFLXOUT` creates one copy of a `.DCD` document in the output print stream. `DFLXOUT` looks at the value of an `INDEX.CPY_CNT` tag, if present, and creates the correct number of copies. The Transall `xxx_OnIndexRead()` script sets the value from a field in `StackedIndex` or provides it from some other source.

Stack Control Report/Ticket

A report prints at the end of each stack, with statistics to assist the operator in loading and processing the printed output finishing equipment.

The name and location of the `TICKET` document is specified with the `IMAGENAME` key in the `[TICKETS]` section of the post-processing `.ini` file (`OPP.INI`):

```
[TICKETS]
IMAGENAME=C:\Clients\CalXPower\Documents\ticket.dcd
TRAY=2
```

Mailer

Documents that must be mailed in a special envelope for weight or other reasons may need an additional mailer page printed in front of the document, allowing the mailing address to fit an envelope window.

For transactions that specify an entry for the “Mailer” field in StackedIndex, *DFLXOUT* generates a mailer page that prints before the remainder of the document.

The Mailer document is specified in the [MAILERS] section of the post-processing *.ini* file (*OPP.INI*), with keys that match the value given in the “Mailer” field of StackedIndex.

Example (for value of FLATMLR):

```
[MAILERS]
FLATMLR=C:\Clients\CalxPower\Documents\flatmlr.rtf
FLATMLR_Tray=3
```

DFLXOUT looks to *Docuflex.ini* for a [MAILER] section describing the input file type. If none is given, the mailer is assumed to be *.DCD*. For the above example, *Docuflex.ini* must contain a [MAILER] section with a type of *.RTF* specified.

Statistics Report

DFLXOUT generates a FORMSET and piece report if a STAT_REPORT=filename value is specified in the [DFLXOUT] section of *Docuflex.ini*. The report contains address, tray, and insert information.

DFLXOUT takes the report values from fields in StackedIndex. The IndexRead Transall script must make the field values available as tags with the following names:

■ INDEX.INSERT1	■ INDEX.REC_ADR4
■ INDEX.INSERT2	■ INDEX.ACEERROR
■ INDEX.INSERT3	■ INDEX.REC_ZIP
■ INDEX.INSERT4	■ INDEX.TRAY1_NO
■ INDEX.INSERT5	■ INDEX.TRAY2_NO
■ INDEX.INSERT6	■ INDEX.TRAY3_NO
■ INDEX.INSERT7	■ INDEX.TRAY4_NO
■ INDEX.INSERT8	■ INDEX.INS_1_FLG
■ INDEX.TRAY1	■ INDEX.INS_2_FLG
■ INDEX.TRAY2	■ INDEX.INS_3_FLG
■ INDEX.TRAY3	■ INDEX.INS_4_FLG
■ INDEX.TRAY4	■ INDEX.INS_5_FLG
■ INDEX.REC_NAME	■ INDEX.INS_6_FLG
■ INDEX.REC_CITY	■ INDEX.INS_7_FLG
■ INDEX.REC_STATE	■ INDEX.INS_8_FLG
■ INDEX.REC_ADR1	■ INDEX.MAIL_ENV
■ INDEX.REC_ADR2	■ INDEX.WEIGHT1
■ INDEX.REC_ADR3	■ INDEX.TOT_IMG

Two-Dimensional DataMatrix Barcode

DFLXOUT generates values to print 26x26 DataMatrix Barcodes on each page of the output document. A unique value prints on each page and this value cannot be determined until the exact number of pages is known, as well as a sequence number in the stack, etc. As such, Docuflex cannot calculate these values during composition.

DFLXOUT takes the barcode value from the BARCODEVALUE tag that is made available by the xxx_OnIndexRead Transall script. The barcode data is in the following format:

```
XXPKKKKKKKKKKKKKKKWDSSSS#####
```

where:

- XX—two hexadecimal characters for inserts
- P—one character, either 0 for “No” or 1 for “Yes,” signifying a package break
- KKKKKKKKKKKKKKKK—a 15-character package key (Transaction ID)
- W—one character for the weight (e.g., 1 oz. or 2 oz.)
- D—one character for a document separator (e.g., 0, 1, 2)
- SSSS—a four-character sequence number. This number is incremented by one for each sheet. The value ranges from 0000-9999.
- #####—a 17-character account number

DFLXOUT updates the document separator and sequence number fields, and creates a value for DCPPP.BAR26X26 for each processed page.

The Docuflex document project (*.DDP) should include a form on each page of the composed .DCD document containing a block tag named DCPPP.BAR26X26. The “DCPPP” prefix prevents the Docuflex Composition Engine from filling the tag and delays the replacement until *DFLXOUT* processes the document.

Generating Printstream Header and Trailer Comments

Docuflex provides three levels of comments which can be included in Docuflex output:

- Header Comments
- Page Comments
- Trailer Comments

Docuflex Studio and DFLXCOMP Processing

The only comments supported at this time are the PAGE level comments. By using the Docuflex member Pre- and PostComposition Rules, you can add the transaction level information to the current output document. Inside the Rule, you can add the comments by calling the Transall command DF\$SetTagValue().

You can request current values from Docuflex reserved tags (DCP.*) using the Transall command DF\$GetTagValue(). The best time to add transaction level comments is during this processing step, since all the data mapped to Transall is available. The comments are added before the document is written to the output file.

You can code the PAGE level comments in several different formats:

- DFX.COMMENT.PAGE.FIRST—add comment to the first page of a document
- DFX.COMMENT.PAGE n —add comment to page “ n ” of a document
- DFX.COMMENT.PAGE.LAST—add comment to the last page of a document

```
DF$SetTagValue("DFX.COMMENT.PAGE.FIRST", "DOC_FIRST_PAGE" & Chr$(0) )
-or-
DF$SetTagValue("DFX.COMMENT.PAGE1", "DOC_FIRST_PAGE" & Chr$(0) )

DF$SetTagValue("DFX.COMMENT.PAGE5", "DOC_LAST_PAGE" & Chr$(0) )
-or-
DF$SetTagValue("DFX.COMMENT.PAGE.LAST", "DOC_LAST_PAGE" & Chr$(0) )
```

DFLXOUT Processing

All three levels of comments are available during this processing step. During the processing of this step, the Open, Write, and Close of an output channel can invoke the following Transall events:

- **OnChannelOpenWrite**—called during the opening of the output file/adding Header Comments
- **OnChannelBeforeWrite**—called before writing current document to file/adding any Page Comments
- **OnChannelAfterWrite**—only called when Write is successful/update totals for trailers
- **OnChannelCloseWrite**—called during the closing of the output file/adding Trailer comments

The following comments are supported during this step:

- DFX.COMMENT.HEADER—add Header Comments to output file
- DFX.COMMENT.PAGE.FIRST—add comment to the first page of a document
- DFX.COMMENT.PAGE n —add comment to page “ n ” of a document
- DFX.COMMENT.PAGE.LAST—add comment to the last page of a document
- DFX.COMMENT.TRAILING—add Trailer Comment to output file

When writing to multiple output files, you can access the following reserved tags to determine which output file is currently being processed:

DCP.CURRENT.DESTINATION
DCP.OUT.FILE.NAME

EXAMPLE

To access reserved tag values, use the Transall command DF\$GetTagValue():

```
StringVar = DF$GetTagValue("DCP.OUT.FILE.NAME")
```

If you add the PAGE comments during the DFLXCOMP composition step, then you should not add them again during the DFLXOUT step. Any values that are to be totaled during the DFLXOUT processing step must be included as part of the DCD stacked index. The DFX.COMMENT.HEADER records are only supported during the OnChannelOpenWrite(), and the DFX.COMMENT.TRAILER records are only supported during the OnChannelCloseWrite() script rule.

In the following example the OnChannel* rules are defined within the Transall destination called "BillingStatement":

```
Public Function BillingStatement _OnChannelOpenWrite( ) As Long
DF$SetTagValue("DFX.COMMENT.HEADER", "FILE_CYCLE" & Chr$(0) & "31" & Chr$(0))
DF$SetTagValue("DFX.COMMENT.HEADER", "FILE_CORP_ID" & Chr$(0) & "00320" & Chr$(0))
DF$SetTagValue("DFX.COMMENT.HEADER", "FILE_RUN_DATE" & Chr$(0) & "10/15/2004" & Chr$(0))

BillingStatement _OnChannelOpenWrite = True
End Function

Public Function BillingStatement _OnChannelBeforeWrite( ) As Long
DF$SetTagValue("DFX.COMMENT.PAGE.FIRST", "DOC_FIRST_PAGE" & Chr$(0))

DF$SetTagValue("DFX.COMMENT.PAGE.FIRST", "DOC_ACCOUNT.NUMBER" & Chr$(0) & "867-5309" &
Chr$(0))
DF$SetTagValue("DFX.COMMENT.PAGE.FIRST", "DOC_TOTAL_AMOUNT_DUE" & Chr$(0) & "145.87" &
Chr$(0))
DF$SetTagValue("DFX.COMMENT.PAGE.FIRST", "DOC_TOTAL_AMOUNT_DUE_SIGN" & Chr$(0) & "+" &
Chr$(0))
DF$SetTagValue("DFX.COMMENT.PAGE.FIRST", "DOC_DUE_DATE" & Chr$(0) & "10/31/2004" &
Chr$(0))

DF$SetTagValue("DFX.COMMENT.PAGE.LAST", "DOC_LAST_PAGE" & Chr$(0))

BillingStatement _OnChannelBeforeWrite = True
End Function

Public Function BillingStatement _OnChannelAfterWrite( ) As Long
'Use this rule to update totals
BillingStatement _OnChannelAfterWrite = True
End Function

Public Function BillingStatement _OnChannelCloseWrite( ) As Long
DF$SetTagValue("DFX.COMMENT.TRAILER", "FILE_TOTAL_SHEETS" & Chr$(0) & "33" & Chr$(0))
DF$SetTagValue("DFX.COMMENT.TRAILER", "FILE_TOTAL_PAGES" & Chr$(0) & "65" & Chr$(0))
DF$SetTagValue("DFX.COMMENT.TRAILER", "FILE_TOTAL_AMOUNT_DUE" & Chr$(0) & "729.35" &
Chr$(0))
DF$SetTagValue("DFX.COMMENT.TRAILER", "FILE_TOTAL_AMOUNT_DUE_SIGN" & Chr$(0) & "+" &
Chr$(0))

BillingStatement _OnChannelCloseWrite = True
End Function
```

Sample AFP Output with NOP Comment Records

```

!..L....FILE_CYCLE.31.
!..L....FILE_CORP_ID.00320.
!..L....FILE_RUN_DATE.10/15/2004.
!..Lyy...DocuFlex
!..LÄ...TRAY4
!..Lyù...DocuFlex
!..LyI...DocuFlex
!..L.....T1DOC037C1FAUNN0.....T1DOC037C1FAUNB0.....T1DOC037C1FALGNB
!..Lwù.....6..U...
!..Lw.....6..U...
!..LzI...DocuFlex
!..L....DOC_FIRST_PAGE...
!..L....DOC_ACCOUNT.NUMBER.867-5309...
!..L....DOC_TOTAL_AMOUNT_DUE.145.87...
!..L....DOC_TOTAL_AMOUNT_DUE_SIGN.+...
!..L....DOC_DUE_DATE.10/31/2004...
!..Ly...DocuFlex
!..L.....L.7.....G...L.Ä.1..E....Previous Account Balance .G.... .G...G....$41.54.G...L.Q..Payments Receiv
!..Lz...DocuFlex
!..Lzù...DocuFlex
!..Lyù...DocuFlex
!..LyI...DocuFlex
!..L.....T1DOC037C1FAUNBB.....T1DOC037C1FAUNBD.....T1DOC037C1FAUNN0
!..Lwù.....6..U...
!..Lw.....6..U...
!..LzI...DocuFlex
!..L....DOC_LAST_PAGE...
!..Ly...DocuFlex
!..L.....L.7.....G...L...1..E....JAMES ROBERTS LLC .. .G...G...L....Details of your utility service at:
!..Lz...DocuFlex
!..Lzù...DocuFlex
!..Lzy...DocuFlex
!..L....FILE_TOTAL_SHEETS.33.
!..L....FILE_TOTAL_PAGES.65.
!..L....FILE_TOTAL_AMOUNT_DUE.729.35.
!..L....FILE_TOTAL_AMOUNT_DUE_SIGN.+.
```

Header Comment Records

Page Comment Records

Page Comment Records

Trailer Comment Records

*Sample AFP Output with BNG/ENG (Named Groups) and TLE (Tagged) Records***NOTE**

Setting IndexFormat=1 in the AFP PrintDef will generate this alternate form of indexing information. The Begin Name Group (BNG) is triggered by the presence of the DOC_FIRST_PAGE comment and the End Named Group (ENG) is triggered by the presence of the DOC_LAST_PAGE comment. Page Comments intended for TLE records should contain a name and value pair separated by a binary zero and terminated by a trailing binary zero.

```

!..L.....FILE_CYCLE.31.
!..L.....FILE_CORP_ID.00320.
!..L.....FILE_RUN_DATE.10/15/2004.
!..Ly...DocuFlex
!..LA....TRAY4
!..Ly[...00000001....00000001
!..L.....DOC_ACCOUNT_NUMBER....867-5309.....
!..L.....DOC_TOTAL_AMOUNT_DUE....145.87.....
!..L.....DOC_TOTAL_AMOUNT_DUE_SIGN....+.....
!..L.....DOC_DUE_DATE....10/31/2004.....
!..Lyù...DocuFlex
!..LyI...DocuFlex
!..L.....T1DOC037C1FAUNN0.....T1DOC037C1FAUNB0.....T1DOC037C1FALGNB
!..Lwù.....6..U...
!..LW.....6.U..
!..LzI...DocuFlex
!..Ly....DocuFlex
!..L.....L.7....G...L.À.1..E....Previous Account Balance .G.... .G...G....$41.54.G...L.Q..Payments Receiv
!..LZ....DocuFlex
!..Lzù...DocuFlex
!..Lyù...DocuFlex
!..LyI...DocuFlex
!..L.....T1DOC037C1FAUNBB.....T1DOC037C1FAUNBD.....T1DOC037C1FAUNN0
!..Lwù.....6..U...
!..LW.....6.U..
!..LzI...DocuFlex
!..L.....DOC_LAST_PAGE...
!..Ly....DocuFlex
!..L.....L.7....G...L...1..E....JAMES ROBERTS LLC .. .G...G...L....Details of your utility service at:
!..LZ....DocuFlex
!..Lzù...DocuFlex
!..Lz[...00000001....00000001
!..Lzy...DocuFlex
!..L.....FILE_TOTAL_SHEETS.33.
!..L.....FILE_TOTAL_PAGES.65.
!..L.....FILE_TOTAL_AMOUNT_DUE.729.35.
!..L.....FILE_TOTAL_AMOUNT_DUE_SIGN.+.
```

Header Comment Records

Begin Group Name

Page Comment Records

End Group Name

Trailer Comment Records

Sample Metacode Output with Comment Records

```

.FILE_CYCLE.31.
.FILE_CORP_ID.00320.
.FILE_RUN_DATE.10/15/2004.
.%%DMG.ID.TAG%% 1
. 0000001 Normal
.$XEROX JDL=DPLJDL,JDE=ONLINE;;
.$XEROX FEED=MAIN;;
.$XEROX COPIES=1;;
.$XEROX FONTS=(FORMSX,AR110E,AR210E,AR112E,AR114E,AR212E,AR111E,AR124H),;
.$XEROX FONTS=(AR210H),;
.$XEROX DUPLEX=YES;;
.$XEROX SIDE=NUFRONT;;
.$XEROX FORMS=NONE;;
.$XEROX BFORM=NONE;;
.$XEROX END;
<
..
.DOC_FIRST_PAGE.
.DOC_ACCOUNT.NUMBER.867-5309.
.DOC_TOTAL_AMOUNT_DUE.145.87.
.DOC_TOTAL_AMOUNT_DUE_SIGN.+
.DOC_DUE_DATE.10/31/2004.
..a..z.....b6.....b6.....b6.....b6..... b6.
..1..1.....b6.....Previous Account Balance.¥.$41.54.
..6..j....Payments Received $196.16.
..6..=....Previous Balance Due.÷.$21.93.
..6.....Adjustments/Fees.>.$0.00.
..6..ä....Current Utility Charges.
..q..¶....Total Current Bill.“.$0.00.
..6..%....New Account Balance.i.$21.93.
:
:
:
<
..
.DOC_LAST_PAGE.
..a..~.....b6.....b6.....b6.....b6.....c.6.
..a..z.....b6.....b6.....b6.....b6..... b6.
:
:
:
..a..<....JAMES ROBERTS LLC.
..a..T....Details of your utility service at: 5910 N. Central Expressway #800.
..U..ö....DOCUCORP UTILITIES Page 2.
..V....Account Number: 867-5309.
..?....Billing Date: 12/01/03.
..N....Amount Due: $21.93.
..N....Due Date: 12/15/03.
..Q....Detach and mail this portion with your payment.
:
:
:
.REPORT END
.FILE_TOTAL_SHEETS.33.
.FILE_TOTAL_PAGES.65.
.FILE_TOTAL_AMOUNT_DUE.729.35.
.FILE_TOTAL_AMOUNT_DUE_SIGN.+

```

} Header Comment Records

} Page Comment Records

← Page Comment Records

} Trailer Comment Records

N-Up Feature

DFLXOUT has been enhanced to provide an N-Up feature according to logical pages defined in DFLXOUT.INI. You can combine multiple pages of the incoming document onto one page in the output created by DFLXOUT. N-Up may be 2-Up, 4-Up, etc., with the order pages being determined by the order of the logical pages defined in DFLXOUT.INI.

Providing an “NUPLOGPAGES=n” entry in the [DFLXOUT] section of DFLXOUT.INI and matching [LOGPAGE x] sections drives the N-Up feature. The “x” in each [LOGPAGE x] section is numbered 0 through n-1 for the number of logical pages indicated by “NUPLOGPAGES=n”.

Each [LOGPAGE x] section provides coordinates of the logical page, the side of the sheet on which the logical page appears, and the orientation of the logical page, as follows:

- **COORD**—specified in inches, centimeters, or pixels (at 14400 dpi)
- **SIDE**—FRONT or BACK
- **ORIENT**—PORT, LAND, INVPORT, or INVLAND

```
[LOGPAGE x]
COORD=0",0",8.5",3.375"/0cm,0cm,0cm,0cm/0,0,0,0
SIDE=FRONT/BACK
ORIENT=PORT/LAND/INVPORT/INVLAND
```

DFLXOUT also allows sequentially-processed documents to appear side-by-side when performing n-Up processing. DFLXOUT refers to this processing as “joining documents,” since the normal behavior for n-Up processing is to treat the pages of each document independently.

The “joining documents” feature makes sense for a sequence of documents being sent to a roll-fed printer and then cut. The created print file contains many documents that will be separated later.

The “joining documents” feature *does not* make sense for a sequence of documents being sent to individual output files or for paper that is not being cut. It’s possible for a document with an odd number of pages to lose its last page, which would be joined with the next document in the next output file. This result would not be useful, since a portion of a recipient’s document would be misdirected to another recipient. *DFLXOUT actively defeats document joining when the output is to PDF files.*

An “NUPJOINDOCS=1” entry is required in the [DFLXOUT] section of *Dflxout.ini*. The default value is “NUPJOINDOCS=0,” which causes DFLXOUT to behave as before—with each document being treated independently. Recall that the n-Up process is enabled with the “NUPLOGPAGES=n” entry, which activates n-Up processing regardless of whether you activate the joining feature.

DFLXOUT Processing Flow

The general processing flow is to read each record of StackedIndex, read the referenced StackedDCD segment, and generate an output print stream.

```
Open StackedIndex
while Read_Index_Record
    Select input Stacked DCD
    Read DCD document for this transaction

    Select output stack based on Batch and transaction/page count
    Create DataMatrix values based on page count

    Read and output Mailer if specified

    Replace DataMatrix tags with values
    write document to stack
End while
Close StackedIndex
Write Stack Control Report for each Stack created above
```

DFLXSAVE Basics

DFLXSAVE is a command-line executable that reads a stacked *.DCD* file, separates the individual *.DCD* documents (or a batch of documents), and creates a queue job to be read by Docusave Server and archived into a data repository such as Documanage.

DFLXSAVE requires two input files—the stacked *.DCD* and the stacked index file, which contains information on each document in the stacked *.DCD*.

TIP

To see usage information, type “**dflexsave.exe /?**” on the command line:

```
Usage: dflexsave.exe ini= env= ddp=
Usage: dflexsave.exe filename.ini env= ddp=
      filename.ini= full path of the application .ini file name
      ini= full path of the application dflexout.ini file
              default: docuflex.ini
      env= (optional) the dflexout.ini section name of the path maps for resources
              default: [PATH_MAPS]
      ddp= (optional) full path of the Docuflex document project
```

Sample Syntax

To run *DFLXSAVE*, type *dflexsave* at the command line. Make sure you have the *Dflexsave.ini* file in the same directory as the executable. If your *.ini* file is in a different location, you must pass the path and file name of the *.ini* file as the first parameter in the command line.

The following sample depicts the syntax of *DFLXSAVE*:

```
dflexsave ini=C:\Docucorp\Docuflex\dflexsave.ini
          [env=OfficePC]
          [ddp=C:\Docucorp\Docuflex\Projects\myproj.ddp]
```

where:

Keyword	Value
ini	The full path and file name of the application <i>.ini</i> file.
env	The environment (env) parameter indicates that path maps for resources are located in a <i>specific</i> section of the indicated <i>.ini</i> file, not the default section of [PATH_MAPS]. In the above sample syntax, Docuflex searches for a section in the <i>Docuflex.ini</i> file called [Environment - OfficePC]. Use Windows Notepad or any other text editor to create this section and its path maps in the <i>Docuflex.ini</i> file. One use of the environment parameter is to create separate sections for path maps of different operating systems. You can define these sections within the same <i>.ini</i> file and share them across platforms (i.e., indicate the desired section with env=xxx).
ddp	The full path and file name of the Docuflex document project file produced by Docuflex Studio.

NOTE

The ENV= and DDP= keywords are optional, but a *.ini* file must be provided either through the INI= keyword or the *.ini* value itself.

Sample DFLXSAVE.INI File

NOTE

You can incorporate the contents of the *Dflxsave.ini* file into the *Docuflex.ini* file. If you choose this option, you must use a section header of [DFLXSAVE] to distinguish the contents to the *DFLXSAVE* application. Also, be sure to specify the correct *.ini* file on the command line.

```
[DFLXSAVE]
DDPFilename=C:\Docucorp\Docuflex\Projects\statements.ddp
DDFArchiveFlag=1
QueueName=dsinputq
ServerName=localhost
DocuFlexINI=C:\Docucorp\Docuflex\docuflex.ini
QBatchSize=5
LogFlag=3
ScreenLog=2
RECAP_FILE=C:\Docucorp\Docuflex\out\recap.log
RECAP_CLEAR=0
ERROR_FILE=C:\Docucorp\Docuflex\out\dflxsave.err
LOG_FILE=C:\Docucorp\Docuflex\out\dflxsave.log
```

.INI File Key Descriptions

Keyword	Value
DDPFilename	The path and filename of the Docuflex Document Project.
DDFArchiveFlag	The “data” is included in the <i>.DCD</i> file to be archived. The valid values are as follows: ■ 0—do not include the data ■ 1—include the data The default is to include the data.
QueueName	The name of the Docusave input queue.
ServerName	The name of the server on which the queue is running.
DocuFlexINI	The path and filename of the <i>.ini</i> file Docuflex uses.
QbatchSize	The number of <i>.DCD</i> documents per job to be archived.
LogFlag	<i>DFLXSAVE</i> generates a log file with increasing levels of detail describing each step of the archiving process. You can specify the level of detail on a scale from 0 to 4. 0 signifies that you do not want <i>DFLXSAVE</i> to produce a log file, and 4 signifies that you want the highest level of detail in the log file.
ScreenLog	<i>DFLXSAVE</i> also generates and displays the log file on the computer’s monitor. 0 signifies that you do not want <i>DFLXSAVE</i> to display a log file, and 4 signifies that you want to display a log file with the highest level of detail.
RECAP_FILE	The path and file name of the file to which <i>DFLXSAVE</i> stores a summary of the documents you’ve archived (see “ Recap Log File ” on page 514).
RECAP_CLEAR	A value of 0 (True) leaves the file intact and appends any new messages to the end of the file, while 1 (False) erases the file each time you execute <i>DFLXSAVE</i> .
ERROR_FILE LOG_FILE	The path and file names where <i>DFLXSAVE</i> records error messages and processing steps.

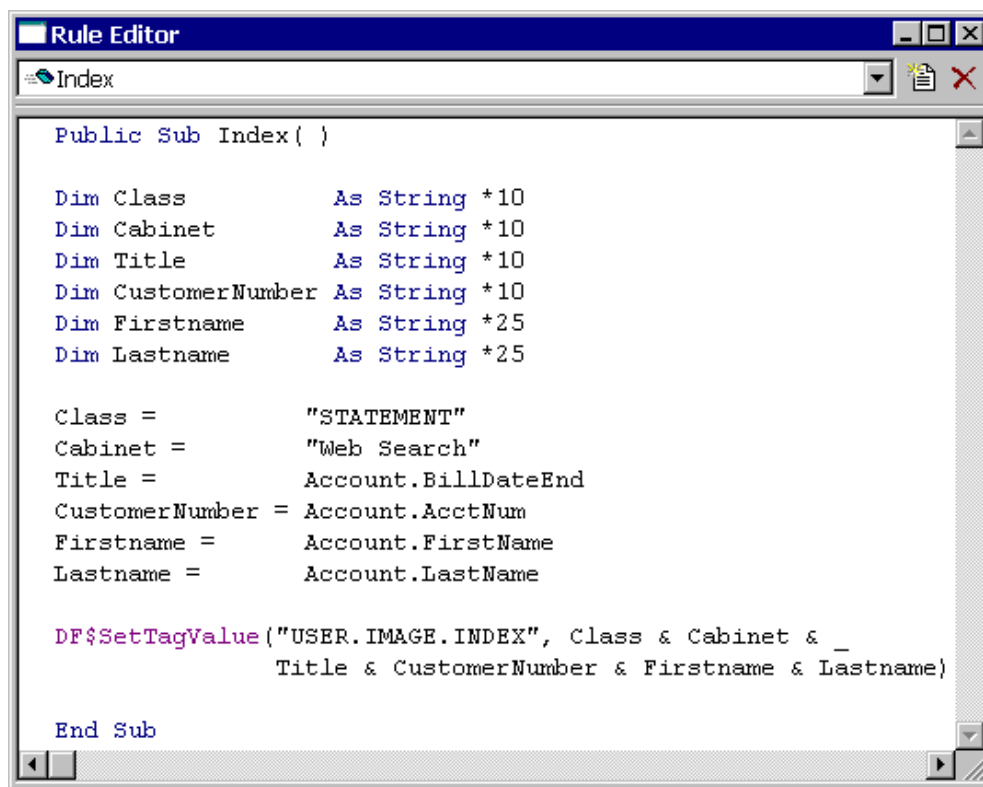
Archiving Documents with Documange

Documange is an optional application that contains archival copies of Docucorp Compound Document (*.dcd) output. When you use Docusave Server and Docuflex to archive documents into Documange, you perform two steps to complete the process:

- Your Docuflex Studio project must include an “index” tag—USER.IMAGE.INDEX. This index tag generates ID comments and places them in the output file.
- You must modify the *index.cfg* file, delivered with Docusave Server, to specify the “key” to reading the index tag included in the output file.

Constructing the USER.IMAGE.INDEX Tag

You construct the index tag in Docuflex Studio via a processing rule, an example of which is included in the “sample” project delivered with Docuflex.



In the first section of the rule, all of the variables are defined, along with a datatype and length. In the second section, constant values or variable data fields from the Docuflex Schema are assigned to the variables. In the final section, the **DF\$SetTagValue** subroutine contains the name of the index tag, followed by the variables you want to use and their order.

TIP

To implement the subroutine and have Docuflex generate the necessary index tag, assign the subroutine as a PreInclusion Rule on the first section of your project.

Modifying the INDEX.CFG File

Next, you must modify or replace the *index.cfg* file, installed with Docusave Server, to correctly archive documents produced with Docuflex. The *index.cfg* file must match the lengths of the variables created in the USER.IMAGE.INDEX tag. You also need to include file offset values so Docusave Serve can correctly read the index.

	offset	Length	Type
	----	-----	----
%%%Class%%%	0	10	C
%%%Cabinet%%%	10	10	C
%%%Title%%%	20	10	C
%%%Author%%%	0	0	C
%%%AddedOn%%%	0	0	C
%%%AddedFrom%%%	0	0	C
%%%Date%%%	0	0	C
%%%SubType%%%	0	0	C
%%%Status%%%	0	0	C
%%%Keyword1%%%	0	0	C
%%%Keyword2%%%	0	0	C
%%%UserFlag1%%%	0	0	C
%%%UserFlag2%%%	0	0	C
%%%Description%%%	0	0	C
CustomerNumber	30	10	C
Firstname	40	25	C
Lastname	65	25	C

NOTE

For more information about modifying the *index.cfg*, see the “Using DRR/Index Configuration Files” section of the “General Setup” chapter in the *Administering Docusave Server* guide.

After reading the index and separating the documents, *DFLXSAVE* places the *.dcd* documents into a standard Queue Management Systems (QMS) TCP/IP queue for Docusave Server. *DFLXSAVE* contains an arbitrary setting of 10 documents per queue entry, but you can change this *Docuflex.ini* setting to suit your operating environment.

Finally, Docusave Server archives the documents into Documanage.

Alphabetical Reference

How to Use the Alphabetical Reference

Following is an encyclopedic reference of all Docuflex Studio program properties, including:

- Component Properties
 - Docuflex Studio Chart Properties
 - Presentation Graphics Chart Properties
 - Field Properties

The reference lists each property in alphabetical order within categories. If you know the name of the property about which you need information, just browse through the reference as you would browse through an encyclopedia until you find the definition of that property.

The topics that follow the definition describe the operations you can perform with that property.

Component Properties

TIP

You can view and edit all properties in the following manner:

- In the Component Explorer, select the component for which you want to specify a property.

The properties that you can define for the component display in the Component Properties.

If you've assigned a Member Style to a Member and you want to change the default property value, see [“Using the Member Styles View”](#) on page 196.

AliasName

Specifies an alternate name for the embedded external project.

You can use this property to associate a key word or phrase with an referenced project.

To Specify the Alias Name

- Click in the AliasName cell, and then type the alternate name for the referenced project.

Alignment

Horizontally positions the lines of text controlled by a paragraph style. Docuflex Studio positions the text between the indentations specified for the style.

You can set the alignment to be one of the following:



Left Alignment places each line of selected text even with the left margin or indent, leaving the right ends ragged.



Right Alignment places each line of selected text even with the right margin or indent, leaving the left ends ragged.



Centered Alignment places each line of selected text in the center between the left and right margins, leaving both ends ragged.



Justified Alignment places each line of selected text flush with the left and right margins.

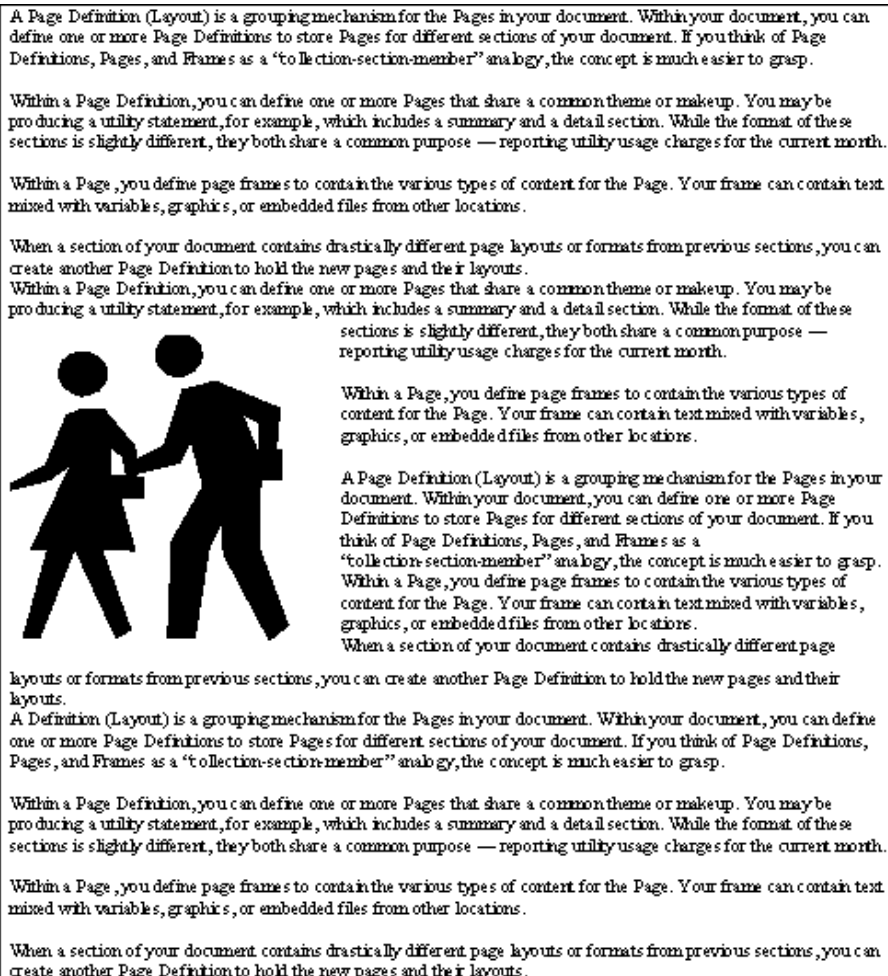
To Align a Paragraph Style

- 1 Click in the Alignment cell of the Styles bar, and then click .
- 2 From the drop-down list, select one of the following:
 - Centered
 - Justified
 - Left
 - Right

AlignTopToFrame

Specifies the starting vertical position of the source member relative to a target frame. This parameter works on the frames themselves, not the members. However, any member placed in a frames that's being aligned is subject to this property.

You can use this property to place a member of one frame on the next line below the lowest member of the specified (usually previous) frame. In effect, you're stretching a lower frame upward to minimize blank space between frames on the page. One practical application of this is when you place a picture on a page and you want the text to "wrap" around the picture.



In this example, there are three text frames on the page, labelled Body1, Body2, and Body3. Body 2 is aligned to the top of frame Body1 and Body3 is aligned to the top of frame Body2.

To Align a Frame to the Top of the Previous Frame

- 1 Click in the AlignTopToFrame cell, and then click .
- 2 From the drop-down list, select a frame name.

Any member you assign to the aligned frame is placed on the next line below the lowest member of the frame to which you're aligning.

AspectRatio

Indicates whether images (BMP, EMF, JPG, PNG, and TIFF) should be stretched or compressed to fit the dimensions specified for the member.

You can use this property to control the relationship of dimensions for resized images specifying a height and width, such as Pre-Composed members.

NOTE

For Chart members, AspectRatio=False will create a chart of the size given by the Width and Height properties. AspectRatio=True will create a chart that may vary slightly from the size given by the Width and Height properties, but the aspect ratio will be correct.

To Indicate the Aspect Ratio of Images

- 1 Click in the AspectRatio cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—images should retain the original ratio between width and height, even as they are stretched or compressed
 - False—the Docuflex composition engine is free to stretch or compress images to the exact dimensions specified even though the images may become distorted

AutoResizeHorizontal

AutoResizeVertical

Specifies whether you want to expand automatically the horizontal and vertical dimensions of Text and Field Boxes in Content Form members.

You can use these properties to accommodate the size needs of a text or field box in the event that the data is longer than originally planned when you first “drew” the box.

To Specify Automatic Resizing

- 1 Click in the AutoResizeHorizontal or AutoResizeVertical cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—resize the box to the right (horizontal) and down (vertical) as needed for more data.
 - False—maintain the static boundaries of the box.

BackColor

Sets the background color or shading for a frame or table row.

You can use this property to emphasize text that has been placed in a separate frame on a page or in a table cell. If you use indentation and enable border lines, the BackColor is only applied to the area within the border, not the indented space (which is outside the border).

To Set the Background Color for a Frame or Table Row

- 1 Click in the BackColor cell, and then click .
- 2 From the drop-down list, select a color style.

For more information about creating color styles, see “Using the Color Styles View” on page 192.

BackColorEvenRow

Sets the background color of the even rows (and cells on those rows) of a table, if specified.

You can use this property to enhance the readability of a table with multiple rows. If you specify a color for the BackColorEvenRow property, Docuflex uses it on the even rows of a table and uses the BackColor on the odd rows of a table. If you do not specify a color for the BackColorEvenRow property, Docuflex uses the BackColor on all rows of the table.

EXPLANATION

In previous versions of Docuflex, the row number in the database (referenced by the DataSource property) enabled this property. Now, it's enabled by the row number on the *composed* table output. The row number is reset to 1 (one) if and when a table “breaks” to a new page. So, for each table shown on each page, the first row is always labelled as 1, or the odd row. Likewise, the second row is an even row. Note that Header and Footer rows are considered in this count; however, you do not have to specify this property on Header and Footer rows. Consequently, the first detail row is “even” if there's a Header row, so be sure to set up the BackColor and BackColorEvenRow properties appropriately.

To Set the Background Color for Even-Numbered Rows

- 1 Click in the BackColorEvenRow cell, and then click .
- 2 From the drop-down list, select a color style.

For more information about creating color styles, see “Using the Color Styles View” on page 192.

BackgroundFormName

Specifies an image to display in the background of a member. If you've enabled Documanage, you'll notice four additional member properties:

Property	Corresponds to:
BGContentRetrievalType	ContentRetrievalType
BGDocumentName	DocumentName
BGLastChangeDate	LastChangeDate
BGStatus	“Step 10” on page 84

You can use this property to display a watermark, logo, or other image behind a member's content.

To Select the Background Form Name

- 1 Click in the BackgroundFormName cell, and then click .
- The Open dialog displays.
- 2 Navigate the dialog to the location containing the background images.
- 3 Select the image you want to use, and then click **OK**.

BackgroundFormPage

Specifies the page number of a multiple-page image to display in the background of a member.

You can use this property to select a specific page to display as the background image of a member. The field defaults to the first page of the form; you must type the page number if it's other than the first.

To Select the Background Form Page

- ▶ Click in the BackgroundFormPage cell, and then click  (spin control), or type the number, to enter the page number.

BackgroundHasSize

Specifies whether the background image should be considered when determining the amount of space occupied by the member.

This property defaults to True for

- members containing values for the **BackgroundFormName** and **BackgroundFormPage** properties.
- members added via the “Placement” dialog with **Select a background form** enabled.

To Specify Whether the Background Image Has Size

- 1 Click in the BackgroundHasSize cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—consider the size of the background image in computing the space occupied
 - False—ignore the size of the background image

BalanceCells

Specifies whether you want to balance the width of cells in a table row.

You can use this property to “even out” cells across a row, thus improving the visual display of your document.

To Balance the Cells in a Table Row

- 1 Click in the BalanceCells cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—attempt to balance cells across a table row
 - False—do not attempt to balance cells

BalanceColumns

Specifies whether you want to balance the height of the text across columns within a frame or table cell.

You can use this property to spread member contents across columns, thus improving the visual display of your document.

To Balance the Columns in a Frame or Cell

- 1 Click in the BalanceColumns cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—attempt to balance columns within a frame or table cell
 - False—do not attempt to balance columns

BasedOn

Sets the initial properties of a style, frame, or page definition to match those of an existing style, frame, or page definition.

You can use this property to define the initial appearance, without having to specify individually other properties, such as Font, Color, Alignment, etc. You can then enter any overrides where necessary (e.g., Docuflex Studio uses the properties of the “based on” style unless you change them in the present style). If you want to recall the default values, you can use the Reset command (see “Reset” on page 272).

If you change the properties of a style, for example, on which another style is based, Docuflex Studio automatically changes those properties for the second style, unless you’ve overridden the property with another value. The same principle holds true for frames and page definitions.

By default, Docuflex Studio assigns the Normal member style to all new members. This allows you to set the default properties in the Normal member style and override them with new styles BasedOn the Normal member style.

To Base the Properties of a Style on Another Style

- 1 Click in the BasedOn cell of the Styles bar, and then click .
- 2 From the drop-down list, select a frame or style name.

BeginUseDate

EndUseDate

Specifies the time period within which a document component is valid for inclusion in a document. You can use these two properties to determine specifically the “processing” date of a component.

NOTE

These dates are only honored if Effective Date Processing is enabled (see “To Specify Effective Date Processing” on page 406).

Some document components, such as a promotional giveaway coupon, are only valid for a certain, established time period. If you produce the document either before or after this period, only the components that are valid are included.

To Specify the Valid Processing Dates for a Component

- 1 Click in the BeginUseDate or EndUseDate cell, and then click .
- 2 Use the pop-up calendar to select the correct beginning or ending use date.

BGContentRetrievalType

The BGContentRetrievalType property is displayed for background forms selected from Documanage and is synonymous with [ContentRetrievalType](#).

BGDocumentName

The BGDocumentName property is displayed for background forms selected from Documanage and is synonymous with [DocumentName](#).

BGLastChangeDate

The BGLastChangeDate property is displayed for background forms selected from Documanage and is synonymous with [LastChangeDate](#).

BGStatus

The BGStatus property is displayed for background forms selected from Documanager and is synonymous with **Status**.

BookletEnabled

Specifies whether you want to enable booklet printing for this project.

You can use this property on the first page definition of your project to reorder the pages so they're presented in the proper sequence for folding and possible binding.

To Enable Booklet Printing

- 1 Click in the BookletEnabled cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—the dimensions for each page are reduced by half so you can fit two document pages per booklet page
 - False—do not enable booklet printing

BookletExtraPages

Specifies where you want to add blank pages to achieve the correct number of pages in the booklet.

You can use this property to place blank pages in your booklet so the total number of pages is a multiple of four.

To Specify the Location of Blank Pages

- 1 Click in the BookletExtraPages cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Back—place all blank pages at the end of the booklet
 - Balanced—place an equal number of blank pages at the front and back of the booklet
 - Front—place all blank pages at the beginning of the booklet

BookletPageOffsetDelta

Specifies the measurement necessary to counter “print creep” when printing pages for a booklet.

You can use this property to minimize the growing inside margin encountered when folding a large stack of paper into a booklet (i.e., the inner folder pages would appear to have a larger margin because less paper is hidden by the fold).

To Set the Offset Delta Measurement

- Click in the BookletPageOffsetDelta cell, and then type the measurement to counter “print creep.”

BookmarkLevel

Establishes the position of this bookmark in the hierarchy of the bookmark list.

You can use this property to determine the level for a bookmark in the table of contents. This feature is useful when saving your document to an Adobe PDF on-line file. The *dc2pdf* output PDL can discern your bookmarks in Docuflex Studio and create identical ones for your PDF.

To Establish the Bookmark Level

- Click in the BookmarkLevel cell, and then click  (spin control), or type the number, to enter the level number. The level number should be between 1 and 16.

NOTE

A BookmarkLevel greater than 0 indicates that Docuflex Studio should create a bookmark for a member. Nested (indented) levels should be incremented by one level at a time (e.g., 1, 2, 3; not 1, 5, 6).

BookmarkText

Establishes the contents of this bookmark that will display in the bookmark list.

You can use this property to determine the wording for a bookmark in the table of contents. This feature is useful when saving your document to an Adobe PDF file. The *dc2pdf* output PDL can discern your bookmarks in Docuflex Studio and create identical ones for your PDF.

To Establish the Bookmark Text

- 1 Click in the BookmarkText cell, and then click .
The Expression Builder dialog displays.
- 2 Type the text string or expression for the bookmark. For details about using the Expression Builder, see “[To Build an Expression](#)” on page 276.

CAUTION

If you do not specify any text for the BookmarkText property, Docuflex Studio uses the first text created by the member; if the member creates no text, then Docuflex Studio uses the member name for the bookmark.

BorderColor

Sets the border color for a frame, or for a Paragraph style when one or more BorderLines are enabled.

You can use this property to select the color for a border around a frame or text.

To Set the Border Color

- 1 Click in the BorderColor cell, and then click .
- 2 From the drop-down list, select a color style.

For more information about creating color styles, see “[Using the Color Styles View](#)” on page 192.

BorderLines

Sets the number of border lines that surround a frame or paragraph style.

You can use this property to specify boxes around a frame or paragraph style.

CAUTION

You *must* set the number of BorderLines before any border lines are displayed. Setting the various BorderLineWidths does *not* automatically display BorderLines.

To Set the Number of Border Lines

- Click in the BorderLines cell, and then type the digit (1, 2, 3, or 4) that represents the number of sides you want for the border.

BorderWidth

Sets the width or thickness of the border line that surrounds Line and Ellipse drawing objects.

You can use this property to specify a visually-appealing border for the appropriate object.

To Set the Border Width

- Click in the BorderWidth cell, and then type a width specification.

BorderLineWidthBottom

BorderLineWidthLeft

BorderLineWidthRight

BorderLineWidthTop

Sets the width or thickness of the border lines that surround a frame or paragraph style.

You can use this property to specify boxes to surround a frame or paragraph style.

To Set the Border Line Thickness

- 1 Click in a BorderLineWidthBottom, Left, Right, or Top cell, and then type a width specification.
- 2 Repeat Step 1 until you've specified a width for each border line that you want for the frame or style.

BorderMarginBottom

BorderMarginLeft

BorderMarginRight

BorderMarginTop

Specifies the distance between the border and the margins of the frame or paragraph, including any SpaceAfter or SpaceBefore the paragraph.

You can use these properties to add space between the member or paragraph text and the border.

TIP

Border margin values are observed even if you do not elect to display the border line(s).

To Specify the Border Margins

- 1 Click in the BorderMarginBottom, Left, Right, or Top cell, and then type a width specification.
- 2 Repeat Step 1 until you've specified a width for each border line that you want for the frame or style.

BorderStyle

Sets the appearance of the border line that surrounds a Line or Ellipse drawing object.

You can use this property to specify the appearance of the "line" that forms boxes around an object.

To Set the Appearance of the Line for a Border

- 1 Click in the BorderStyle cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Dash
 - Dash Dot
 - Dash Dot Dot
 - Dot
 - Solid

BorderStyleBottom

BorderStyleLeft

BorderStyleRight

BorderStyleTop

Sets the appearance of the border lines that surround a frame or paragraph style.

You can use this property to specify the appearance of the lines that form boxes around a frame or paragraph style.

To Set the Appearance of the Line(s) for a Border

- 1 Click in a BorderStyleBottom, Left, Right, or Top cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Dash
 - Dash Dot
 - Dash Dot Dot
 - Dot
 - Solid
- 3 Repeat Steps 1 and 2 until you've specified a style for each border line.

CellListSource

The CellListSource property enables the dynamic cell selection and width overriding feature which allows you to choose specific cells via a list and change their default widths, if necessary.

This property specifies the name of a "table.column" from the schema that contains a comma-separated value (CSV) list of cell names and corresponding cell widths (e.g., Cell2:2i,Cell1,Cell5:1i). If you provide a CSV list, only the requested cells are published and they're published in the specified order. Additionally, if a cell you request in the CSV list has an associated cell width, the composed cell's width is overridden with this new value, regardless of the width specified in the project. Any members that reference the cells that are not requested will not be composed.

NOTE

Please be aware of the following conditions:

- The member who has the NewTableRow property as its startParm should be in the CSV list.
- Member children of non-composing cells, and other members that reference those cells, will not be composed.
- Dynamically removing cells from a row will not change the row's width; so row shading could extend past the extent of the published cells.

The syntax of the CSV list is as follows:

```
name1[:#(i|c|m|p)][,name2[:#(i|c|m|p)]...
```

where:

namen	corresponds to the name of a table cell that you want to compose
:# (optional)	(number of units) corresponds to the desired width of the associated cell
unit of measure (optional)	The letter you use tells the application how to interpret the number of units, as follows:
	i inches
	c centimeters
	m millimeters
	p pixels

Given a table row with cells **Cell1**, **Cell2**, **Cell3**, **Cell4**, and **Cell5**, you could create a valid CSV file similar to the following:

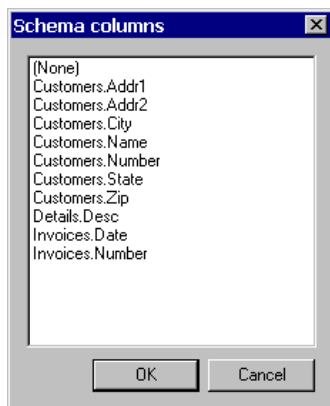
```
cell14:2i,cell12,cell13,cell15:1i
```

This list forces the row to compose Cell4 with a width of two (2) inches; Cell2 and Cell3 with widths specified in the project; followed by Cell5 with a width of one (1) inch. Cell1 will not be composed at all.

To Specify the Cell List Source

- 1 Click in the CellListSource cell, and then click .

The Schema columns dialog displays.



- 2 Select the appropriate "table.column" from the list and click **OK**.

CharacterPosition

Determines the vertical positioning of the character(s).

You can use this property to raise, lower, or leave the character(s) in line with the surrounding ones.

To Determine the Character Position

- 1 Click in the CharacterPosition cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Lowered
 - Normal
 - Raised

CharacterStyle

Determines the font, color, and character position of the style. CharacterStyle is a reference to a predefined character style.

You can use this property to control the look and feel of member styles, paragraph styles, and support definitions such as Text and Text Document.

To Select the Character Style

- 1 Click in the CharacterStyle cell, and then click .
- 2 From the drop-down list, select any one of the Character Styles that have been created.

ChoiceField

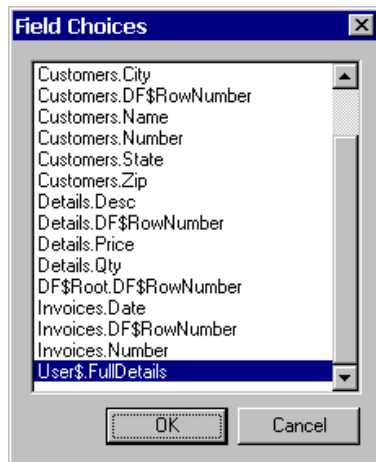
Specifies the user-defined variable data field to contain the True or False response to a question posed by ChoicePrompt.

You can use this property, with ChoicePrompt, to elicit a response from users about their preference concerning the composition of a particular component (see “Using Choice Fields” on page 116).

To Select the Choice Field

- 1 Click in the ChoiceField cell, and then click .

The Field Choices dialog displays.



- 2 Select the appropriate “table.column” from the list and click **OK**.
The True or False result of the ChoicePrompt is stored in this field.

ChoicePrompt

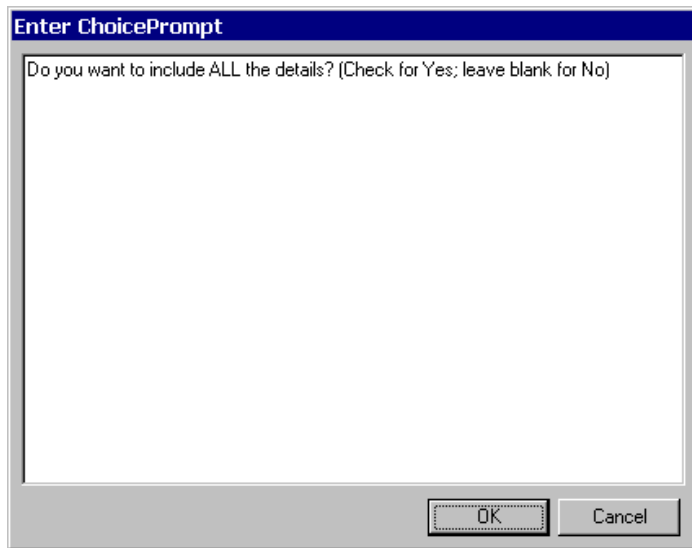
Specifies a user-defined prompt string designed to elicit a True or False response from users.

You can use this property, with ChoiceField, to elicit a response from users about their preference concerning the composition of a particular component. For more information, see “Using Choice Fields” on page 116.

To Specify the Choice Prompt

- 1 Click in the ChoicePrompt cell, and then click .

The Enter ChoicePrompt dialog displays.



- 2 Type the question or phrase you want the users to answer. Be sure to construct the question so the response must be either True or False.
- 3 Click **OK**.

Color

Specifies the foreground color of the text.

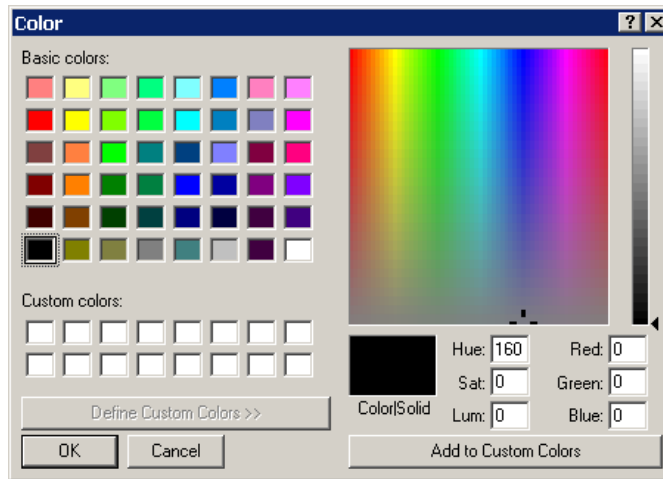
You can use this property to emphasize or bring attention to an important area of the page.

To Specify the Color

- 1 Click in the Color cell, and then click .
- 2 From the drop-down list, select a color style (see “Using the Color Styles View” on page 192).

Color Dialog

The Color dialog lets you pick the color for a property.



To Select a Color

- 1 In the Basic colors pallet, click on the desired color.
-OR-
In the Basic colors pallet, click on a color that's close to the desired color, and then drag the ◀ (color indicator) along the color scale until the desired color shows in the ColorSolid box.
- 2 Click **OK**.

To Create a Custom Color

- 1 Type the appropriate RGB color values into the Red, Green, and Blue text boxes.
-OR-
Drag the ◀ (color indicator) along the color scale until the desired color shows in the ColorSolid box.
- 2 Click **Add to Custom Colors**.
- 3 Click **OK**.

ColorProcessing

Specifies the color setting of the referenced image.

You can use this property to change the color processing of an image.

To Specify the Color Processing of the Image

- 1 Click in the ColorProcessing cell, and then click ▾.
- 2 From the drop-down list, select one of the following:
 - BlackandWhite
 - Grayscale
 - Original

ColumnCount

Sets the number of columns for the frame.

You can use this property to establish a columnar format for your text frames.

To Set the Number of Columns

- ▶ Click in the ColumnCount cell, and then click  (spin control), or type the number, to adjust the number of columns.

Comment

Specifies any clarifying description relevant to the member or style.

You can use this property to record an expanded description, for example, that provides more detail into the contents of a member or style.

To Specify the Comment

- 1 Click in the Comment cell, and then click .
The Enter Comment dialog displays.
- 2 Type the contents the comment.

CommonBorders

Specifies whether to “overlap” the borders of adjacent table cells (to make a common border) or leave the borders of each cell side-by-side (in effect doubling the width of the border).

You can use this feature (for Table Definitions created by the “Import RTF” feature) to generate tables with cells whose borders “overlap” as in Microsoft Word. Docuflex sets the **CommonBorders** property to True for imported Table Definitions and leaves the property set to False for existing Table Definitions.

To Specify a Common Border for Tables

- 1 Click in the CommonBorders cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—create a common border between two table cells
 - False—keep each border separate from the other

Content

CAUTION

This property only displays if you select a **ContentType** of Document Name From Table, Docuflex Stylized Content, Pre-Composed Document, Segment Reference, or Text Document.

Specifies the content of a member, which can include a graphic to enhance your document, a precomposed document, a document segment that reduces the unnecessary repetition of typing multiple occurrences of identical text, or a text file.

To Specify the Content

- 1 Click in the Content cell, and then click .

NOTE

If you’ve enabled the interface with Documanage, you’ll be prompted to log in if your session is no longer active.

- 2 Do one of the following:

If the content is a	Do this
Document Name From Table	Select the table row from the Select Schema dialog box.
Docuflex Stylized Content	Select the document from the Select Stylized Content box.
Pre-Composed Document	Select the document from the Select Form dialog box.
Document Segment	Select the segment from the drop-down list box.
Text Document	Select the document from the Select Text Document dialog box.

-or-

Select the desired document from the Select Documange Document dialog box.

ContentAllowDelete

Indicates whether someone viewing an online document can delete a member.

You can use this property to enhance the flexibility of online documents by allowing unnecessary content to be deleted.

To Allow Content to be Deleted

- 1 Click in the ContentAllowDelete cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True
 - False

ContentAllowEdit

Indicates whether someone viewing an online document can edit a member.

You can use this property to enhance the flexibility of online documents by allowing incorrect or outdated content to be changed.

To Allow Content to be Edited

- 1 Click in the ContentAllowEdit cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True
 - False

ContentAllowInsert

Indicates where someone viewing an online document can add a member.

You can use this property to enhance the flexibility of online documents by allowing a user to add content “around” the selected member.

To Allow Content to be Inserted

- 1 Click in the ContentAllowInsert cell, and then click .
- 2 From the drop-down list, select one of the following:
 - After
 - Before
 - Before and After
 - Child

ContentRetrievalType

Specifies the type of retrieval method for obtaining the latest content for this member at document composition time.

NOTE

If you've chosen a background form from Documanager, you'll also see the member property **BGContentRetrievalType**.

You can use this property to indicate which revision of a Documanager document you want to retrieve.

To Indicate the Content to be Retrieved

- 1 Click in the ContentRetrievalType cell, and then click .
- 2 From the drop-down list, select one of the following:
 - **SelectedVersion**—uses the selected version during composition. This option provides the best performance since there is no need to access the Documanager server during composition *unless you're using Renditions*.
 - **LatestVersion**—retrieves, from Documanager, the latest version of the document and also updates the Status property in Docuflex.

ContentType

Specifies the type of content that this member contains. You select the ContentType when you use the Member Definition or other Wizard. After you've created the member through a Wizard, you cannot change the value of this property.

CropHeight

CropLeft

CropTop

CropWidth

Specifies the dimensions of the cropped, or selected, area of the image.

You can use these properties to define the boundaries and size of the cropped portion of the image.

To Specify the Dimensions of the Cropped Area

- 1 Click in the CropHeight, Left, Top, or Width cell, and then type a measurement.
- 2 Repeat Step 1 until you've specified a setting for each boundary of the cropped area of the image.

DataAllowTableDelete

Indicates whether someone viewing an online document can delete a row from a table.

You can use this property to enhance the flexibility of online documents by allowing unnecessary rows to be deleted. The table that you can delete is specified in "[DataInsDelTable](#)" on page 573.

To Allow Table Data to be Deleted

- 1 Click in the DataAllowTableDelete cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True
 - False

DataAllowTableInsert

Indicates where someone viewing an online document can add a row to a table.

You can use this property to enhance the flexibility of online documents by allowing a user to add content “around” the selected member. The table that you can insert is specified in “DataInsDelTable” on page 573.

To Allow Table Data to be Inserted

- 1 Click in the DataAllowTableInsert cell, and then click .
- 2 From the drop-down list, select one of the following:
 - After
 - Before
 - Before and After
 - Child

DataInsDelTable

Indicates the data table from which a user can add or delete rows when viewing an online document.

You can use this property to enhance the flexibility of online documents by allowing a user to add rows to or delete rows from a table.

To Allow Data Tables to be Inserted or Deleted

- 1 Click in the DataInsDelTable cell, and then click .
- 2 From the drop-down list, select a table from the data file.

DataSource

Specifies the table in the data file which is the source of information for this member. DataSource controls the number of occurrences for this member. The member is repeated once for each row in the table. If the member is a child of another repeating member, then the member is only included once for each child row of the parent member.

You can use this property when you have a data file that supplies the variable data for your document.

To Specify the Data Source

- 1 Click in the DataSource cell, and then click .
- 2 From the drop-down list, select any one of the data source candidates that have been created.

DataSourceSort

Indicates the order in which you want to sort the contents of the table before composing the content.

You can use this property to present the content in a more meaningful fashion for your recipients.

To Sort the DataSource

- 1 Click in the DataSourceSort cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Ascending—from lowest to highest
 - Descending—from highest to lowest

DataSourceSortCol

Specifies the column in the table on which you want to sort the contents.

You can use this property to present the content in a more meaningful fashion for your recipients.

To Specify the Column for Sorting

- 1 Click in the DataSourceSortCol cell, and then click .
- 2 From the drop-down list, select any one of the available columns in the table.

DecimalChar

Specifies the appropriate character to use for separating the decimal and integer digits in a numerical value.

You can use this property to make Docuflex Studio compatible with different countries' numbering systems.

To Specify the Decimal Character

- Click in the DecimalChar cell, and then type the desired character (e.g., comma or period).

DestinationName

Specifies the destination in your Transall project that contains the OnIndexWrite and OnIndexRead event scripts. Docuflex Studio and the Post-Processor need to access the Transall executable containing the two necessary event scripts.

Docuflex Studio imports a Transall executable file when you add a Docuflex Post-Process Library (*.tex) file reference.

You use this property to identify the DestinationName contained in the Transall executable. The name you type must match the one already defined in Transall.

To Specify the Destination Name

- Click in the DestinationName cell, and then type the name.

For more information, see [“The Post Processors”](#) on page 527.

DisplayIfEmpty

Specifies whether to display a cell if it's empty.

You can use this property to display only those cells that contain data. Furthermore, you could set up two or more overlapping cells and display only the cell receiving data. This property provides a way to “highlight” cells based on processing rules (e.g., You set up two members with the appropriate rules and include either one or the other). The members, in turn, have different frame references, which cause one of the overlaid cells to be selected for display.

To Specify Whether to DisplayIfEmpty

- 1 Click in the DisplayIfEmpty cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—display the cell, regardless of whether it contains any data (default).
 - False—do not display an empty cell.

DocumentName

Specifies an alternate name for a Documanager document.

NOTE

If you've chosen a background form from Documanager, you'll also see the member property **BGDocumentName**.

You can use this property view an associated name that's easily connected with a document stored in a Documanager repository.

To Specify the Document Name

- Click in the DocumentName cell to view the name.

DropCache

Specifies whether to drop the cached content for a member with each transaction to avoid "stale" content.

Some Docuflex projects require that a member dynamically create its content by calling an external process in its PreComposition rule, which typically creates the same filename for each transaction. Therefore, the Docuflex cache reuses content with the same filename such that "new" content will not be accessed.

To Specify Whether to Drop the Cached Content

- 1 Click in the DropCache cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—refresh the content
 - False—reuse the cached content

EditWithNext

Specifies whether this Member is eligible to be edited with the next Member.

You can use this property to group Members during Preview Edit and edit them as a single Member (see "[Combining and Editing Multiple Members](#)" on page 217).

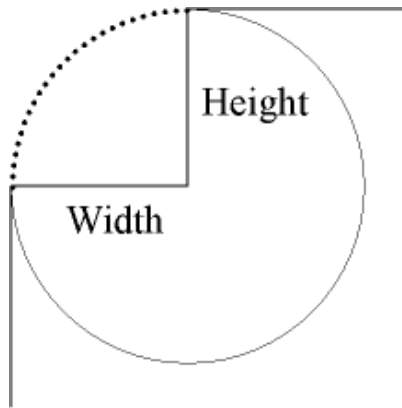
To Specify Whether to EditWithNext

- 1 Click in the EditWithNext cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—Make this Member eligible to be edited with the next Member.
 - False—Keep this Member independent.

EllipseHeight

EllipseWidth

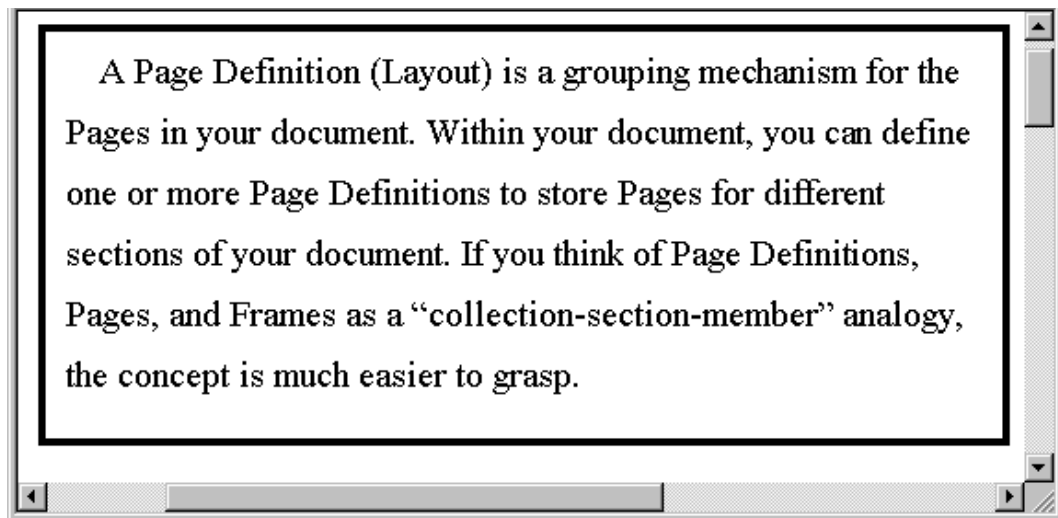
Specifies the height and width of a corner in a frame or paragraph style where you want a border with rounded corners. In mathematical terms, the actual corner is an ellipse with height and width measurements.



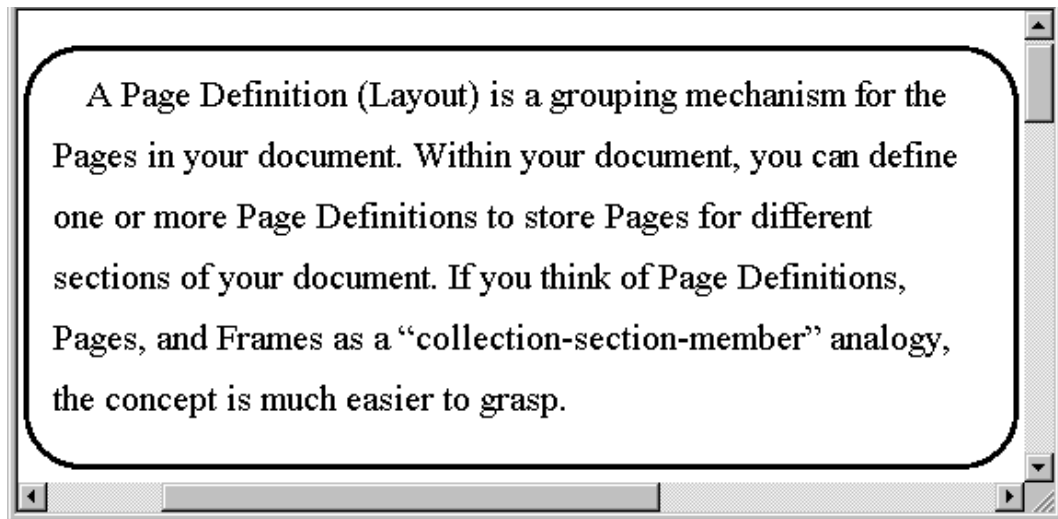
NOTE

Neither the PCL nor the AFP (with the GOCA option enabled) PDLs can produce “rounded rectangles” for output; both produce squares.

You can use this property when you want a visible paragraph or frame border that includes rounded corners. In the first illustration, the paragraph style includes a solid border without specifying any ellipse measurements.



In the next illustration, the same paragraph style now includes measurements for EllipseHeight and EllipseWidth. You'll notice that the border corners are rounded off instead of square.



To Specify Ellipse Measurements

- 1 Click in the EllipseHeight cell, and then type a specification.
- 2 Repeat Step 2 for the EllipseWidth cell.

NOTE

When you select to modify a border style to have rounded corners, Docuflex Studio automatically displays the border as a solid line regardless of your BorderStyle settings.

Embed

Determines whether to embed or link an external project to the current project.

You can use this property to pair constantly an externally-referenced project with your current project.

CAUTION

You will not see this property until after you’ve added an external reference (see “[To Add an External Reference](#)” on page 363).

To Specify Whether to Embed

- 1 Click in the Embed cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—a copy of the Reference is stored within the parent document. If changes are made to this reference, you can select whether to incorporate the changes into the parent. If you want to include the changes, use the Update Reference command to load an updated copy (see “[Update Reference](#)” on page 390).
 - False—the Reference is linked to the parent document. Any changes to the referenced project are automatically reflected in the parent.

ExcludeExternalLeading

Specifies whether to exclude external leading (extra space between lines) from each line of the paragraph.

You can use this property to make sure that your RTF output from Docuflex matches the paragraph spacing that Microsoft Word uses.

To Specify Whether to ExcludeExternalLeading

- 1 Click in the ExcludeExternalLeading cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—exclude external leading for each line of the paragraph. This setting means that your RTF output from Docuflex *would not* match the leading employed by Microsoft Word.
 - False—add extra space between each line of the paragraph to match the leading that Microsoft Word uses.

Font

Determines the typeface, style, point size, and effects of the intended text, which are stored as pre-defined character styles.

You can use this property to control all aspects of the printed text, including the font (Arial, Times New Roman), style (Bold, Italic), point size, and effects (Underline, Strikeout).

To Select the Font

- 1 Click in the Font cell, and then click .
- The Font dialog displays.
- 2 Pick a font. For details about using the Font dialog, refer to “Font Dialog” on page 579.
- 3 Click **OK**.

FontSize

The FontSize property is displayed for informational purposes only. If you want to change the point size of the font, follow the steps discussed in “Font” on page 578.

FontStrikeThrough

Determines whether text using this Character style is composed with a line running through the middle (e.g., ~~FontStrikeThrough~~).

To Specify Whether to Strike Through

- 1 Click in the FontStrikeThrough cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True
 - False

FontStyle

The FontStyle property is displayed for informational purposes only. If you want to change the style of the font, follow the steps discussed in “Font” on page 578.

FontUnderline

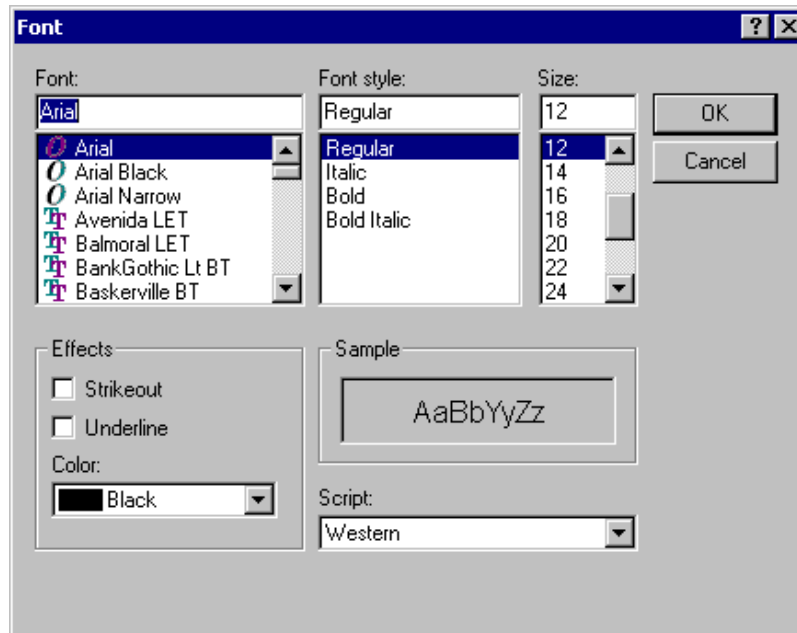
Determines whether text using this Character style is composed with a line running under the text (e.g., FontUnderline).

To Specify Whether to Underline

- 1 Click in the FontUnderline cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True
 - False

Font Dialog

The Font dialog lets you pick the font settings for a character style.



To Designate a Font

- 1 Use the scroll arrows to select the Font, Font style, Size, and Effects.
- 2 Click **OK**.

FrameOrTableCell

Determines the frame or table cell in which this member should be printed.

You can use this property to specify the frame or table cell where you want to include this member.

To Specify the Frame

- 1 Click in the FrameOrTableCell cell, and then click .

The Select FrameOrTableCell dialog displays.

- 2 Select any one of the frames or table cells from the available list.
- 3 Click **OK**.

Gutter

Determines the space between columns within a frame.

You can use this property to enhance the readability of your frame by adjusting the gap between the columns.

To Adjust the Gutter

- Click in the Gutter cell, and then type the number to adjust the size of the gutter.

HeaderLevel

Establishes the position in the hierarchy of an outline where this heading is placed.

You can use this property to determine the level for a heading in an ordered list or outline (see “[Lists](#)” on page 54).

To Establish the Heading Level

- Click in the HeaderLevel cell, and then click  (spin control), or type the number, to specify the level number. The level number should be between 1 and 16.

HeaderStartAt

Establishes the pattern for this heading in the hierarchy of an outline.

You can use this property to set the beginning number or letter for this and subsequent headings in the ordered list (e.g., A to Z, a to z, 1 to 9; see “[Lists](#)” on page 54).

To Establish the Starting Identifier of the Heading

- Click in the HeaderStartAt cell, and then type a value.

Height

Determines the vertical length of a frame or member. If the member is larger than this height, an overflow situation is forced, even though the bottom of the frame has not been reached. If you use a non-zero Height property on a member, the SpaceAfter property is ignored.

TIP

When you're formatting a table row or cell, this property acts as follows:

A table with a height of 0" shrinks and grows to accommodate the data. If you specify a height value greater than 0", the table is composed explicitly to that height and the last row is adjusted to "fill" up the space (if necessary). If the height specified is greater than the height of the frame, the table is shrunk to fit into the frame.

If you want to make table heights vary by page, set the table height larger than it will ever be in a frame. Govern the frame height according to which Page Definition gets invoked. The fact that there is a non-zero height causes the last table row / cells to extend to the table height. The table height is limited by the height of the remainder of the static frame into which the table is composed.

To Set the Height

- Click in the Height cell, and then type a height specification greater than or equal to zero.

IconFileName

Specifies the name of a bitmap or icon file that supplies the icon associated and displayed with a member style.

You can use this property to indicate a member style you frequently use. Indicating an icon file name causes a member style to display in the Member Styles bar.

To Specify the IconFileName

- 1 Click in the IconFileName cell, and then click . The Open dialog displays.
- 2 Navigate the dialog to the location of bitmap or icon files.
- 3 Select a file and click **OK**.

Include

Overrides an inclusion rule stored in the member style.

With this property, you can still take advantage of all the property settings in the member style, and override the inclusion rule for exceptional situations.

To Determine the Inclusion Status

- 1 Click in the Include cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Always—always include this member in the document, whether or not it satisfies the inclusion rule
 - Default—the default action, which is to include a member only if it satisfies the test condition stated in the inclusion rule
 - Never—never include the member in the document

IncludeIfFits

Specifies whether to include an Overflow Definition member when publishing a page of the document.

You can use this property to make the overflow content optional—so it does not compose at all if it does not fit (e.g., a marketing message that only appears as space permits). IncludeIfFits is usually combined with UseOnce to publish a message only once on the first page where it fits.

To Specify the IncludeIfFits Property

- 1 Click in the IncludeIfFits cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—publish the member as long as it fits on the current page
 - False—publish the member on the first page on which it fits

IncludeIfRow

Specifies whether to include a member representing a multiple occurrence of data in a data file (see “RowBegin” on page 594).

EXAMPLE

Suppose you want to format multiple occurrences of data in a table in a “gray bar” format (i.e., every other line is shaded). You should create a parent member and specify which data table to use via the DataSource property. You then create two child members under the parent; one whose IncludeIfRow property value is “Odd” and has a paragraph style with the Shading property “white”, and the other whose IncludeIfRow property value is “Even” and has a paragraph style with the Shading property “gray”.

You can use this property to include a member based on its row designator in a column.

To Specify the IncludeIfRow Property

- 1 Click in the IncludeIfRow cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Any—the default action, which is to include all rows within the column
 - Even—only include the row if it is even-numbered
 - Odd—only include the row if it is odd-numbered

Inclusion

Specifies the Inclusion rule containing a criterion which must be satisfied before a member, section, or page is included in the document.

To Specify an Inclusion Rule

- 1 Click in the Inclusion cell of the Component Properties, and then click .
The Rules dialog displays.
- 2 Select the appropriate Rule for this component.
- 3 Click **OK**.

IndentationBottom**IndentationLeft****IndentationRight****IndentationTop**

Specifies the amount of space to indent the member or paragraph from the bottom, left, right, and top frame or paragraph boundary, respectively (see “[Paragraph Formatting](#)” on page 60).

You can use these properties to enhance the readability of the text.

TIP

The IndentationTop value on the paragraph style of the member is not applied to the first paragraph in a frame or table cell.

To Specify Indentation

- 1 Click in an IndentationBottom, Left, Right, or Top cell, and then type a width specification.
- 2 Repeat Step 2 until you've specified a width for each indentation measurement that you want for the frame or style.

IndentationType

Determines the direction in which the indenting occurs. A Hanging indent moves the first line of text toward the left margin: this setting is useful for bulleted and numbered lists. A FirstLine indent moves the first line of text toward the right margin (*à la* novels).

You can use this property to enhance the readability of the text.

To Determine the Indentation Type

- 1 Click in the IndentationType cell, and then click .
- 2 From the drop-down list, select one of the following:
 - FirstLine
 - Hanging

IndentationValue

Specifies the amount of space to indent the first line of the paragraph. Whether you're creating a Hanging or FirstLine indent, type a measurement for the indentation and Docuflex Studio moves the indent in the proper direction.

You can use this property to enhance the readability of the text.

To Specify the Indentation Value

- ▶ Click in the IndentationValue cell, and then type an indentation specification.

InsertionLocations

Specifies the location in the document where you can insert Optional Contents.
You can use this feature to limit the optional content to a specific location or indicate a member before or after which a user can insert it.

To Specify the Insertion Location

- 1 Click in the InsertionLocation cell, and then click .
- The Insertion Locations dialog displays.
- 2 Select the appropriate location for this component.
- 3 Click **OK**.

For more information, see “Add Optional Content” on page 290.

KeepFirstNOccur

KeepLastNOccur

NOTE
You can only use the KeepFirstNOccur and KeepLastNOccur on a member that has a data source assigned, where that member will loop on the rows of a table.

Determines the number of occurrences to keep together when composing with data from a data file (e.g., Keep the First *N* Occurrences of recurring members together). You can use these properties to enhance the readability of the text.

Take, for example, a listing for law offices with several lawyers in each office. In creating the listing, you probably do not want to list a new office on the last line of the column and not have any room left to list the lawyers.

<u>Dewey, Cheatham & Howe</u>	Hook, John D — JD
Dewey, Misty N — PC	8305 Walnut Hill Lane
8305 Walnut Hill Lane	Suite 100
Suite 100	Dallas, TX 75231
Dallas, TX 75231	214.555.1212
214.555.1212	Line, Ahmin D — JD
Cheatham, Rob N — PC	8305 Walnut Hill Lane
8305 Walnut Hill Lane	Suite 100
Suite 100	Dallas, TX 75231
Dallas, TX 75231	214.555.1212
214.555.1212	Stinker, Ima D — JD
Howe, Anne D — PC	8305 Walnut Hill Lane
8305 Walnut Hill Lane	Suite 100
Suite 100	Dallas, TX 75231
Dallas, TX 75231	214.555.1212
214.555.1212	<u>Hook, Line & Stinker</u>

You can use the KeepFirstNOccur to enforce the condition that at least one lawyer print with each office name. KeepFirstNOccur ensures that the first *n* occurrences of this member have a KeepPrev value of True (see “KeepPrev” on page 585). If the number of stated occurrences will not fit, Docuflex Studio should place the entire office’s list of lawyers on the next page.

Likewise, you might not want the last lawyer within an office to be listed all alone at the top of a new page. KeepLastNOccur ensures that the last *n* occurrences of this member have a KeepPrev value of True.

To Determine the Number of Occurrences to Keep

- ▶ Click in the KeepFirstNOccur or the KeepLastNOccur cell, and then click  (spin control), or type a number greater than or equal to zero, to adjust the number of occurrences.

KeepPrev

Determines whether a detail-level member should be grouped with the previous member or section heading.

You can use this property to enhance the readability of the text.

To Keep a Member With a Previous Member or Section Heading

- 1 Click in the KeepPrev cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—This member should be kept with the previous member
 - False—This member can be displayed by itself

LastChangeDate

Displays last date on which the document was changed in Documanage.

NOTE

If you've chosen a background form from Documanage, you'll also see the member property **BGLastChangeDate**.

You can use this property to determine easily the status of the document.

LastModifiedBy

The LastModifiedBy property is displayed for informational purposes only. This property contains the network login name of the person who made the most recent change to a project component.

LastModifiedDate

The LastModifiedDate property is displayed for informational purposes only. This property contains the date and time of the most recent change to a project component. The date and time are assigned at the *beginning* of the editing session during which a project component is modified.

The date and time format is dependent on the locale assigned to the workstation. For the United States, the format is as follows:

- MM/DD/YYYY HH:MM AM
- or-
- MM/DD/YYYY HH:MM PM

For more information about the locale settings, see “[Settings](#)” on page 400.

LeadingAdjustment

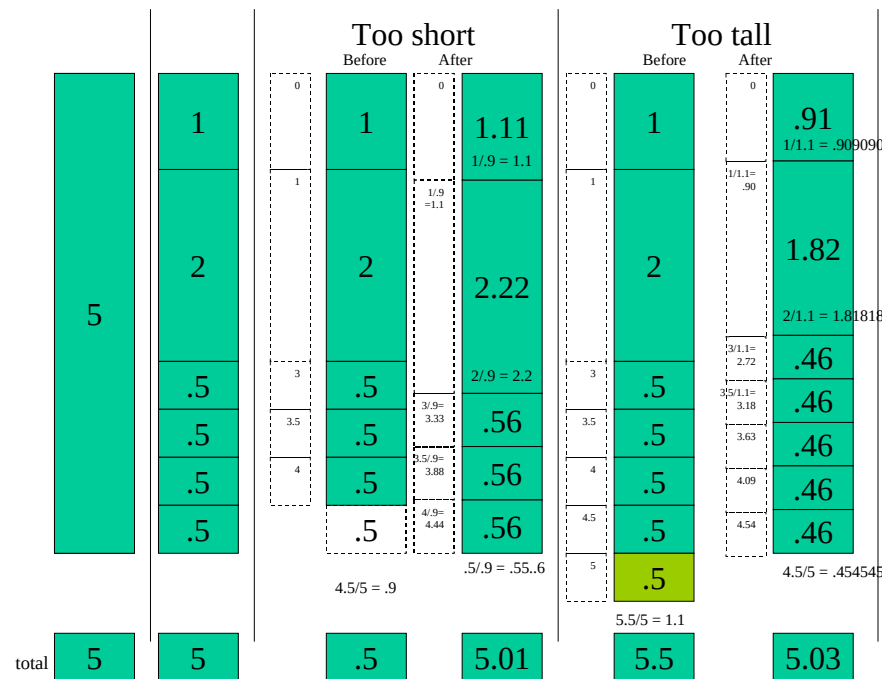
Establishes a zone at the bottom of the frame where, if the text encroaches upon it, you want the vertical spacing of the text in the entire frame adjusted so that the frame is completely filled.

You can use this property to minimize

- empty space at the bottom of frames
- the chances of encountering an overflow situation

Suppose you enter a LeadingAdjustment value of 10%: One of two actions occurs:

- If the text comes within 10% of the bottom of the frame (based on the overall height of the frame), but does not overflow, Docuflex Studio increases the leading so that the text fills the frame.
- If the text does overflow the frame, Docuflex Studio decreases the leading so that no overflow occurs.



To Set the Leading Adjustment

- Click in the LeadingAdjustment cell, and then click  (spin control), or type the number, to adjust the percentage.

Left

Establishes the boundary of the frame relative to the left edge of the page, or the member relative to the left edge of the current column. If the member overflows to a new column, this property still applies to the new column.

You can use this property to position precisely the frame on the page or the member within the frame. This frame or member should be located within the margins you've specified for the page or frame.

To Set the Left Boundary

- Click in the Left cell, and then type a boundary specification.

LibraryDateTime

Displays the date and time of the most recent update of the external project.

You can use this property to view quickly the "version" of the externally-referenced project.

LibraryFileName

Displays the file name and revision of the external project.

You can use this property to view quickly the name for the externally-referenced project.

LineSpacing

Determines the amount of vertical white space to insert between each line of text in the paragraph. Docuflex Studio uses Single line spacing as a default.

You can use this property to enhance the readability of the text.

To Determine the Line Spacing

- 1 Click in the LineSpacing cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Double – Twice that of single-line spacing. In double-spaced lines of 10-point text, for example, the line spacing is approximately 20 points.
 - Exact – Fixed-line spacing that Docuflex Studio does not adjust. This option spaces all lines evenly. If you select Exact, you can specify an exact amount of white space to include between the lines (see “LineSpacingValue” on page 588).
 - OneAndOneHalf – One-and-one-half times that of single-line spacing. If 10-point text is spaced at 1½ lines, for example, the line spacing is approximately 15 points.
 - Single – Accommodates the largest font in that line, plus a small amount of extra space. The amount of extra space varies depending on the font.
 - Triple – Three times that of single-line spacing. In triple-spaced lines of 10-point text, for example, the line spacing is approximately 30 points.
 - Multiple – Similar to above line spacing types, the user picks the number of lines to space. For example, 4 lines would use 400% of the tallest font used on a line of text.
 - Exact Points – You provide the exact point size to use for line spacing and text baselines are adjusted based on your entry. This matches the “Exactly” line spacing option in Word.
 - At Least – You provide the exact point size to use for line spacing and text baselines are adjusted based on your entry. This matches the “At Least” line spacing option in Word.

Keep in mind that the use of the line spacing value is conditional. For example, if the line spacing value is 20 pts and the current line of text contains a 24 pt font, then the height of the 24 pt font is used instead of the “At Least” amount you entered. When a line of text contains fonts that are smaller than the specified amount, then the “At Least” amount is used.

The difference between the Exact and Exact Points options is shown here.

Line spacing set to Exact does not push the text down.

Line spacing set to Exact Points does push the text down.

The Exact option does not push the text down, so you can see the extra space below the text. The Exact Points option does push the text down to the baseline of a 24 point font, so the extra space is above the text.

LineSpacingValue

Determines the *exact* amount of white space to insert between each line of text in the paragraph.

You can use this property to enhance the readability of the text.

To Determine the Line Spacing Value

- Click in the LineSpacingValue cell, and then type a line spacing value.

MemberStyle

Determines the overall properties of the member, including its width within the frame, whether to include white space before and after, and where it should start.

You can use this property to control completely the placement of the member within the frame to which it's assigned.

To Associate a Member Style

- 1 Click in the MemberStyle cell, and then click .
- 2 From the drop-down list, select any one of the Member Styles that have been created.

Name

Specifies a unique identifier of an object.

You can use the Name as a descriptive label that is both self-documenting and immediately identifiable.

To Rename an Item

- Click in the Name cell, and then type the new name.

TIP

If you want to add a new item to a particular category of the Component Explorer, see “[To Add a Member](#)” on page 294.

OrderListLevel

Establishes the position in the hierarchy of a list or outline where this member is placed.

You can use this property to determine the level for a member in an ordered list or outline (see “[Lists](#)” on page 54).

To Establish the Level

- Click in the Level cell, and then click  (spin control), or type the number, to specify the level number. The level number should be between 1 and 16.

Orientation

Indicates whether printed lines are parallel to the long or short edge of the paper.

You can use this property to determine whether the text printed on a page follows the portrait (8½” X 11”) or landscape (11” X 8½”) print mode.



To Specify the Orientation

- 1 Click in the Orientation cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Landscape
 - Portrait
 - Reverse Landscape
 - Reverse Portrait

OverflowDefinition

Establishes the Overflow Definition to use with this member.

You can use the property to reference an Overflow Definition that controls and formats such items as the page number or a continuation heading.

To Specify the Overflow Definition

- 1 Click in the OverflowDefinition cell, and then click .
- 2 From the drop-down list, select any one of the Overflow Definitions that have been created.

For more information, see “[What are Overflow Definitions?](#)” on page 155.

OverflowFrame

Establishes the Overflow Frame to use with this frame.

You can use the property to reference an Overflow Frame that receives any data that does not fit into the current Frame. The default setting of **(None)** directs the flow of data into the same frame on multiple pages.

If the contents of the member will not fit in the designated frame, and you want that contents to overflow to another frame on the same page, use the OverflowFrame property to specify the desired frame.

To Specify the Overflow Frame

- 1 Click in the OverflowFrame cell, and then click .
- 2 From the drop-down list, select any one of the frames that have been created.

PageDefinition

Specifies a predefined page definition to use for this section.

You can use this property to set up your initial document and all subsequent “pages” within.

To Specify A Page Definition

- 1 Click in the PageDefinition cell, and then click .
- 2 From the drop-down list, select any one of the Page Definitions that have been created.

PaperSource

Determines the physical tray of the printer from which the paper stock is supplied. Tray definition specifications are stored in the Printer Definitions module of the Docucorp Control Panel.

You can use this setting to list the printer tray you’re using to supply paper for this page of the project.

To Select the Paper Source

- 1 Click in the PaperSource cell, and then click .
- 2 From the drop-down list, select the desired paper stock.

ParagraphStyle

Specifies the characteristics of the paragraph, including the justification; border color, border style, border line width, and border margin; character style; indentation; line spacing; and shading.

You can use the property to control completely the “look and feel” of the paragraph.

TIP

ParagraphStyle is only available as a Component Property with Text and Text Document members. You can select it from the Formatting toolbar for members of type Content Text and Docuflex Stylized Content.

To Select a Paragraph Style

- 1 Click in the ParagraphStyle cell, and then click .
- 2 From the drop-down list, select any one of the paragraph styles that have been created.

PostComposition

PostInclusion

Specifies the point during the composition of the document at which the Rule is applied against the member.

You can use this property to perform a set of operations on a member at a specific time, as follows:

- PostComposition—the rule is applied after the member is placed on the document.
- PostInclusion—the rule is applied to the member after it satisfies the specified inclusion rule.

To Select a Processing Rule

- 1 Click in the PostComposition or PostInclusion cell of the Component Properties, and then click .

The Rules dialog displays.

- 2 Select the appropriate Rule for this member.
- 3 Click **OK**.

PreComposition

PreInclusion

Specifies the point during the composition of the document at which the Rule is applied against the member.

You can use this property to perform a set of operations on a member at a specific time, as follows:

- PreComposition—the rule is applied to the member after it satisfies the inclusion rule, but before it's actually placed on the document.
- PreInclusion—the rule is applied to the member even before it's considered for inclusion in the document.

To Select a Processing Rule

- 1 Click in the PreComposition or PreInclusion cell of the Component Properties, and then click .

The Rules dialog displays.

- 2 Select the appropriate Rule for this member.
- 3 Click **OK**.

PrefixCharacterStyle

Specifies the character style you want to use to format the prefix text within the paragraph style.

You can use the property to control the character style of the prefix text, which is helpful when you're using bulleted or other lists in your document.

To Select a Prefix Character Style

- 1 Click in the PrefixCharacterStyle cell, and then click .
- 2 From the drop-down list, select any one of the character styles that have been created.

For more information, see “[PrefixText](#)” on page 592.

PrefixText

Specifies the prefix text you want to use when creating a paragraph style that formats a bulleted or other list.

You can use the property to contain the prefix text, which can be a bullet character or any other designator for the items in your list.

To Specify the Prefix Text

- 1 Click in the PrefixText cell, and then click .
- 2 In the Expression Builder dialog box, type the character or string you want to represent the prefix text.

For more information, see [“To Build an Expression”](#) on page 276.

ProcessFirstChild

Determines whether to step through all child members to locate the first candidate (child) satisfying its processing rule (e.g., once the first qualified child has been successfully processed, do not process any more children).

You can use this property to process through a group of child members whose rules are mutually exclusive and you want to process a default child if none of the specific children get processed.

To Specify Whether to Process the First Child

- 1 Click in the ProcessFirstChild cell, and then click .
- 2 From the drop-down list, select one of the following:
 - No—process all child records
 - Yes—process the first child if it satisfies the processing rule, then ignore any subsequent children; otherwise, skip to the next child and examine its rule, and so on.

ProcessFirstNChildren

Specifies that you want Docuflex Studio to publish as many children of this Overflow Definition as you specify or, if they will not fit, move the member to the next page.

This property is a combination of IncludeIfFits and ProcessFirstChild. Since the Editor doesn't know what will or won't fit during Pass 1 (Inclusion Pass), the ProcessFirstChild won't work. This property essentially says to process the first n children that fit in the frame.

To Specify the Number of Children to Process

- Click in the ProcessFirstNChildren cell, and then click  (spin control), or type the number, to select the number of children to process.

Recipients

Determines the recipients (target audience) for this member.

You can use this property to suppress or activate the presence of a member, depending on the intended Recipient of the document.

To Select the Recipient

- 1 Click in the Recipients cell, and then click . The Recipients dialog displays.
- 2 Select one or more recipients from the available recipients list.
- 3 Click **OK**.

ReferenceIteration

NOTE

This property is only available if you've chosen a member that occurs multiple times in a table (see "ReferenceMember" on page 593).

Specifies a particular occurrence of the ReferenceMember when it occurs multiple times, due to looping on the table named by the DataSource property of the ReferenceMember.

If the destination for a cross-reference is a member that occurs multiple times in a data source, you can use this property to select a particular occurrence of that member.

To Specify the ReferenceIteration

- Click in the ReferenceIteration cell, and then click  (spin control), or type the number, to select the desired occurrence of the reference.

ReferenceMember

NOTE

This property is only available if you've chosen a ReferenceType of Member Reference (see "ReferenceType" on page 593).

Establishes the source and destination members of a cross-reference that can be converted into hypertext links in an Adobe PDF.

You can use this property to link together two members in your document project. This feature is useful when saving your document to an Adobe PDF on-line file. The *dc2pdf* output PDL can discern your references in Docuflex Studio and create identical ones for your PDF.

To create a cross-reference, you determine the member that is the starting point, or source, of the cross-reference (i.e., the one that tells the reader where to look for the reference). You then go to the ReferenceMember property of the source member and select the destination member from the selection dialog box.

To Specify the Reference Member

- 1 Click in the ReferenceMember cell, and then click .
The Reference Name dialog displays.
- 2 Select the member that you want to designate as the destination of the cross-reference.
- 3 Click **OK**.

ReferenceType

Establishes the type of document object you want to use as a cross-reference.

You can use this property to select either a member or a URL as the destination of a cross-reference.

To Specify the Reference Type

- 1 Click in the ReferenceType cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Member Reference—establish a cross-reference to another member within the project
 - URL Reference—establish a cross-reference to an external URL

ReferenceURL

NOTE

This property is only available if you've chosen a ReferenceType of URL Reference (see "ReferenceType" on page 593).

Establishes the source member and destination URL of a cross-reference that can be converted into hypertext links in an Adobe PDF.

You can use this property to link together a member and an external URL in your document project. This feature is useful when saving your document to an Adobe PDF on-line file. The *dc2pdf* output PDL can discern your references in Docuflex Studio and create identical ones for your PDF.

To Specify the Reference URL

- 1 Click in the ReferenceURL cell, and then click .
- The Enter ReferenceURL dialog displays.
- 2 Type the URL that you want to designate as the destination of the cross-reference.
- 3 Click **OK**.

Right-To-Left

Indicates the direction of the paragraph.

RowBegin

RowEnd

Indicates the starting and ending rows to observe when cycling through the data source.

You can use these properties to limit the scope of qualifying data within the data source. Most data in a data file is constructed with the "column and row" construction (e.g., doctors in a group practice). For this example, "Practice Name" is the column, and "Doctor Name" the row. Several doctors within the practice means multiple rows within the column.

RowBegin specifies the row on which to start looping within the data schema. A choice of 0 or 1 both indicate the first row. RowEnd specifies the row on which to stop looping. A choice of 0 indicates the last row, -1 indicates the second-to-last row, and so on. You can also explicitly select the row on which to begin and end (e.g., RowBegin=2, RowEnd=4).

To Select the Beginning and Ending Rows

- Click in the (ChartData)RowBegin or (ChartData)RowEnd cell, and then click  (spin control), or type the number, to adjust the beginning and ending rows.

RowIncrement

Indicates the interval with which you want to cycle through the data source.

You can use this property to limit the scope of qualifying data within the data source by, for example, skipping every other row (e.g., RowIncrement=2).

To Select the Row Increment

- Click in the RowIncrement cell, and then click  (spin control), or type a number greater than zero, to adjust the row increment.

SectionBegPage

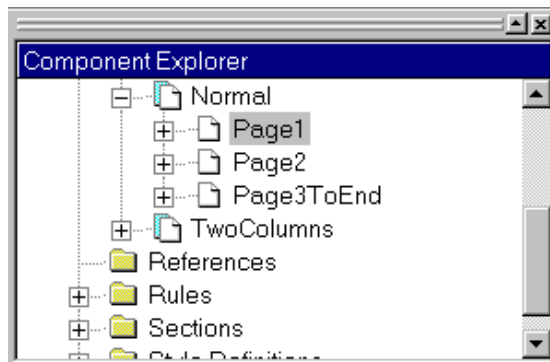
SectionEndPage

Specifies the beginning and ending page range, within a given section, for which a page layout is valid (e.g., from Page 1 through Page 4). These properties also apply to a member.

TIP

These properties *do not* specify the page number of the document on which to start and end the section. Rather, they specify a page range for which a page layout is valid within a section.

Each section of your document is linked to a Page Definition. The Page Definition lists any number of pages and its frames. With each new section, Docuflex Studio looks to the SectionBegPage and SectionEndPage properties to determine which page layout of the Page Definition to use.



In the previous example, the Page1 page layout is only valid on the first page of any section—from SectionBegPage=0, or the first page, to SectionEndPage=1. In Docuflex Studio, a zero in SectionBegPage signifies the first item in the range; conversely, a zero in SectionEndPage signifies the last item in the range.

If we take the example farther to include the subsequent pages, Page2 should have a range of SectionBegPage=2 to SectionEndPage=2. Finally, Page3ToEnd should have a range of SectionBegPage=3 to SectionEndPage=0. Thus, pages one and two are only valid on the first two pages of the section, while Page3ToEnd is valid for the remaining pages.

EXAMPLE

You must be careful when you assign page ranges to pages. Consider the following example:

Page Definition “Larry” contains two pages, “Moe” and “Curly:”

Page Name	Frame Name	SectionBegPage / SectionEndPage
Moe	BodyA	0 / 3
Curly	BodyB	4 / 0

If Section X uses Page Definition Larry and you assign the first member in that section to Frame BodyB, Docuflex Studio generates an error message. The reason for the error situation is that Docuflex Studio attempts to place the member on the first “qualified” page in Page Definition, which is Moe. Since BodyB does not exist in Moe, the placement cannot be completed.

To Select the Beginning or Ending Page Number

- ▶ Click in the SectionBegPage or SectionEndPage cell, and then click  (spin control), or type the number greater than or equal to zero, to adjust the beginning and ending page range for which this page layout is valid.

Shading

Sets the background color for text formatted by this Paragraph or Character style.

You can use this property to emphasize regular text or text that has been placed in a separate frame on a page.

To Set the Shading Color for a Paragraph or Character Style

- 1 Click in the Shading cell, and then click .
- 2 From the drop-down list, select a color style.

TIP

Docuflex Studio treats a Shading color of White or (None) as a transparent setting. For Paragraph styles, if you select a BackColor for the underlying frame and a Shading color of White or (None) for the paragraph, the frame color “bleeds through” to the paragraph. Any other RGB setting besides 255,255,255 (white) is treated as a solid color.

For more information about creating color styles, see “[Using the Color Styles View](#)” on page 192.

Simplex

Determines whether printing occurs on only one side of the physical sheet of paper.

You can use this property to specify Simplex=True for printing on the front of the sheet, or False for printing on the front and back of the sheet.

NOTE

The Simplex/Duplex flag in the current Printer Definition of Docucorp Control Panel, not the Simplex property in the Page Definition of Docuflex Studio, controls whether the printer prints pages on one or both sides of a sheet of paper:

- If the PrintDef specifies Simplex printing, Docuflex Studio generates sheets with one page (side) per sheet and ignores the PageDef’s Simplex=False property.
- If the PrintDef specifies Duplex printing and the PageDef specifies Simplex=True, Docuflex Studio adds blank pages to the back of each sheet, thus presenting the proper appearance.
- If the PrintDef and PageDef both specify Duplex, each sheet consists of two pages (e.g., front and back).

Creating blank pages increments the page number just as do pages with content. The front side of a sheet is always an odd page number and the back side is always an even page number.

To Specify the Simplex Print Setting

- 1 Click in the Simplex cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—printing on the front side of a sheet
 - False—printing on both sides of a sheet

SpaceAfter

SpaceBefore

Specifies the amount of vertical blank space to include, within the frame, before or after placing the member to enhance readability and separate it from the prior or next member.

TIP

If the member to which you apply the SpaceBefore property is the first member in the frame, the SpaceBefore value is ignored.

Also, if you select StartParm=Continuous on more than one member AND include a SpaceBefore measurement, the SpaceBefore value is only included on the first member.

To Specify the Spacing

- Click in the SpaceAfter or SpaceBefore cell, and then type a height specification.

StackerOffset

Controls how printed pages are placed in the printer's output bin. When you specify StackerOffset=True, the printer output will be offset (or staggered) from the prior job.

You can use this property to ensure that, at the end of the entire print run, every other job is lined up and you can separate them easier.

To Specify the Stacker Offset

- 1 Click in the StackerOffset cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—stagger the print jobs
 - False—print all jobs to a single stack

StartAt

Establishes the pattern for this member in the hierarchy of an outline.

You can use this property to set the beginning number or letter for this and subsequent items in the ordered list (e.g., A to Z, a to z, 1 to 9; see “[Lists](#)” on page 54).

To Establish the Starting Identifier of the Member

- Click in the StartAt cell, and then type a value.

StartParm

Determines the starting point of the member within the Document or Frame, including such options as Odd or Even Page, Concatenate or Continuous, and New Column or New Page.

You can use this property when you want to include a blank page between two parts or insert a column break in the middle of a table.

To Specify the Starting Parameter

- 1 Click in the StartParm cell, and then click .
- 2 From the drop-down list, select one of the following:
 - BelowLowestInFrame—place this member below the lowest member in this frame
 - BelowLowestOnPage—place this member below the lowest member in ANY frame on this page

TIP

When using the following two StartParms, you should be aware that if you use StartParm=Continuous or StartParm=Continuous(No Space), all properties are inherited from the first member.

- Continuous—insert a space, then place this member on the last line of the previous text or rich-text member
- Continuous(No Space)—place this member on the last line of the previous text or rich-text member, with NO space between the two members
- EvenPage—place this member on the next even page of the document
- EvenWithLastRowTop—align this member with the top of the last row in ANY frame on this page
- EvenWithPrevMemberBottom—align this member with the bottom of the previous member in ANY frame on this page
- EvenWithPrevMemberTop—align this member with the top of the previous member in ANY frame on this page
- NewColumn—(unavailable for Overflow Definitions) place this member at the start of the next column of the designated frame. If there are no remaining available columns, or the frame only contains a single column, the member is placed at the start of the column on the next page
- NewPage—(unavailable for Overflow Definitions) place this member on the next page of the document
- NewParagraph—place this member at the beginning of a new paragraph
- NewTableRow—place this member in the next row of a table
- NewSheet—(unavailable for Overflow Definitions) place this member on the front side of the next physical sheet of paper
- NewSheet(EvenPage)—place this member on the back side of the next physical sheet of paper
- NextTab—place this member at the next available tab stop on the last line of the previous text or rich-text member
- OddPage—place this member on the next odd page of the document

Status

Displays the content Status—a user-defined Documanager category that tracks the workflow stages of a document.

NOTE

If you've chosen a background form from Documanager, you'll also see the member property **BGStatus**.

To View the Status of the Document

- ▶ Click in the Status cell to view the status indicator (e.g., Draft, Accepted, Complete).

SuppressBlankLines

Suppresses any blank lines of a member if the incoming data for that member contains an empty row.

You can use this property, instead of creating an inclusion rule, when your project retrieves its content from a data file. If not all the Customers in your data file have an Address2, for example, SuppressBlankLines prevents your member from displaying a blank line when no Address2 data exists.

To Prevent a Blank Line from Displaying

- 1 Click in the SuppressBlankLines cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—do not display a blank line if no data exists for the member
 - False—display all lines

SuppressLastPageIfBlank

Suppresses the display of a page if it does not contain any members.

You can use this property to prevent Docuflex Studio from displaying a blank page whenever one occurs in your document.

To Prevent a Last Blank Page from Displaying

- 1 Click in the SuppressLastPageIfBlank cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—do not display a blank page. For a correct pagination count while you're composing the document, however, False might be the better option.
 - False—display all pages

TableCell

Determines the table cell in which this member should be printed, for the frame with which it's associated. You can use this property when adding members directly attached to a page frame. You can link the member to a specific table cell or the frame in general.

To Specify the Cell

- 1 Click in the TableCell cell, and then click . The Select TableCell dialog appears.
- 2 Select one of the following:
 - (None)—the member is automatically composed as the first member in the frame before any other members destined for the frame
 - *table cell*—the member is composed directly into the selected table cell
- 3 Click **OK**.

TableDef

This property only applies to members of type Table. This property contains the table definition referred to by this member.

Tabs

Determines the type, horizontal position, and leading character of the tab stop, which are stored as predefined tab styles.

You can use this property to control all aspects of the printed text.

To Specify the Tabs

- 1 Click in the Tabs cell, and then click .

The Tabs dialog displays.

- 2 Specify a tab stop. For details, see “[To Add a Tab Style](#)” on page 207.
- 3 Click **OK**.

TabStyle

Determines the type, leading character, and position of the tag. TabStyle is a reference to a predefined tab style.

You can use this property to control the look and feel of content within a member, member style, or paragraph style.

TIP

TabStyle is only available as a Component Property with Text and Text Document members. You can select it from the Formatting toolbar for members of type Content Text and Docuflex Stylized Content.

To Select the Tab Style

- 1 Click in the TabStyle cell, and then click .
- 2 From the drop-down list, select any one of the Tab Styles that have been created.

TOCInsertionPoint

Establishes the member that contains the Table of Contents.

You can use this property to position the Table of Contents in your document. Usually, the member is of type Content Text, it's content is the label “Table of Contents”, and it's positioned toward the front of the document.

To Specify the TOCInsertionPoint

- 1 Click in the TOCInsertionPoint cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—generate the Table of Contents at composition time and store it in this member
 - False (default)—do not generate a Table of Contents

TOCReference

Establishes the format to use when creating a TOC entry for a member or paragraph style.

NOTE

You can use the **TOCReference** property in paragraph styles to generate TOC entries from paragraphs contained in “rich content”—either internal or external:

- Internal rich content—Content Text members
- External rich content—Pre-Composed Document members referencing rich text files (*.RTF)

You can use this property to select between different formats that you’ve established for the TOC entries (e.g., Heading1, Heading2).

To Specify the TOCReference

- 1 Click in the TOCReference cell, and then click .
- 2 From the drop-down list, select any one of the Table of Contents formats that have been created.

Top

Specifies the point at which the top of the frame is located relative to the top edge of the page, or the top of the member is located relative to the top edge of the frame.

To avoid overlapping contents, the Top (and/or Left) property should be greater than the current vertical (and/or horizontal) insertion point (i.e. after the previously-placed content). If the content overflows the current column, it is continued on the next column or page where the Top property dictates.

NOTE

If you use a non-zero Top property, the SpaceBefore property is ignored, as is the previous member’s SpaceAfter property.

You can use this property to help define the boundaries of the frames or members in which you’ll place document components as you compose your document.

To Specify the Top

- Click in the Top cell, and then type a width specification.

UseOnce

Specifies that Docuflex Studio should only use this Overflow Definition once and then remove it from the list of eligible candidates while publishing the document.

You can use this property to ensure that an Overflow Definition which occurs in an overflow processing situation is only included once in the document. In some cases, you would not want a particular message to occur on all the pages, just the first time it’s applicable.

To Specify the UseOnce Property

- 1 Click in the UseOnce cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True
 - False

VerticalAlign

Designates the vertical placement of the

- member within the frame
- cells within the table

You can use this property, for example, to control the vertical alignment of the member within the frame.

To Specify the Vertical Alignment of Members

- 1 Click in the VerticalAlign cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Top—place the member at the top of the remaining area of the frame
 - Center—place the member in the center of the remaining area of the frame
 - Bottom—place the member at the bottom of the remaining area of the frame

To Specify the Vertical Alignment of Cells

You have a choice of Top (default), Center and Bottom with the VerticalAlign property for Table Cells.

- 1 Click in the VerticalAlign cell, and then click .
- 2 From the drop-down list, select the appropriate setting.
 - If you specify Center or Bottom for a **Cell**, all contents of only that cell are affected.
 - If you specify Center or Bottom for a **Member**, only that member is affected.

NOTE

The VerticalAlign property for Members overrides the property for Cells.

VisibleIfOutput

Indicates whether to make a member visible when displaying, printing, or both.

You can use this property to print only pertinent information in the project (e.g., placing a visual reminder on the screen, but selecting not to print it in the final copy).

To Specify the VisibleIfOutput Property

- 1 Click in the VisibleIfOutput cell of the Component Properties, and then click .
- 2 From the drop-down list, select one of the following:
 - Any—the default action, which is to include the data in both output modes (printing and display)
 - Display—only include the data for display mode
 - Printer—only include the data for printing mode

WhenUsed

Specifies the composition event that triggers the inclusion of an Overflow Definition or table row.

You can use this property, for example, to specify the point in the composition of the page or column at which to use an Overflow Definition.

To Specify the WhenUsed Property

- 1 Click in the WhenUsed cell, and then click .
 - 2 From the drop-down list, select one of the following for an Overflow Definition:
 - All
 - BeginColumn
 - BeginPage
 - EndColumn
 - EndPage
 - FinishPage
- or-**
- From the drop-down list, select one of the following for a Table Row Definition:
- TableDetail
 - TableFooter
 - TableHeader
 - TableOverflowFooter
 - TableOverflowHeader

WhereUsed

Indicates the side of the page on which this frame, page, member, or Overflow Definition is printed.

You can use this property, for example, to determine the side of the page on which you want the page or Overflow Definition to display. The valid settings are EvenPage (back side), OddPage (front side), or AnyPage.

To Specify the WhereUsed Property

- 1 Click in the WhereUsed cell, and then click .
- 2 From the drop-down list, select one of the following:
 - AnyPage
 - EvenPage
 - OddPage

Width

Specifies the width of the frame on the page, the member within the frame, or the cell within the row of a table.

You can use this property to help define the boundaries of the frames, members, and cells in which you'll place document components as you compose your document.

To Specify the Width

- Click in the Width cell, and then type a positive value.

NOTE

If you don't explicitly define the width of each cell in a table row, the Width property displays a value of 0 which causes Docuflex to calculate the width of each cell by dividing the width of the table by the number of cells.

WidthPercent

Specifies the width of a

- **cell definition**, expressed as a percentage of the remaining table width after all fixed-length cell widths are subtracted. (The WidthPercent property is only available for cells within the Table Definitions folder.) If the overall width of a table changes, the widths of individual cells also change based on this percentage.
- **frame**, expressed as a percentage of the available width of the page

To Specify the WidthPercent Property

- Click in the WidthPercent cell, then click  (spin control), or type the percentage.

Docuflex Studio Chart Properties

TIP

You can view and edit all component properties for chart members by:

- In the Component Explorer, select the chart for which you want to specify a property. The properties that you can define for the chart display in the Component Properties.

ChartCharacterStyle1-6

Specifies the available character styles for use when printing text on a chart.

You can use this property to enhance the visual appeal of a chart or graph.

To Specify the Character Style

- 1 Click in the desired ChartCharacterStyle cell, and then click .
- 2 From the drop-down list, select a character style.

For more information about creating character styles, see “Using the Character Styles View” on page 190.

ChartColorPrimary1-8

Specifies the primary color style of a data group on a chart.

You can use this property to enhance the visual appeal of a chart or graph.

To Specify the Primary Color Style

- 1 Click in the desired ChartColorPrimary cell, and then click .
- 2 From the drop-down list, select a color style.

For more information about creating color styles, see “Using the Color Styles View” on page 192.

ChartColorShading1-8

Specifies the shading color style of a data group on a chart.

You can use this property to enhance the visual appeal of a chart or graph.

To Specify the Shading Color Style

- 1 Click in the desired ChartColorShading cell, and then click .
- 2 From the drop-down list, select a color style.

For more information about creating color styles, see “Using the Color Styles View” on page 192.

ChartDataColumns

Specifies the legend and data columns (data groups) for your chart.

You can use this property to pick-and-choose the specific data groups you want to include on your chart.

To Select the Columns

- 1 Click in the ChartDataColumns cell, and then click .

The Select Chart Columns dialog displays.

If you need to change the table on which your chart is based, see “[ChartDataSource](#)” on page 606.

- 2 In the Available: list box, select the column you want to include in your chart and click . The column is displayed in the Selected: list box.

TIP

If you want to use all of the available columns, simply click  and all columns are displayed in the Selected: list box.

- 3 If you select the wrong column and need to remove it from the Selected: list box, select the column and click .

TIP

If you want to remove all of the selected columns, simply click  and all columns are again displayed in the Available: list box.

- 4 If you want to rearrange the order of the Selected: columns, highlight the column you want to move and click either **Move Up** or **Move Down**. The columns are rearranged in the order you specified.
- 5 Click **OK**.

ChartDataOrientationPie

Specifies whether the data in a pie chart is row-oriented or column-oriented.

You can use this property to decide whether to

- represent slices of the pie as the sum of all specified data columns within the row (row oriented) or
- graph separately all the columns in a row (column oriented).

To Specify the Orientation of the Chart

- 1 Click in the ChartDataOrientation cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Row (default)
 - Column

ChartDataRowBegin

See “[RowBegin](#)” on page 594.

ChartDataRowEnd

See “[RowEnd](#)” on page 594.

ChartDataSource

Specifies the data table on which this chart is based.

You can use this property to select the source data to use with your chart.

To Specify the Data Source

- 1 Click in the desired ChartDataSource cell, and then click .
- 2 From the drop-down list, select a data table.

ChartDimension

Specifies the number of dimensions for your chart.

You can use this property to add “depth” to your chart (e.g., three-dimensional) and enhance its visual appeal.

To Specify the Dimensions

- 1 Click in the desired ChartDimension cell, and then click .
- 2 From the drop-down list, select the number of dimensions you want to incorporate into your chart (either 2 or 3).

ChartFootingArea

Specifies the area, as a percentage of your chart, reserved for printing the footer text. This value must fall between 5% and 35%.

You can use this property to increase or decrease the amount of space reserved within the dimensions of your chart to print the footer text.

To Adjust the Footer Area

- Click in the ChartFootingArea cell, and then click  (spin control), or type the number, to adjust the percentage of reserved space.

ChartFootingFont

Specifies the character style for use when printing footer text on a chart.

You can use this property to determine the typeface, point size, and weight of the text printed in the footer area of your chart.

To Specify the Footer Style

- 1 Click in the ChartFootingFont cell, and then click .
- 2 From the drop-down list, select a character style.

CAUTION

If the point size specified by the character style is too large to print your text within the designated area, the text will not print in the footer area.

For more information about creating character styles, see “[Using the Character Styles View](#)” on page 190.

ChartFooterText

Specifies the text to use when printing the footer label on a chart.

You can use this property to print either plain text or an expression mixing text and data variables.

To Specify the Footer Text

- 1 Click in the ChartFooterText cell, and then click .
The Expression Builder dialog displays.
- 2 Type the text string or expression for the footer text. For details about using the Expression Builder, see “[To Build an Expression](#)” on page 276.

ChartHeadingArea

Specifies the area, as a percentage of your chart, reserved for printing the header text. This value must fall between 5% and 35%.

You can use this property to increase or decrease the amount of space reserved within the dimensions of your chart to print the header text.

To Adjust the Header Area

- Click in the ChartHeadingArea cell, and then click  (spin control), or type the number, to adjust the percentage of reserved space.

ChartHeadingFont

Specifies the character style for use when printing header text on a chart.

You can use this property to determine the typeface, point size, and weight of the text printed in the header area of your chart.

To Specify the Header Style

- 1 Click in the ChartHeadingFont cell, and then click .
- 2 From the drop-down list, select a character style.

CAUTION

If the point size specified by the character style is too large to print your text within the designated area, the text will not print in the header area.

For more information about creating character styles, see “[Using the Character Styles View](#)” on page 190.

ChartHeadingText

Specifies the text to use when printing the header label on a chart.

You can use this property to print either plain text or an expression mixing text and data variables.

To Specify the Header Text

- 1 Click in the ChartHeadingText cell, and then click .
- The Expression Builder dialog displays.
- 2 Type the text string or expression for the header text. For details about using the Expression Builder, see “[To Build an Expression](#)” on page 276.

ChartInnerFrame

Specifies whether to join the X- and Y-axes to form an inner border on a chart.

Use this property to create a border for your chart to enhance its visual appearance.

To Specify the Inner Frame

- 1 Click in the ChartInnerFrame cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—create an inner border by completing the frame initiated by the two axes.
 - False—do not create a border.

ChartLanguage

Indicates the language to use when printing text labels on a chart.

Use this property to increase further the flexibility of Docuflex Studio by enabling your document to be printed in many different languages with minimal additional effort.

To Indicate the Language

- 1 Click in the ChartLanguage cell, and then click .
- 2 From the drop-down list, select any one of the following:
 - English
 - Finnish
 - French
 - German
 - Italian
 - Spanish
 - Swedish

ChartLeftMarginArea

Specifies the area, as a percentage of your chart, reserved for printing the left-margin text. This value must fall between 5% and 35%.

You can use this property to increase or decrease the amount of space reserved within the dimensions of your chart to print text in the left margin.

To Adjust the Left Margin Area

- Click in the ChartLeftMarginArea cell, and then click  (spin control), or type the number, to adjust the percentage of reserved space.

ChartLeftMarginFont

Specifies the character style for use when printing margin text on a chart.

You can use this property to determine the typeface, point size, and weight of the text printed in the left margin area of your chart.

To Specify the Left Margin Style

- 1 Click in the ChartLeftMarginFont cell, and then click .
- 2 From the drop-down list, select a character style.

CAUTION

If the point size specified by the character style is too large to print your text within the designated area, the text will not print in the left margin area.

For more information about creating character styles, see “[Using the Character Styles View](#)” on page 190.

ChartLeftMarginText

Specifies the text to use when printing the left-margin label on a chart.

You can use this property to print either plain text or an expression mixing text and data variables.

To Specify the Left Margin Text

- 1 Click in the ChartLeftMarginText cell, and then click .
The Expression Builder dialog displays.
- 2 Type the text string or expression for the left margin text. For details about using the Expression Builder, see “[To Build an Expression](#)” on page 276.

ChartOuterFrame

Specifies whether to create an outer border around a chart.

You can use this property to create a border around your chart to enhance its visual appearance.

To Specify the Outer Frame

- 1 Click in the ChartOuterFrame cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—create an outer border.
 - False—do not create a border.

ChartRightMarginArea

Specifies the area, as a percentage of your chart, reserved for printing the right-margin text. This value must fall between 5% and 35%.

You can use this property to increase or decrease the amount of space reserved within the dimensions of your chart to print text in the right margin.

To Adjust the Right Margin Area

- Click in the ChartRightMarginArea cell, and then click  (spin control), or type the number, to adjust the percentage of reserved space.

ChartRightMarginFont

Specifies the character style for use when printing margin text on a chart.

You can use this property to determine the typeface, point size, and weight of the text printed in the right margin area of your chart.

To Specify the Right Margin Style

- 1 Click in the ChartRightMarginFont cell, and then click .
- 2 From the drop-down list, select a character style.

CAUTION

If the point size specified by the character style is too large to print your text within the designated area, the text will not print in the right margin area.

For more information about creating character styles, see “[Using the Character Styles View](#)” on page 190.

ChartRightMarginText

Specifies the text to use when printing the right-margin label on a chart.

You can use this property to print either plain text or an expression mixing text and data variables.

To Specify the Right Margin Text

- 1 Click in the ChartRightMarginText cell, and then click .

The Expression Builder dialog displays.

- 2 Type the text string or expression for the right margin text. For details about using the Expression Builder, see “[To Build an Expression](#)” on page 276.

ChartShadeBackground

Specifies whether you want to see a background shade on a chart.

You can use this property to introduce a background shade to your chart and enhance its visual appearance.

To Specify a Background Shade

- 1 Click in the ChartShadeBackground cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—shade the background.
 - False—do not shade the background.

ChartType

Indicates the type or style of chart you want to create.

You can use this property to view a proposed change before implementation. Docuflex Studio can quickly recompose a chart of the new style, allowing you to view it before saving your changes.

To Indicate the Type of Chart

- 1 Click in the ChartType cell, and then click .
- 2 From the drop-down list, select any one of the following:
 - Area
 - Bar
 - Bar/Line
 - Column
 - Histogram
 - Horizontal Bar
 - Line
 - Overlap Bar
 - Perspective Bar
 - Pie
 - Scatter
 - Spike
 - Stacked Bar

ChartXTicksStart

Specifies the starting point in the sequence of labels you're using to identify the data groups along the X-axis of a chart.

All of the XTicks labels, whether you're using a custom or sample set, are numbered from 1 to n . If you're using the months of the year for your XTicks labels, for example, and you select a starting point of 4, the labels begin with April.

To Specify the XTicks Start

- Click in the ChartXTicksStart cell, and then type the number representing the starting point in the sequence (up to 360).

ChartXTicksText

Specifies the text to use for labeling the data groups along the X-axis of a chart.

You can use this property if you want to enter customized labels for your data groups; however, Docuflex Studio provides several sets of default labels for a chart (see "ChartXTicksType" on page 611).

To Specify the XTicks Text

- 1 Click in the ChartXTicksText cell, and then click .

The Expression Builder dialog displays (see "To Build an Expression" on page 276).
- 2 Type the comma-delimited text string or expression for the XTicks text.

ChartXTicksType

Indicates the style of labels to use for identifying the data groups along the X-axis of a chart. Docuflex Studio includes several sample styles from which to select; however, you can also type customized labels (see "ChartXTicksText" on page 611).

You can use this property to view a proposed change before implementation. Docuflex Studio can quickly recompose a chart using the new labels, allowing you to view it before saving your changes.

To Indicate the Type of XTicks

- 1 Click in the ChartXTicksType cell, and then click .
- 2 From the drop-down list, select any one of the following:
 - Basic (1-60)
 - Days (M-F)
 - Hours (12AM-11PM)
 - Hours24 (0000-2359)
 - Ledger (0-360)
 - Minutes (1-60)
 - Months
 - Seconds (1-60)
 - Week Days (M-F)

ChartYGridLines

Specifies whether to display horizontal grid lines along the Y-axis of a chart.
You can use this property to enhance the visual appearance and readability of your chart.

To Specify YGrid Lines

- 1 Click in the ChartYGridLines cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—create horizontal grid lines corresponding to the labels along the Y-axis.
 - False—do not create grid lines.

ChartYValueMax

Specifies the maximum value for the Y-axis of your chart.
You can use this property to limit the amount of scaling performed by the composition engine. If the highest data point on your chart equals 52, for example, you can indicate a ChartYValueMax of 100 and your values are displayed relative to a scale of 100.

To Specify the Maximum Y Value

- Click in the ChartYValueMax cell, and type the number representing the maximum value of the Y-axis.

Presentation Graphics Chart Properties

Docuflex Studio includes a charting tool by Three |D| Graphics, Inc.

TIP

You can view and edit all component properties for chart members in the following manner:

- In the Component Explorer, select the chart for which you want to specify a property.

The properties that you can define for the chart display in the Component Properties.

ChartData

Specifies the table and columns from your data file that provide the data for your chart.
You can use this property to determine the contents and appearance of your chart, including the data itself, groups, series, and Legend labels.

To Specify the Chart Data

- 1 Do one of the following:

To Specify Chart Data for a	See:
Standard chart (Area, Bar, Column, Line, or Pie)	“To Build a Standard Chart” on page 613
Scatter chart	“To Build a Scatter Chart” on page 614
Stock chart	“To Build a Stock Chart” on page 615

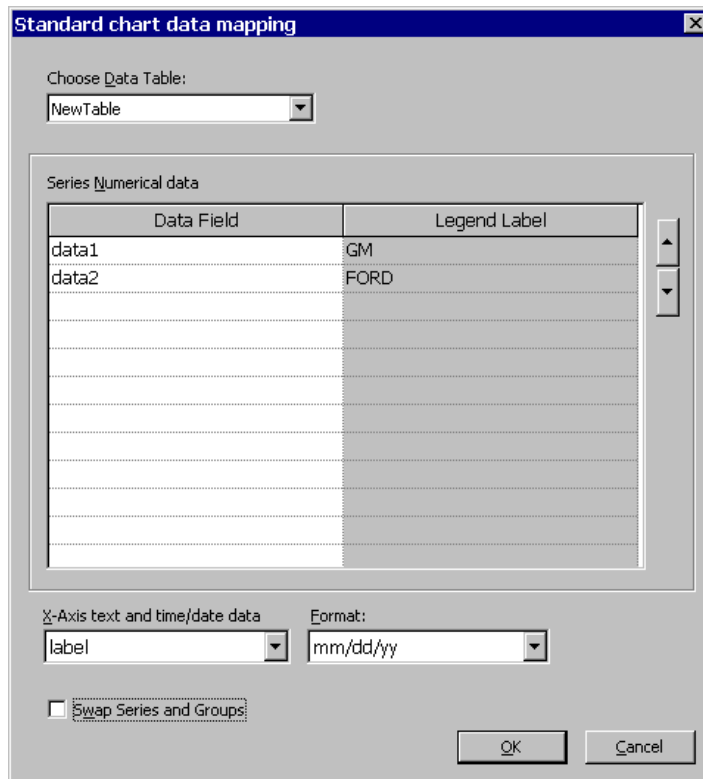
To Build a Standard Chart

NOTE

You can “drag-and-drop” *table.column* fields from the Data bar; however, you must drag into the boundaries of the chart itself. Also, the Legend automatically reflects the name of the associated Data Field.

- 1 Click in the ChartData cell, and then click .

The Standard chart data mapping dialog displays.



The dialog box titled "Standard chart data mapping" contains the following elements:

- Choose Data Table:** A drop-down menu currently showing "NewTable".
- Series Numerical data:** A table with two columns: "Data Field" and "Legend Label".

Data Field	Legend Label
data1	GM
data2	FORD

 To the right of the table are up and down arrow buttons for reordering.
- X-Axis text and time/date data:** A drop-down menu currently showing "label".
- Format:** A drop-down menu currently showing "mm/dd/yy".
- Swap Series and Groups:** An unchecked checkbox.
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

- 2 In the Choose Data Table drop-down list box, choose the table in your data file from which you'll choose columns for your chart.
- 3 In Data Field column, choose a *table.column* for each *series* in your chart.
- 4 In the Legend Label column, type an optional descriptive label for the Legend.
- 5 Click the up- and down-arrows on the right to rearrange the order of the list.
- 6 In the X-Axis text and time/date data drop-down list box, choose the *table.column* containing dates or descriptions for each *group*.
- 7 In the Format drop-down list box, choose a formatting mask for a date column.
- 8 Enable the Swap Series and Groups check box to switch the chart to display *series* as *groups* and vice versa.
- 9 Click **OK** to save your changes.

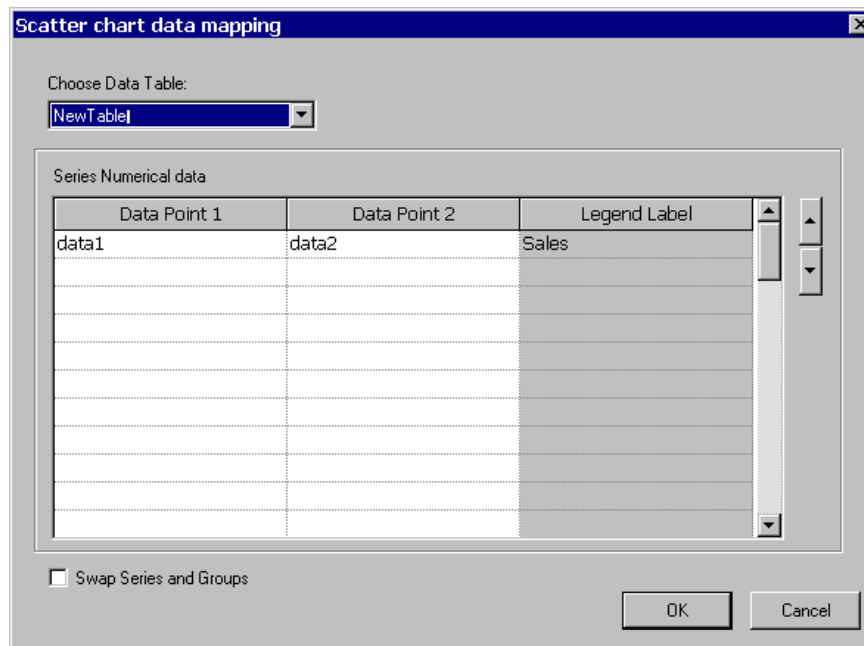
To Build a Scatter Chart

NOTE

You cannot “drag-and-drop” *table.column* fields from the Data bar. You also cannot edit or delete on-screen elements.

- 1 Click in the ChartData cell, and then click .

The Scatter chart data mapping dialog displays.



- 2 In the Choose Data Table drop-down list box, choose the table in your data file from which you'll choose columns for your chart.
- 3 In the Data Point 1 and Data Point 2 columns, choose two *table.columns* for each *series* in your chart.
- 4 In the Legend Label column, type an optional descriptive label for the Legend.
- 5 Click the up- and down-arrows on the right to rearrange the order of the list.
- 6 Enable the Swap Series and Groups check box to switch the chart to display *series* as *groups* and vice versa.
- 7 Click **OK** to save your changes.

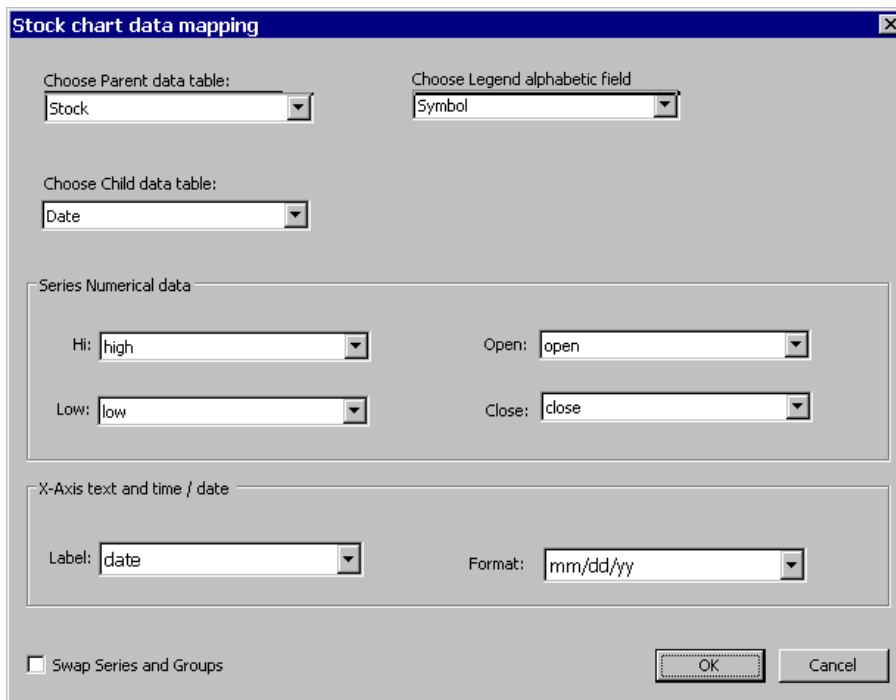
To Build a Stock Chart

NOTE

You cannot “drag-and-drop” *table.column* fields from the Data bar. You also cannot edit or delete on-screen elements.

- 1 Click in the ChartData cell, and then click .

The Stock chart data mapping dialog displays.



The dialog box is titled "Stock chart data mapping". It contains several sections for configuring the chart data:

- Choose Parent data table:** A drop-down menu with "Stock" selected.
- Choose Legend alphabetic field:** A drop-down menu with "Symbol" selected.
- Choose Child data table:** A drop-down menu with "Date" selected.
- Series Numerical data:** A section with four drop-down menus:
 - Hi:** "high"
 - Low:** "low"
 - Open:** "open"
 - Close:** "close"
- X-Axis text and time / date:** A section with two drop-down menus:
 - Label:** "date"
 - Format:** "mm/dd/yy"
- Swap Series and Groups:** A checkbox that is currently unchecked.
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

- 2 In the Choose Parent data table drop-down list box, choose the parent table in your data file from which you'll choose the legend column for your chart.
- 3 In the Choose Legend alphabetic field column, choose the *table.column* containing the Legend.
- 4 In the Choose Child data table drop-down list box, choose the child table in your data file from which you'll choose columns for your chart.
- 5 In Hi, Low, Open, and Close drop-down list boxes, choose a *table.column* (i.e., you must have four *table.columns* for each *series* in your chart).
- 6 In the Label drop-down list box, select the *table.column* containing dates or descriptions for each *group*.
- 7 In the Format drop-down list box, choose a formatting mask for a date column.
- 8 Enable the Swap Series and Groups check box to switch the chart to display *series* as *groups* and vice versa.
- 9 Click **OK** to save your changes.

ChartDataColumns

The ChartDataColumns property is displayed for informational purposes only. If you want to change the *table.columns* for your chart, follow the steps discussed in “[ChartData](#)” on page 612.

ChartDataLegend

The ChartDataLegend property is displayed for informational purposes only. If you want to change the Legend for your chart, follow the steps discussed in “[ChartData](#)” on page 612.

ChartDataRowBegin

See “[RowBegin](#)” on page 594.

ChartDataRowEnd

See “[RowEnd](#)” on page 594.

ChartDataXAxis

The ChartDataXAxis property is displayed for informational purposes only. If you want to change the X axis value for your chart, follow the steps discussed in “[ChartData](#)” on page 612.

ChartFootNote

Specifies the text to use for the label at the bottom the chart.

To Specify the Footnote Title

- 1 Click in the ChartFootNote cell, and then click .
The Expression Builder dialog displays (see “[To Build an Expression](#)” on page 276).
- 2 Type the appropriate text string or expression for the footnote.

ChartGraphTitle

Specifies the text to use for the label containing the graph title.

To Specify the Graph Title

- 1 Click in the ChartGraphTitle cell, and then click .
The Expression Builder dialog displays (see “[To Build an Expression](#)” on page 276).
- 2 Type the appropriate text string or expression for the title.

ChartLegendTitle

Specifies the text to use for the label accompanying the chart legend.

To Specify the Legend Title

- 1 Click in the ChartLegendTitle cell, and then click .
The Expression Builder dialog displays (see “[To Build an Expression](#)” on page 276).
- 2 Type the appropriate text string or expression for the legend.

ChartSubTitle

Specifies the text to use for the label located beneath the main title.

To Specify the Subtitle

- 1 Click in the ChartSubTitle cell, and then click .
The Expression Builder dialog displays (see “[To Build an Expression](#)” on page 276).
- 2 Type the appropriate text string or expression for the subtitle.

ChartXAxisTitle

Specifies the text to use for the label located along the X-axis.

NOTE

On a bar chart, the X-axis is vertical; on a column chart, it's horizontal.

To Specify the X-axis Title

- 1 Click in the ChartXAxisTitle cell, and then click .

The Expression Builder dialog displays (see “[To Build an Expression](#)” on page 276).
- 2 Type the appropriate text string or expression for the X-axis.

ChartY1AxisTitle

ChartY2AxisTitle

Specifies the text to use for the label located along the Y1- and Y2-axes.

NOTE

On a bar chart, the Y-axes are horizontal; on a column chart, they're vertical.

To Specify the Y-axes Titles

- 1 Click in the ChartY1AxisTitle or ChartY2AxisTitle cell, and then click .

The Expression Builder dialog displays (see “[To Build an Expression](#)” on page 276).
- 2 Type the appropriate text string or expression for the Y-axes labels.

Field Properties

TIP

You can view and edit all field properties in the following manner:

- 1 In the Component Explorer, select the member for which you want to specify a field property.
- 2 Display the Source window (see “[To Display the Source Window](#)” on page 234).
- 3 Select the field and display the Properties view (see “[To Display the Properties View](#)” on page 241).
- 4 View the field properties (see “[To Display the Field Properties](#)” on page 244).
- 5 Click on the applicable property cell.

If you've assigned a Field Style to the Field and you want to change the default property value, see “[Using the Field Styles View](#)” on page 193.

AutoTab

Indicates that data entry should automatically “tab” to the next field once enough data has been entered into a field.

You can use this property to speed up data entry in online documents.

To Specify Automatic Tabbing

- 1 Click in the AutoTab cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—automatically tab to the next field from a completed one
 - False—do not automatically advance

BasedOn

(Field style only) See “BasedOn” on page 561.

Case

Indicates whether the data entered into the document should be forced to a particular case.

You can use this property to ensure the data is entered in the correct format for your document.

To Specify the Case of Data

- 1 Click in the Case cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Any—data stays in mixed case
 - Lower—force all data into lower case
 - Upper—force all data into upper case

CharacterStyle

See “CharacterStyle” on page 567.

CheckBoxOffCharacter

Indicates the character to use, typically contained in a “symbol” font, with fields of type Checkbox.

You can use this property to select a character that Docuflex Studio uses to depict an empty, or blank, checkbox.

To Specify the Off Character

- Click in the CheckBoxOffCharacter cell, and then type the number of the character you want to use for an empty checkbox (see “Check Box Fields” on page 74).

CheckBoxOnCharacter

Indicates the character to use, typically contained in a “symbol” font, with fields of type Checkbox.

You can use this property to select a character that Docuflex Studio uses to depict an active, or “checked”, checkbox.

To Specify the On Character

- Click in the CheckBoxOffCharacter cell, and then type the number of the character you want to use for a “checked” checkbox (see “Check Box Fields” on page 74).

CheckBoxWithFont

Indicates whether a checkbox field should be created with a font or vector drawing commands.

You can use this property to control the appearance of checkboxes—using a font is quicker and neater because Windows draws the box; however, these must be converted to graphics if you’re printing to an AFP or Xerox printer.

To Specify the Font

- 1 Click in the CheckBoxWithFont cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—use a Windows font
 - False—use vector commands

ControlAction

Specifies the JavaScript code or function call to execute when an OnClick or OnChange event occurs in an HTML data entry form.

To Specify the Control Action

- 1 Click in the ControlAction cell, and then click .
- The Enter ControlAction dialog displays.
- 2 Type the code or the name of the function call.

WARNING!

Docuflex does not validate the contents of this dialog; the entry is placed directly into the HTML code.

- 3 Click **OK**.

ControlType

Indicates the type of input box you want in an HTML data entry form.

TIP

The ControlType you select may not trigger an OnClick or OnChange event. If so, then the ControlAction is ignored.

To Specify the Control Type

- 1 Click in the ControlType cell, and then click .
- 2 From the drop-down list, select any one of the following:
 - Button
 - Check Box
 - Combo Box
 - Edit Box

DataFormat

Specifies the formatting mask that you want to apply to the incoming data.

To Specify the Data Format

- 1 Click in the DataFormat cell, and then click .
- The Format dialog displays.
- 2 Use the scroll box to select the data format you want (see “[Selecting the Field Format](#)” on page 452).
- 3 Click **OK**.

DataList

Lists the available choices for a combo box in an HTML data entry form.

To Specify the List

- In the Source window, select the field for which you want to specify the data list. The properties that you can define for the field display in the Properties view.

Because the Data List can originate from two different sources, select one of the following:

To Obtain Values from an	See:
External (Table) source	“To Select a Table” on page 620
Internal (User entered) source	“To Enter Internal Values” on page 620

To Select a Table

- 1 Click in the DataList cell, and then click .
- The Field Choices dialog box displays.
- 2 Use the scroll box to select the table from the data file supplying the valid choices.
- 3 Click **OK**.

To Enter Internal Values

- 1 Click in the DataList cell, and then click .
- The Choices dialog box displays.
- 2 Type the value into the lower text box, and then click **Add**.
- 3 Repeat Step 2 as necessary to complete the list of choices.
- 4 Click **OK**.

DataListType

Specifies the source of the valid values presented as choices in a combo box on an HTML data entry form.

To Specify the Type of Data List

- 1 Click in the DataListType cell, and then click .
- 2 From the drop-down list, select one of the following:
 - External (Table)—the list of choices is gathered from the columns in a table of the data file (see [“To Select a Table” on page 620](#))
 - Internal (User entered)—you type the choices for the list in the order you want (see [“To Enter Internal Values” on page 620](#))

DataListValidate

Indicates whether a field’s value should be validated against the list of choices specified in the DataList.

You can use this property to indicate that the choice must or must *not* be present in the list.

To Specify List Validation

- 1 Click in the DataListValidate cell, and then click .
- 2 From the drop-down list, select one of the following:
 - InList—the field value must be present in the list
 - NotInList—the field value cannot match an item in the list

FieldStyle

Specifies the field style whose properties apply to this data variable.

You can use this property to access stored values for the field properties. If necessary, you can override individual values.

To Specify the Field Style

- 1 Click in the FieldStyle cell, and then click .
- 2 From the drop-down list, select a style from the list.

FieldType

Specifies the classification and behavior of the variable data field.

To Specify the Field Type

- 1 Click in the FieldType cell, and then click .
- 2 From the drop-down list, select any one of the following:
 - BPSD
 - BPSDREF
 - DRAW
 - FORMREF
 - LITERAL
 - TAGREF
 - **VSD** (default)
 - VSDREF

For more information, see “[Selecting the Field Type](#)” on page 448.

ForceRefresh

Indicates whether to refresh the Preview window if you change the value.

You can use this property to automatically update the preview image of the document; however, you can avoid some amount of delay and flicker by not refreshing the entire page for a field whose value does not impact the values or layout of the entire page.

To Force a Refresh

- 1 Click in the ForceRefresh cell, and then click .
- 2 From the drop-down list, select one of the following:
 - False—do not refresh the display
 - True—automatically refresh the display whenever the value changes

FullFill

Indicates whether the field’s value should be validated for the required number of characters.

Use this property to ensure that the field has the required number of characters; however, you must incorporate the DataListValidate property to ensure they’re the correct ones.

To Validate a “Full” Field

- 1 Click in the FullFill cell, and then click .
- 2 From the drop-down list, select one of the following:
 - False—do not refresh the display
 - True—automatically refresh the display whenever the value changes

InstanceDesired

Indicates the target instance of a field that occurs multiple times.

Use this field value to get, for example, the second of five instances of a given field.

To Specify the Instance Desired

- Click in the InstanceDesired cell, and then type the number representing the number of the instance (see “[Step 3](#)” on page 455).

Justify

Specifies that a field’s value should be aligned within the space held by the field. This property is mostly applicable to fields of a fixed-size (e.g., BPSD variable data tags).

Use this property to enhance the appearance of your documents.

To Justify the Field Content

- 1 Click in the Justify cell, and then click .
- 2 From the drop-down list, select one of the following:
 - Center—center the text within the assigned space
 - Left—start composing values at the left side of the assigned space
 - Right—start composing values at the right side of the assigned space

LastModifiedBy

See “[LastModifiedBy](#)” on page 585.

LastModifiedDate

See “[LastModifiedDate](#)” on page 585.

Length

Specifies the length of a field designated for data entry on an HTML data entry form. This property reserves space on an HTML data entry form if your field is of type VSD, you’ve specified a length, and you produce HTML output with fields.

To Specify the Length

- Click in the Length cell, and then type the number representing the length of the placeholder for the data entry field.

Locale

Specifies the major language of your geographical region and whether to use the default Windows formatting symbols for currency, dates, and times. Use this property to localize the appearance of your documents.

To Specify the Locale

- 1 Click in the Locale cell, and then click . The Select Locale dialog box displays.
- 2 Use the drop-down list box to select the region in which you’re located.
- 3 Click **OK**.

For more information, see “[To Display the Locale View](#)” on page 413.

Mandatory

Indicates that this field is required and must contain data; it cannot be left blank.

To Specify a Mandatory Field

- 1 Click in the Mandatory cell, and then click .
 - 2 From the drop-down list, select one of the following:
 - True—the data entry user must provide data for this field
 - False—the field is optional and may be left blank
- For more information, see “[Step 4](#)” on page 455.

Mask

Specifies the formatting mask that should be applied to the data entered into a text box. This property is enabled when you select a ControlType of Edit Box.

To Specify the Mask

- Click in the Mask cell, and then type the formatting mask (e.g., (\$#,##0.00;(\$#,##0.00)).
- For more information, see “[Selecting the Field Format](#)” on page 452.

Name

(Field style only) See “[Name](#)” on page 588.

OverrideError

Indicates whether you can override or ignore validation errors in an online HTML data entry form.

To Specify Error Override

- 1 Click in the OverrideError cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—the data entry user can ignore errors for this field
 - False—the form must be free of errors

Prompt

Displays a qualifying question about the data entry field in the status bar at the bottom of the browser window.

To Specify the Prompt

- 1 Click in the Prompt cell, and then click .
- The Enter Prompt dialog box displays.
- 2 Type the text string that you want displayed as the prompt.
- 3 Click **OK**.

RangeBegin

RangeEnd

NOTE

You cannot use the RangeBegin and RangeEnd properties until you've activated the RangeBeginEnable and RangeEndEnable properties.

Specifies the minimum value that the field must contain, or the maximum value that the field can contain, to be considered valid (e.g., range must be greater than or equal to 1 and less than or equal to 100).

To Specify the Effective Range

- Click in the RangeBegin or RangeEnd cell, and then click  (spin control), or type the number, to enter the beginning or ending value.

RangeBeginEnable

RangeEndEnable

Indicates whether the field's value should be validated against the RangeBegin or RangeEnd values.

To Specify Range Validation

- 1 Click in the RangeBeginEnable or RangeEndEnable cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—ensure the value is within the valid range
 - False—do not check the value

ReadOnly

Indicates whether editing should be disallowed for the field.

You can use this property to protect the contents of a field from inadvertent changes.

To Indicate Whether to Edit a Field

- 1 Click in the ReadOnly cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—do not allow modifications to the field
 - False—allow changes

ReplacementCharacters

Specifies the special characters that are displayed as a placeholder for the number of characters in the data field on an HTML data entry form.

The number of replacement characters should

- correspond to the maximum number of characters for the field
- match the Length of the field

To Specify the Replacement Characters

- Click in the ReplacementCharacters cell, and then type the correct number of characters.

For more information, see “[Step 1](#)” on page 454.

SampleText

Specifies that text to display instead of the field name (e.g., Customer Name instead of Account.Customer.Name).

You can use this property to give an accurate representation of the field width, especially for fields that are completed at the very end of the composition process. Also, if your sample text represents the maximum width of the field, you'll receive a WYSIWYG display in the Preview window for easier layout planning.

To Specify the Sample Text

- 1 Click in the SampleText cell, and then click .

The Enter SampleText dialog box displays.

- 2 Type the text string that you want displayed as the sample text.
- 3 Click **OK**.

SpellCheck

TIP

This field is active only during Preview Edit; however, Docuflex also offers a general spell checking tool that you can use in the Source and Preview windows (see “[Check Spelling](#)” on page 457).

Enables spell checking capabilities of variable data fields for the user of an HTML data entry form.

You can use this property to make corrections to misspelled data in the source data file.

To Enable Spell Check

- 1 Click in the SpellCheck cell, and then click .
- 2 From the drop-down list, select one of the following:
 - True—check the spelling of the contents of this field
 - False—ignore misspellings

For more information about using spell checking during a Preview Edit session, see “[Spell Checking Variable Data Fields](#)” on page 218.

ToolTipText

Displays a description of the field's purpose as a ToolTip for the user of an HTML data entry form.

You can use this property to offer a hint pertaining to the data required for a field. When a user moves the mouse cursor over the field, Docuflex Studio or the Web browser displays the hint.

To Specify ToolTip Text

- 1 Click in the ToolTipText cell, and then click .

The Enter ToolTipText dialog box displays.

- 2 Type the text string that you want displayed as the ToolTip text.
- 3 Click **OK**.

Validation

Specifies a business rule to run that validates the value of the field.

You can use this property to ensure the field contains the correct contents.

To Specify a Validation Rule

- 1 Click in the Validation cell, and then click .

The Rules dialog box displays.

- 2 Select the validation Rules from the list, and then click **OK**.

ZoomFactor

Specifies the magnification of the field when it's presented for the user on an HTML data entry form.

You can use this property to direct attention to an important field on the form.

To Specify the Zoom Factor

- 1 Click in the ZoomFactor cell, and then click .
- 2 From the drop-down list, select one of the available magnification settings.

Docuflex Stylized Content Editor

Basics

The Docuflex Stylized Content Editor, a companion application to Docuflex Studio, contains fewer features and is designed for creating content for later inclusion in a document project. The Content Editor is designed to make creating content easier for someone who's not thoroughly familiar with the process of assembling an entire Docuflex project.

The Content Editor is easy to use when creating and editing “stylized” content for use with Docuflex Studio. Stylized content contains any combination of fonts, font weights, point sizes, colors, and variable data fields. Once you create or recall a Docuflex Stylized Content (.dsc) file, you can manipulate the file in the same manner as in Docuflex Studio (e.g., performing Spell Checking and adding and editing variable data fields).

Installing the Content Editor

The Content Editor is included on the installation disc for Docuflex. Midway through the installation routine, you'll make the choice to install the Docuflex Stylized Content Editor instead of Docuflex Studio and its components.

To Install the Content Editor

- 1 Perform the installation routine for Docuflex.
- 2 When prompted for the Setup Type, select **Docuflex Stylized Content Editor** versus **All Docuflex Studio Components**.
- 3 Complete the installation routine (see “[Installing Docuflex](#)” on page 29).

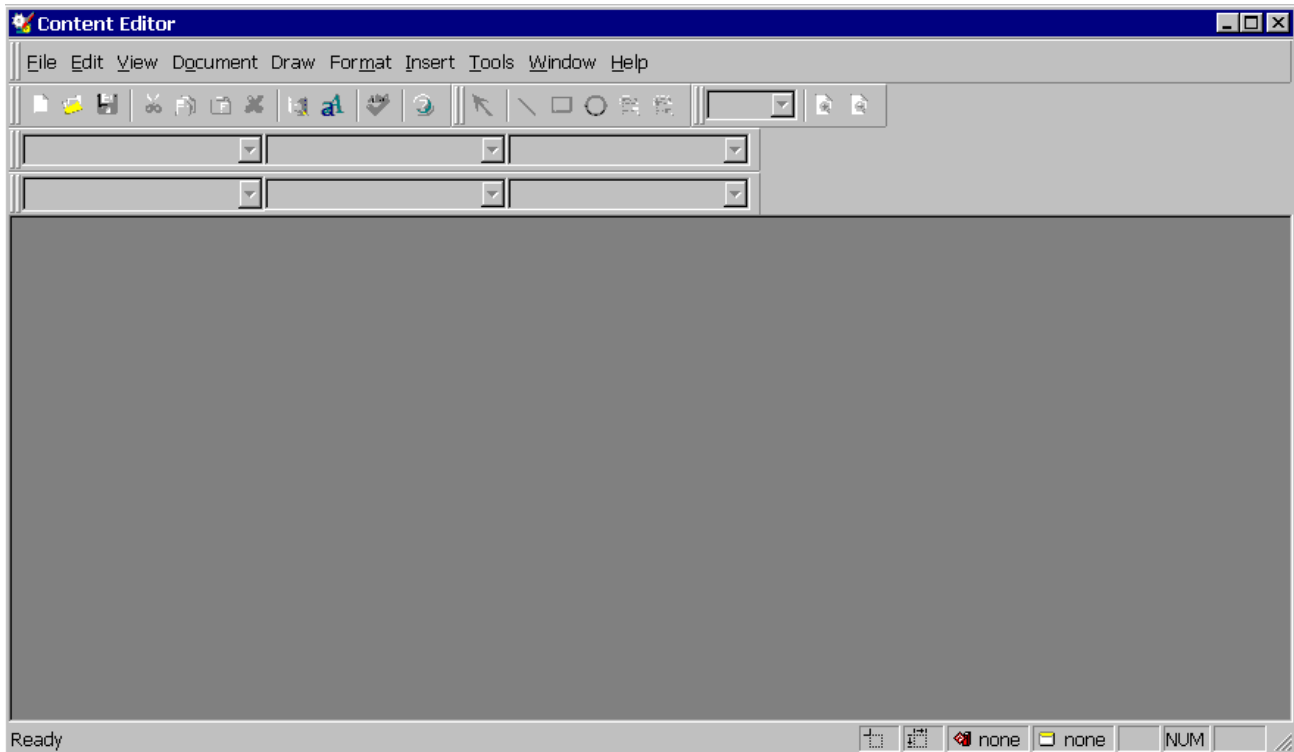
Opening the Content Editor

You can install the Content Editor at the same time as Docuflex Studio; however, it requires its own installation routine. The Content Editor operates as a separate application and includes its own program icon.

To Open the Content Editor

After you install Docuflex in your Windows system, the Start menu's Programs sub-menu displays the Docuflex Studio folder.

- ▶ Click **Content Editor** to display the main application window:



Getting Started

Step 1: Selecting a Configuration File

The first time you execute the Content Editor, you must select a configuration file that provides the Content Editor with the necessary Docuflex environment settings.

You must load a configuration file before you can create or load stylized content files into the Content Editor.

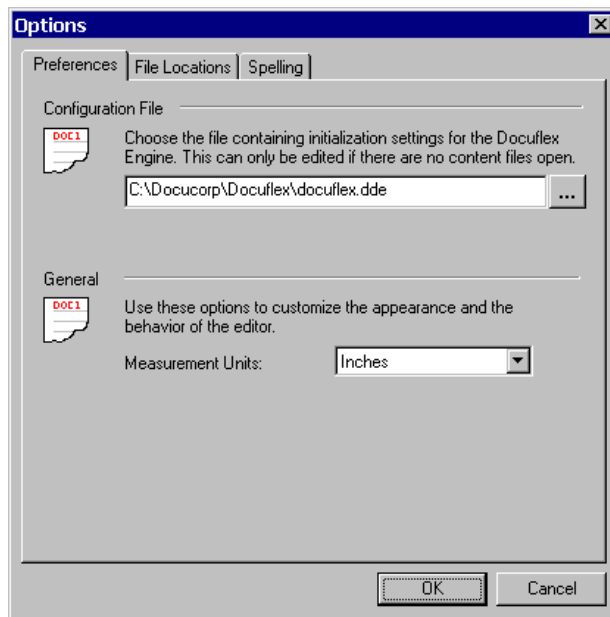
TIP

You only have to select a configuration file the very first time you execute the Content Editor. Thereafter, you only need to follow Step 2.

To Select a Configuration File

- 1 Select **Tools>Options**.

The Content Editor displays the Options dialog box.



- 2 In the Configuration File group box, select a configuration file.

TIP

The configuration file you select should be the same one that is loaded for Docuflex Studio.

- 3 In the General group box, select the unit of measure from the drop-down list box.
- 4 Click **OK**.

For more information, see “[To Specify the Initialization File](#)” on page 496.

- 5 If you’re going to access files stored in Documanage, select **Tools>Options>File Locations** and specify a Documanage Document location.

For more information, see “[Using the File Locations View](#)” on page 496.

Step 2: Creating a Docuflex Stylized Content File

As you create a stylized content file in the Content Editor, you must select the type of file, based on its content—if it contains graphics, it’s a Form; if not, it’s Text. You must also select a current Docuflex project so that the Content Editor can access the available formatting styles (e.g., Character, Color, Field, Member, Paragraph, and Tab). The Docuflex project is loaded as a reference; thus providing the Content Editor with formatting styles and a data file schema.

You’re also prompted to select a Page Frame from the master Page Definition of the referenced project file. The frame you select determines the width of the content file you’re creating.

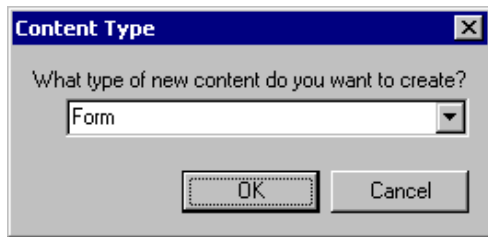
To Create a Docuflex Stylized Content File

- 1 Select **File>New**.

-or-

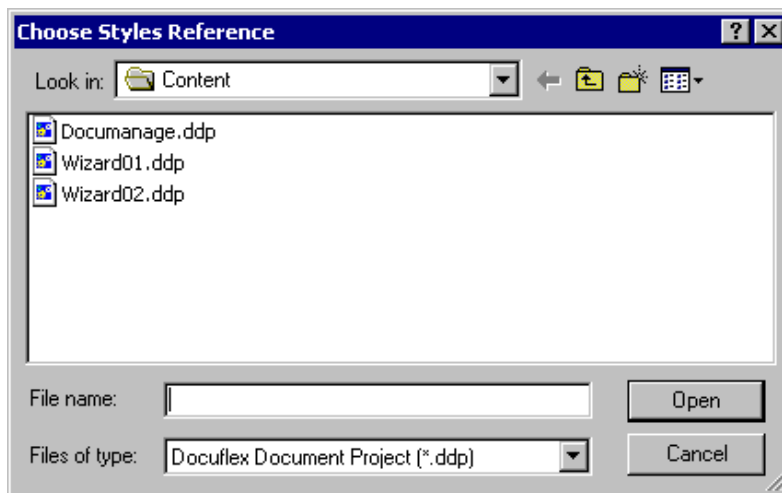
Click .

The Content Type dialog displays.



- 2 Select the type of file you want to create. If you plan to include graphics, you must select **Form**. For all other types of content, including schema data fields, rules, functions, and text, select **Text**.
- 3 Click **OK** to continue.

The Choose Styles Reference dialog displays.

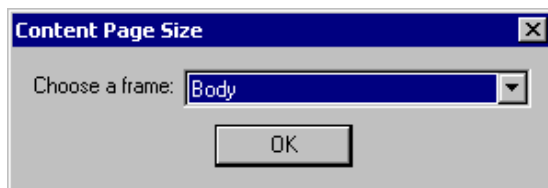


- 4 Select an existing Docuflex project to use as a basis for this Docuflex Stylized Content file.

The Content Editor shares the formatting styles defined in this project.

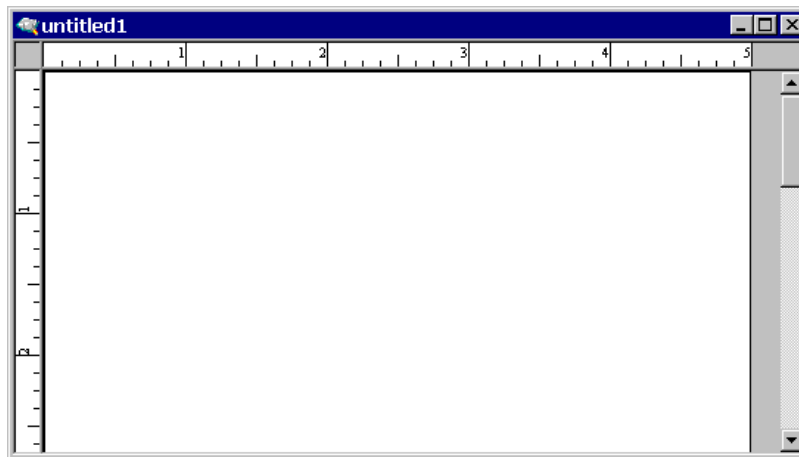
- 5 Click **Open** to access the Docuflex project.

The Content Page Size dialog displays.

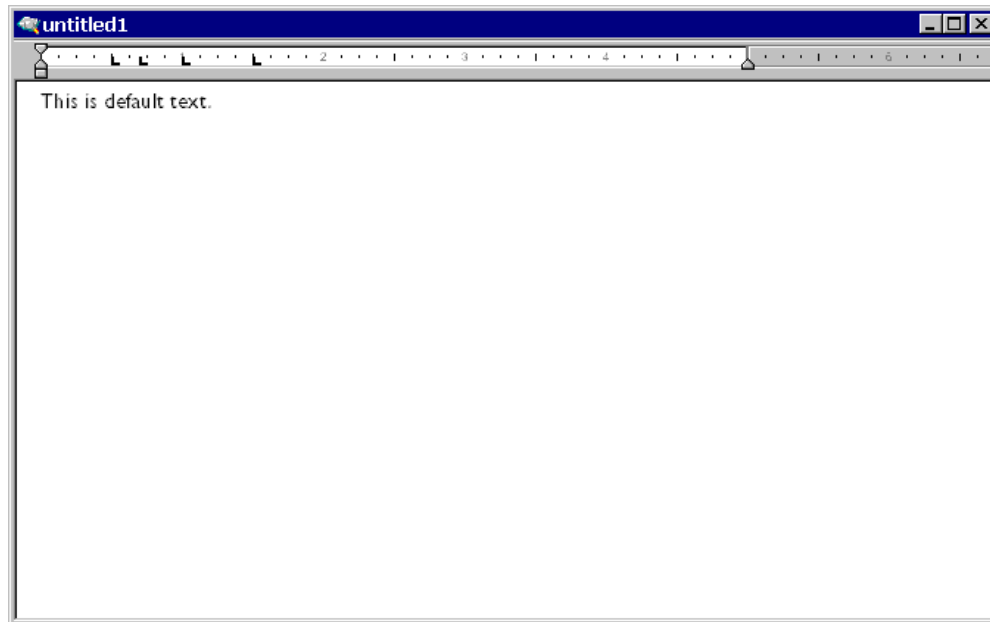


- 6 From the Choose a frame drop-down list box, select the Page Frame into which this content will be placed.
- 7 Click **OK** to select the frame.

The Content Editor displays the main editing window.



If you've chosen a content of type Text, the Content Editor displays the text editing window.



8 Begin creating a Docuflex Stylized Content file.

Stylized content consists of variable fields and formatted text. You create stylized content in the Content Editor in the same manner as in the Source window of Docuflex Studio (see [“Source Window”](#) on page 234).

Using the Content Editor

The Content Editor is a limited version of Docuflex Studio. For the majority of the menu options, the procedure is identical whether you're working in Docuflex Studio or the Content Editor. You just need to remember this situation when the title of a dialog box or a file name and type is mentioned.

Styles Control Bar

The Content Editor displays text formatting styles in the Styles bar. The displayed styles are obtained from the referenced Docuflex Studio project. You can view, but not edit, the properties of the styles.

For more information, see “[Styles Control Bar](#)” on page 187. You will not see Member styles displayed, as this type of style only applies to Docuflex Studio.

Status Bar

The status bar at the bottom of the Content Editor window displays the currently-loaded Docuflex Document Project (*.DDP) file and its Docuflex Data Schema (*.DDS) file.

Menu Options

The Content Editor comprises the following menus:

- “[File Menu](#)” on page 632
- “[Edit Menu](#)” on page 633
- “[View Menu](#)” on page 633
- “[Document Menu](#)” on page 634
- “[Draw Menu](#)” on page 637
- “[Format Menu](#)” on page 639
- “[Tools Menu](#)” on page 646
- “[Window Menu](#)” on page 646
- “[Help Menu](#)” on page 646

File Menu

The File menu comprises the following menu options:

If you want to	See
Create a stylized content file	“ To Create a Docuflex Stylized Content File ” on page 629
Open an existing stylized content file	“ Open ” on page 257
Close the current stylized content file without exiting the Content Editor	“ Close ” on page 258
Save the stylized content file	“ Save ” on page 258
Save the stylized content file under a different name	“ Save As ” on page 259
Exit the Content Editor	“ Exit ” on page 265

Edit Menu

The Edit menu comprises the following menu options:

If you want to	See
Reverse the last action	“Undo” on page 266
Repeat the last action	“Redo” on page 267
Specify to which point you want to “Undo” actions	“Undo Advanced” on page 267
Remove the selected text and copy it to the Windows Clipboard	“Cut” on page 268
Copy the selected text to the Windows Clipboard	“Copy” on page 268
Paste the contents of the Windows Clipboard into the project	“Paste” on page 268
Delete the selected document component	“Delete” on page 269
Make a duplicate copy of a drawing object	“To Duplicate a Drawing Object” on page 250
Select the entire expression in the Source window	“Select All” on page 270
Find a phrase in the Source window	“Find” on page 270
Replace a phrase in the Source window with another phrase	“Replace” on page 272
View or edit a variable within a component	“Edit Field” on page 273

View Menu

The View menu comprises the following menu options:

If you want to	See
Toggle the display of the Data bar	“To Toggle the Display of the Data File” on page 633
Toggle the display of the Styles bar	“Styles” on page 285
Toggle the display of the Field Properties view	“To Toggle the Display of the Field Properties” on page 633
Toggle the display of the horizontal and vertical rulers	“To Toggle the Display of the Rulers” on page 634
Toggle the display of the various tool bars available for the Stylized Content Editor	“Toolbars” on page 285
Adjust the magnification aspect	“Zoom” on page 289

To Toggle the Display of the Data File

- Select **View>Data**.

The Content Editor either displays or hides the Data bar (see [“To Display the Data Bar”](#) on page 177).

To Toggle the Display of the Field Properties

- Select **View>Field Properties**.

The Content Editor either displays or hides the Field Properties view (see “[To Display the Properties View](#)” on page 241).

To Toggle the Display of the Rulers

- ▶ Select **View>Rulers**.
The Content Editor either displays or hides the horizontal and vertical rulers.

Document Menu

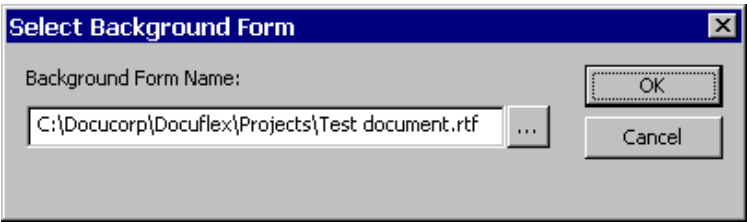
The Document menu comprises the following menu options:

If you want to	See
Choose a background image for your document	“To Select a Background Form” on page 634
Change the page frame assigned to this file	“To Change the Page Frame” on page 634
Choose an external Reference	“To Select a Different Docuflex Project” on page 635
Perform various Documange operations	“To Set the Content Management State” on page 94
Adjust the document settings	“Specifying the Document Settings” on page 635

To Select a Background Form

- 1 Select **Document>Choose Background Form**.

The Select Background Form dialog displays.

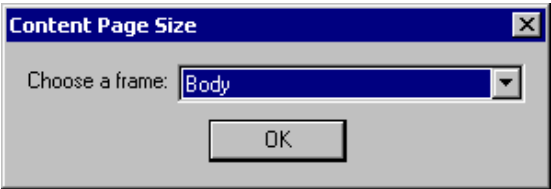


- 2 In the Background Form Name text box, type the data path and name of the file you want to use as the background for your form.
-or-
Click  to display the dialog allowing you to locate the file.
- 3 Click **OK**.

To Change the Page Frame

- 1 Select **Document>Choose Frame**.

The Content Page Size dialog displays.



- 2 From the Choose a frame drop-down list box, select the page frame into which you want to insert this piece of content. The displayed frame names are obtained from the Docuflex document project to which the Content Editor is linked.

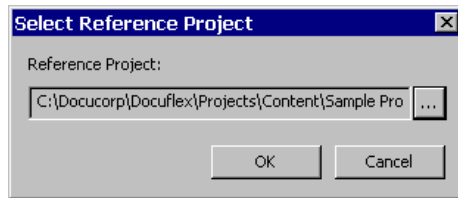
- 3 Click **OK** to change the frame name.

The Content Editor changes the frame name and subsequent width of the content.

To Select a Different Docuflex Project

- 1 Select **Document>Choose Reference**.

The Select Reference Project dialog displays.



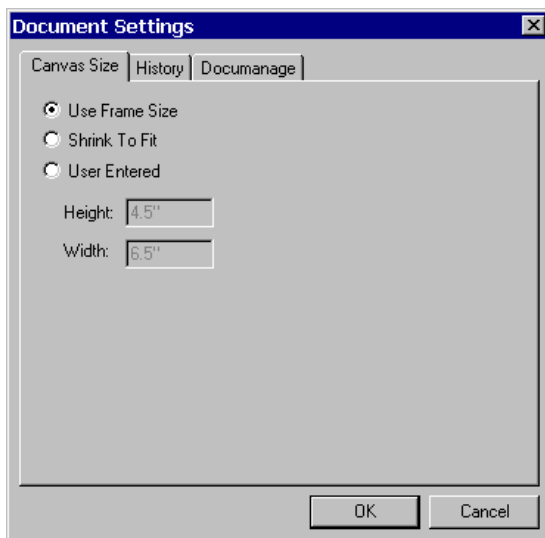
- 2 The current Reference Project is displayed.
- 3 If you want to pick a different referenced project upon which to base your Frames and formatting Styles, click **...** to display the dialog allowing you to locate the file.
- 4 Click **OK**.

Specifying the Document Settings

Use the Settings command to specify several default Content Editor options for use when composing your document. The Document Settings dialog and all of its properties are used to manage "project-related" information.

To Specify Document Settings

- Select **Document>Settings**.



Using the Document Settings Dialog and Views

The Document Settings dialog box contains multiple views. You complete a setting by specifying general operating parameters under these views.

To Use a Document Settings View

- ▶ Do any of the following:

To specify	Go to this topic
The size of the canvas	“Using the Canvas Size View” on page 636
Whether to enable a history file, or clear an existing file	“Using the History View” on page 415
The integration with Documanager	“Step 4” on page 82

To Save or Close the Document Settings Dialog

- ▶ Do one of the following:

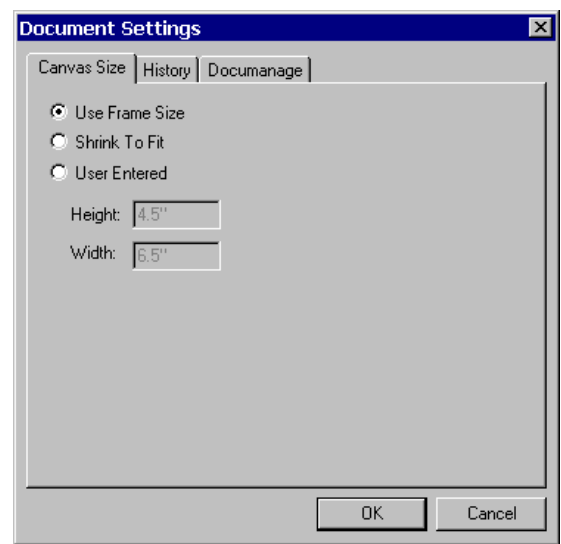
To	Do this
Apply the specifications you’ve provided and return to the Content Editor	Click OK .
Return to the Content Editor without applying the specifications you’ve provided	Click Cancel .

Using the Canvas Size View

Use the first view in the Document Settings dialog box to customize the size of the canvas, which is the usable space for composing your document.

To Display the Canvas Size View

- ▶ If the Canvas Size view is not already showing in the Document Settings dialog box, click on the **Canvas Size** tab.



Because the Canvas Size view contains multiple specifications, this guide provides a separate topic for each.

If you need to specify the	Go to
Canvas size	“To Specify the Canvas Size” on page 637
Saving or closing of the Canvas Size view	“To Save or Close the Document Settings Dialog” on page 636

To Specify the Canvas Size

- ▶ Click the option button that best defines the size of the composition area:
 - Use Frame Size—(default) uses the size of the frame as defined in Docuflex Studio. The frame size is assigned when you select a Content Page Size while creating a document.
 - Shrink To Fit—the size shrinks to fit the objects on the canvas.
 - User Entered—you can specify the exact proportion of the canvas with the Height and Width settings.

Draw Menu

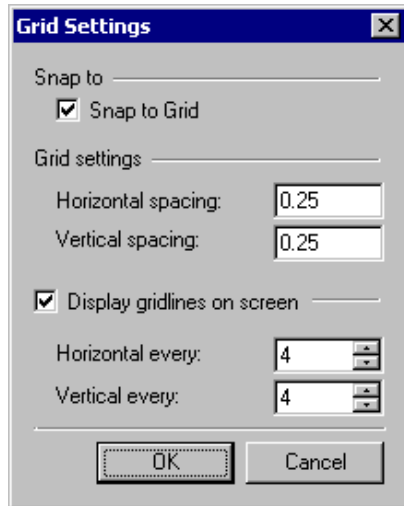
The Draw menu comprises the following menu options:

If you want to	See
Select a drawing object to edit	“To Select a Drawing Object” on page 248
Draw an ellipse	“To Draw an Ellipse” on page 246
Insert a Schema data field	“To Draw a Field Box” on page 246
Draw a line	“To Draw a Line” on page 247
Draw a rectangle	“To Draw a Rectangle” on page 247
Draw a text box	“To Draw a Text Box” on page 247
Customize the drawing grid	“To Configure the Grid” on page 638
Select the next drawing object on a Content Form member	“To Select the Next Drawing Object” on page 250

To Configure the Grid

Use the Grid command to configure the drawing grid that helps to size and place shapes on the canvas. The grid is a visible or invisible drawing aid that you use to obtain more accurate placement when using the mouse.

- 1 Select **Draw>Grid** and the Grid Settings dialog displays.



- 2 Enable the Snap to Grid check box if you want the cursor to seek out the next closest “snap” setting when creating a drawing object. You can enable Snap to Grid even if you do not display grid lines on the screen.
- 3 In the Grid settings group box, use the horizontal and vertical spacing text boxes to specify the amount of space between each “snap” of the grid. The measurement you use depends on the unit of measure specified in **Document>Settings>General>Measurement Units**.

TIP

A smaller horizontal and vertical spacing interval ensures greater accuracy when using the mouse.

- 4 Enable the Display gridlines on screen if you want to display the drawing grid on the canvas.
- 5 In the Horizontal every: and Vertical every: combo boxes, use the spin controls to specify the placement of gridlines.

EXAMPLE

If the spacing of your grid is one “snap” at every quarter-inch (0.25) and you display a gridline at every fourth snap, you’ll see gridlines displayed at every inch. The cursor, though, still “snaps” every quarter of an inch.

- 6 Click **OK** to save the changes.

Format Menu

The Format menu comprises the following menu options:

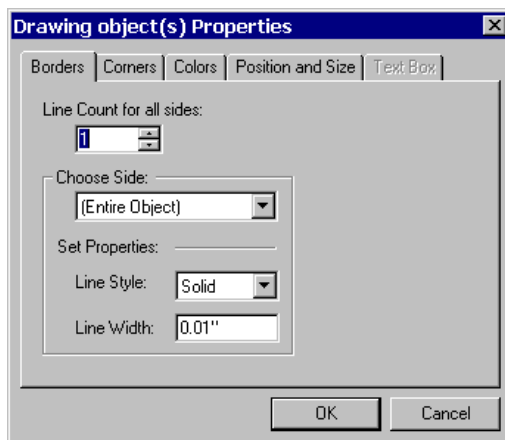
If you want to	See
Align multiple drawing objects	"Alignment" on page 440
Group together multiple drawing objects	"Grouping" on page 440
Slightly shift the position of a drawing object	"Movement" on page 441
Adjust the order of layered drawing objects	"Order" on page 441
Rotate a drawing object	"Rotation" on page 442
Apply a Character style	"Character Style" on page 442
Apply a Paragraph style	"Paragraph Style" on page 443
Apply a Tab style	"Tab Style" on page 444
Select a locale	"Locale" on page 445
View the properties of a drawing object	"Specifying the Properties" on page 639

Specifying the Properties

Use the Properties command to specify the field properties and customize the characteristics of drawing objects on the canvas. After using the mouse to create a drawing object, you can refine the properties and dimensions to your exact specifications.

To Specify the Properties

- Select **Format>Properties**.



Using the Drawing Object Properties Dialog and Views

The Drawing Object Properties dialog box contains multiple views. You customize the properties of a drawing object by specifying measurements, borders, colors, and margins under these views.

To Use a Drawing Object Properties View

- ▶ Do any of the following:

To specify	Go to this topic
Border properties	“Using the Borders View” on page 641
The shape of corners on rounded rectangles	“Using the Corners View” on page 642
The background and border colors	“Using the Colors View” on page 643
The dimensions of the drawing object	“Using the Position and Size View” on page 644
The margins between text and borders	“Using the Text Box View” on page 645

To Save or Close the Drawing Object Properties Dialog

- ▶ Do one of the following:

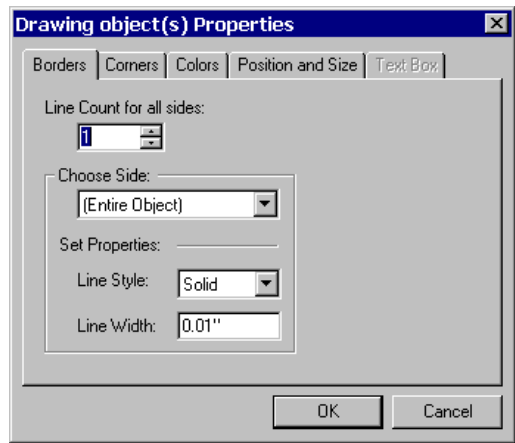
To	Do this
Apply the specifications you’ve provided and return to the Content Editor	Click OK .
Return to the Content Editor without applying the specifications you’ve provided	Click Cancel .

Using the Borders View

Use the first view in the Drawing Object Properties dialog box to specify the number of lines, style, and width of borders.

To Display the Borders View

- ▶ If the Borders view is not already showing in the Drawing Object Properties dialog box, click on the **Borders** tab.



Because the Borders view contains multiple specifications, this guide provides a separate topic for each.

If you need to specify the	Go to
Number of lines comprising the border	“To Specify the Number of Border Lines” on page 641
Style and width of each side	“To Specify the Style and Width” on page 641
Saving or closing of the Borders view	“To Save or Close the Drawing Object Properties Dialog” on page 640

To Specify the Number of Border Lines

WARNING!

This option is not available for Lines and Ellipses.

- ▶ In the Line Count for all sides: combo box, type the number of lines you want to use as a border (e.g., single, double, triple line).
-or-
Click  to select the number of lines.

To Specify the Style and Width

WARNING!

The Choose Side option is not available for Rounded Rectangles, Lines, and Ellipses.

- 1 In the Choose Side drop-down list box, select one of the following styles:
 - (Entire Object)
 - Bottom
 - Left
 - Right
 - Top

TIP
You can specify different styles for each side; simply choose the side, then the style, then choose another side and its style, and so forth.

- 2 In the Line Style drop-down list box, select one of the following styles:
 - Dash
 - DashDot
 - DashDotDot
 - Dot
 - Solid
- 3 In the Line Width text box, type the desired thickness of the border.

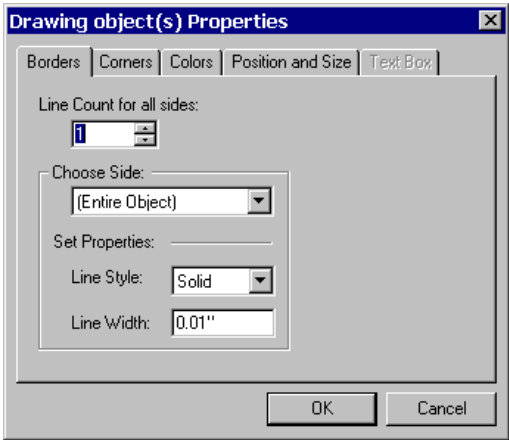
Using the Corners View

Use the second view in the Drawing Object Properties dialog box to specify the corners of a rounded rectangle. The shape of the corner is determined by the arc defined by the two measurements (e.g., height plus width). A “regular” rectangle, with square corners, uses a zero measurement for height and width.

WARNING!
This view is not available for Lines and Ellipses.

To Display the Corners View

- If the Corners view is not already showing in the Drawing Object Properties dialog box, click on the **Corners** tab.



Because the Corners view contains multiple specifications, this guide provides a separate topic for each.

If you need to specify the	Go to
Height and Width of the corners	“To Specify the Height and Width of the Corners” on page 643
Saving or closing of the Corners view	“To Save or Close the Drawing Object Properties Dialog” on page 640

To Specify the Height and Width of the Corners

- In the Height and Width text boxes, type the measurements of the corners.

TIP

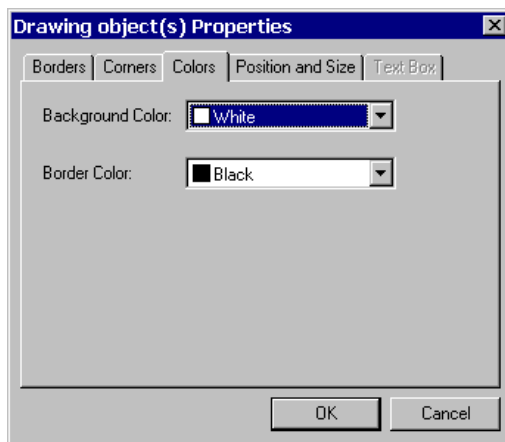
A smaller measurement results in a smaller curve (see “[EllipseHeight](#)” on page 576).

Using the Colors View

Use the third view in the Drawing Object Properties dialog box to select the border color of the drawing object and the background, or fill, color.

To Display the Colors View

- If the Colors view is not already showing in the Drawing Object Properties dialog box, click on the **Colors** tab.



Because the Colors view contains multiple specifications, this guide provides a separate topic for each.

If you need to specify the	Go to
Border and background colors	“To Specify the Border and Background Colors” on page 643
Saving or closing of the Colors view	“To Save or Close the Drawing Object Properties Dialog” on page 640

To Specify the Border and Background Colors

- 1 In the Background Color drop-down list box, select a color style from the list. The background color is especially useful if you're going to place something in front of the drawing object and you want to use the drawing object as a background.
- 2 In the Border Color drop-down list box, select a color style from the list.

NOTE

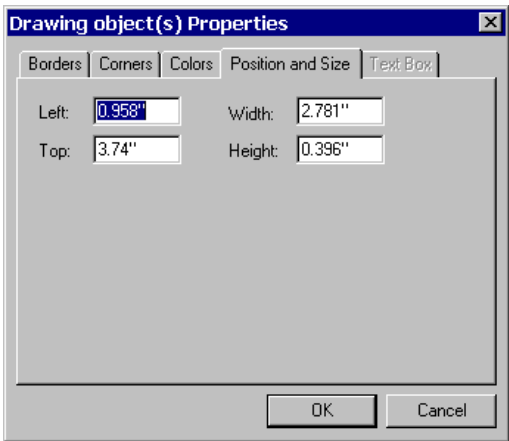
If you need to create a color style, you must open Docuflex Studio.

Using the Position and Size View

Use the fourth view in the Drawing Object Properties dialog box to precisely position a drawing object. After using the mouse to create a drawing object, you can use this view to fine-tune the dimensions.

To Display the Position and Size View

- ▶ If the Position and Size view is not already showing in the Drawing Object Properties dialog box, click on the **Position and Size** tab.



Because the Position and Size view contains multiple specifications, this guide provides a separate topic for each.

If you need to specify the	Go to
Precise dimensions of the drawing object	"To Specify the Overall Dimensions" on page 644
Saving or closing of the Position and Size view	"To Save or Close the Drawing Object Properties Dialog" on page 640

To Specify the Overall Dimensions

- 1 In the Left text box, type the number representing the distance from the left margin where the drawing object begins.
- 2 In the Top text box, type the number representing the distance from the top margin where the drawing object begins.

The combination of these two measurements establishes the top left corner. From this point, the Content Editor can accurately render the drawing object using the next two measurements.
- 3 In the Width text box, type the width measurement.
- 4 In the Height text box, type the height measurement.

Using the Text Box View

Use the fifth view in the Drawing Object Properties dialog box to

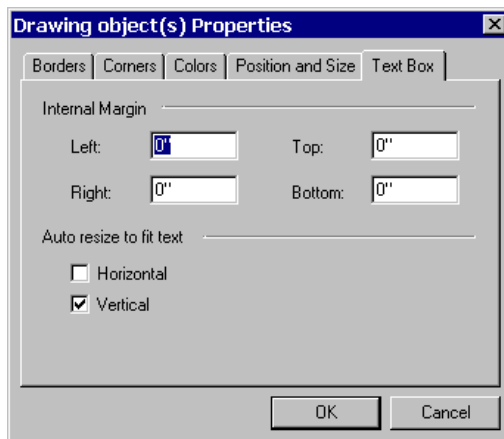
- add space between the text or variable data field and the box surrounding it.
- dynamically resize the box depending on its content.

WARNING!

This view is only available for Field and Text Boxes.

To Display the Text Box View

- If the Text Box view is not already showing in the Drawing Object Properties dialog box, click on the **Text Box** tab.



Because the Text Box view contains multiple specifications, this guide provides a separate topic for each.

If you need to specify the	Go to
Space between the field or text and the border	"To Specify the Border Margins" on page 645
Automatic resizing of the box	"To Specify the Resizing Options" on page 645
Saving or closing of the Margins view	"To Save or Close the Drawing Object Properties Dialog" on page 640

To Specify the Border Margins

- In the Bottom, Left, Right, and Top text boxes, type the number representing the distance between the text or field and the designated margin.

To Specify the Resizing Options

- Click any combination of check boxes to achieve the resizing control you want.

Insert Menu

The Insert menu comprises the following menu options:

If you want to	See
Add a Cell Break to a Member	"Cell Break" on page 446
Add a variable Field	"Field" on page 446
Add a Filter for additional text	"Verbiage Filter" on page 455

Tools Menu

The Tools menu comprises the following menu options:

If you want to	See
Ensure that all spelling is correct in the document	“Check Spelling” on page 457
Customize environment-related Editor settings	“Options” on page 494

Window Menu

The Window menu comprises the following menu options:

If you want to	See
Place windows in a overlapping sequent	“Cascade” on page 503
Place windows next to each other from left to right	“Tile Horizontally” on page 503
Place windows next to each other from top to bottom	“Tile Vertically” on page 504
Switch between the open windows	“Switching Windows” on page 504

Help Menu

The Help menu comprises the following menu option:

If you want to	See
View information about your current version of the Content Editor	“To View the About Box” on page 646

To View the About Box

Use the About Content Editor command to view the copyright information and the current version and release number of the Content Editor.

- 1 Select **Help>About Content Editor**.
The About Content Editor dialog displays.
- 2 Click **OK** to return to the Content Editor.

Docuflex UNIX

Overview

Docuflex™ UNIX, a Skywire Software software application, is a general-purpose document composition and assembly tool. While Docuflex is not a product geared towards writing simple letters, it excels at creating a variety of complex documents such as

- Utility Bills
- Financial Statements
- Contracts
- Group insurance booklets

Docuflex is designed for acquiring, managing, and personalizing information that results in rapid development, automation, and customization of all types of documents.

Docuflex is a composition system for producing custom documents. It utilizes processing rules and variable data from an information system to build a custom document. The document may be comprised of a mixture of document content, including:

- Pre-formatted document components, including Docucorp DCD, Xerox Metacode, and IBM AFP
- Docuflex Studio Document Segments, such as recurring heading topics or common formatting styles
- Rich text-formatted documents, such as Microsoft RTF
- Unformatted text
- Graphical representations in the bitmap (*.bmp) format.

Components

Docuflex UNIX comprises the following components:

- DFLXCOMP (Docuflex Composition Engine)
- DFLXOUT (Docuflex Output Processor)
- DFLXSAVE (Docuflex Archive Processor)

DFLXCOMP

DFLXCOMP is a command-line executable that composes the documents you created in Docuflex Studio.

After you define Channels and Recipients in your Docuflex project, you execute DFLXCOMP. The composition engine creates the output print stream according to the Printer Definition that each of your channels uses.

For more information, see “[DFLXCOMP](#)” on page 511.

DFLXOUT

DFLXOUT is only required if there's custom processing you want to perform on the output that can't be handled by Docuflex (e.g., generating multiple copies or sorting by zip code).

For more information, see “[DFLXOUT Basics](#)” on page 527.

DFLXSAVE

DFLXSAVE prepares your output for archival into Documanage by Docusave.

For more information, see “[DFLXSAVE Basics](#)” on page 550.

System Requirements

Docuflex UNIX operates on multiple UNIX platforms, including AIX, Linux, and Sun Solaris.

AIX (32-bit)

The minimum hardware requirements to install and operate Docuflex are:

- Processor: POWER 4 or later processors; 1.2 GHz or faster processor required
- Memory: 1 GB available RAM or more recommended
- Hard disk: 40 MB of available hard disk space required for installation (hard disk usage will vary based on configuration)

The minimum software requirements to install and operate Docuflex are:

- AIX 5.2 and 5.3 (32-bit mode only); the latest service packs for each operating system are highly recommended
- Databases supported:
 - Oracle 8 and later supported via 32-bit Oracle 8 driver
 - Sybase 12.5
 - JDBC for all DBMS that support JDBC

Linux (32-bit)

The minimum hardware requirements to install and run Docuflex are:

- Processor: Intel-compatible only; 1 GHz or faster Pentium Pro or better processor required
- Memory: 1 GB available RAM or more recommended
- Hard disk: 40 MB of available hard disk space required for installation (hard disk usage will vary based on configuration)

The minimum software requirements to install and operate Docuflex are:

- Kernel 2.4.9 or later; formal Linux distribution is desirable (e.g., Red Hat Enterprise Linux or Novell SuSE Linux Enterprise Server); all current fixes are required for each kernel release.
- Databases supported:
 - Oracle 9 and later supported via Oracle 9 driver
 - MySQL version 4.0 and later using MyODBC
 - JDBC for all DBMS that support JDBC
- Linux 2.4.9 or later with the following libraries:
 - libdl.so.2
 - libm.so.6
 - libc.so.6
 - /lib/ld-linux.so.2
 - libstdc++-libc6.2-2.so.3

Sun Solaris (32-bit)

The minimum hardware requirements to install and operate Docuflex are:

- Processor: UltraSPARC IIIi processors or later; 1.06 GHz or faster processor required
- Memory: 512 MB available RAM or more recommended
- Hard disk: 40 MB of available hard disk space required for installation (hard disk usage will vary based on configuration)

The minimum software requirements to install and operate Docuflex are:

- Sun Solaris 8 and 9 (5.8 and 5.9)
- Databases supported:
 - Oracle 9 and later supported via Oracle 9 driver
 - MySQL version 4.0 and later using MyODBC
 - JDBC for all DBMS that support JDBC
- Sun Solaris 2.8.5 or later with the following libraries:
 - libc.so.1
 - libdl.so.1
 - libm.so.1

Installation

Installing Docuflex UNIX involves copying the files from the installation disc to the appropriate directory.

To Install Docuflex UNIX

- Copy the appropriate files from the installation disc to a directory to which all users of the product have access:

If you're on this platform:	Copy these files:
IBM AIX	setupflx112.aix setupcom112.aix setuptrn112.aix
Linux	setupflx112.lnx setupcom112.lnx setuptrn112.lnx
Sun	setupflx112.snx setupcom112.snx setuptrn112.snx

EXAMPLE

If you want to install the product into the **/home/docucorp/docuflex** directory, first create the directory and then copy the files into it. You should perform this operation with root authority so that file permissions can be set for users and groups, but using root authority is not absolutely necessary.

Setting Up the Environment

Setting up Docuflex on UNIX is a multiple-step process involving

- setting up access permissions for directories and users (see “To Set Up Permissions” on page 650)
- running the installation script (see “To Run the Installation Script” on page 651)
- verifying the environment variables (see “To Verify the Environment Variables” on page 656)

To Set Up Permissions

- 1 Ensure that you’re logged on with the proper authority for the directory and installation files. You might need to assign user and group permissions.
 - a Verify that the directory in which you’re about to run the setup script has write permission. If the permission is not set correctly, do so now.

EXAMPLE

If user **jxsmith** created the **/home/docucorp/docuflex** directory, use that ID to run the setup script. Verify that **/home/docucorp/docuflex** has write permission using the “ls” command:

```
ls -ald /home/docucorp/docuflex
```

You should see the following results:

```
drwxr-xr-x 2 jxsmith staff 512 Apr 19 07:52 /home/docucorp/docuflex
```

The most important part of this message is the third letter of the string “drwxr-xr-x”. The “w” indicates that the owner of this directory has write permission. If the third letter is not a “w”, assign write permission with the following command:

```
chmod 755 /home/docucorp/docuflex
```

- b Make sure you’re in the directory containing the installation files:


```
cd /home/docucorp/docuflex
```
 - c Change the file permission for the three installation files.
 - the files should have read permission (read/write for the user, if desired):


```
chmod 644 setupflx112.aix (or .lnx, or .snx)
chmod 644 setupcom112.aix (ditto)
chmod 644 setuptrn112.aix (ditto)
```
- 2 Adjust the file permission of the installed files for the various users and groups needing access.

Running the Installation Script

The Docuflex 11.3, Common Objects 11.3, and Transall 11.3 installations on the Unix platforms (AIX, Linux, Sun) have been enhanced to use the Unix *uuencoded text* encoding method instead of the *tar* files, which will no longer be provided. The new *uuencoded* files are text-based files instead of binary *tar* files. This should make the transmission and distribution of these installation files easier and more portable to different machines in your network.

You can perform either a new installation or update an existing one. The installation process detects whether you are updating an existing installation when you enter the directory name of the target or destination of the installation. If the directory does not exist, then a new install is performed.

If the directory already exists and a predefined required binary file is found in the existing directory, then an “update” to an existing installation is performed. Both these conditions must be true. The predefined required binary file for Docuflex is “dflexcomp”, for Common Objects, “dc2cpy”, and for Transall, “tranexe”. The installation update process will ask if you first want to “back up” the existing installation. If you choose “back up”, all the existing files in the target directory will be copied to a subdirectory called “backup”. Since this is an installation update, only the new binary files will be copied/installed to your target/destination directory, preserving any existing data files you may already have in that directory (e.g., .ini files and .dde files).

To Run the Installation Script

- Run the installation script you want to install.

The naming convention for these scripts is as follows:

setupPPPvvv.r.sss

where:

PPP	the three-letter product acronym	
	flx	Docuflex
	com	Common Objects
	trn	Transall
vvv	the version number	
r	the revision number	
sss	the Unix platform system	
	aix	IBM's AIX
	lnx	Linux
	snx	Sun

Therefore, if you were installing Docuflex 11.3 on the Linux operating system, the script name will be “setupflx11.3.lnx”.

Following is an example of running the Docuflex installation on the Linux operating system and its display and response. In this example, we will install Docuflex, Common Objects, and Transall all into the same directory named “docuflex11.n”.

NOTE

The Docuflex script will automatically invoke the Common Objects and Transall installation scripts. You can choose to install or bypass the installation of any one of these components.

```
>setupflx11.3.lnx                                     <= At your ready prompt, enter the installation script name.

* * * Docuflex 11.n Installation/Update * * *
Loading, Please wait ...

Do you want to Install Docuflex 11.n?
Enter 'Y'es or 'N'o, or 'X' to cancel this process.
?>y                                                    <= Enter 'y' to install this component.
                                                         Enter 'n' to bypass the installation of this component
                                                         and continue with the next component.
                                                         Enter 'x' to cancel all of this installation process.

Please select an Installation/Update Directory:
Press <Enter> to accept default: </home/acctflename/flx11.n>
?>docuflex11.n                                         <= Enter the directory name where you want to install.
                                                         This is a qualified or non-qualified directory name. In this
                                                         example, a sub-directory named "docuflex11.n" will be created
                                                         at the existing/current directory.

Install Docuflex 11.n to <docuflex11.n>?
{y or n}?>y                                           <= Enter 'y' to continue this installation.

Installation/Update in progress. Please wait...
Updated Base Components ...

...

* * * Common Object 11.n Installation/Update * * *
Loading, Please wait ...

Do you want to Install Common Objects 11.n?
Enter 'Y'es or 'N'o, or 'X' to cancel this process.
?>y                                                    <= Enter 'y' to install this component.
                                                         Enter 'n' to bypass the installation of this component
                                                         and continue with the next component.
                                                         Enter 'x' to cancel all of this installation process.

Please select an Installation/Update Directory:
Press <Enter> to accept default: </home/acctname/com11.n>
?>docuflex11.n                                         <= Enter the directory name where you want to install.
                                                         This is a qualified or non-qualified directory name. In this
                                                         example, a sub-directory named "docuflex11.n" will be created
                                                         at the existing/current directory.
```

Continued on next page

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```

Install Common Object 11.n to <docuflex11.n>?
{y or n}?>y                                     <= Enter 'y' to continue this installation.

Installation/Update in progress. Please wait...
Updated Base Components ...

...

Common Object Installation Complete.

* * * Transall 11.n Installation/Update * * *
Loading, Please Wait ...

Do you want to Install Transall 11.n?
Enter 'Y'es or 'N'o, or 'X' to cancel this process.
?>y                                               <= Enter 'y' to install this component.
                                                Enter 'n' to bypass the installation of this component
                                                and continue with the next component.
                                                Enter 'x' to cancel all of this installation process.

Please select an Installation/Update Directory:
Press <Enter> to accept default: </home/acctname/trn11.n>
?>docuflex11.n                                   <= Enter the directory name where you want to install.
                                                This is a qualified or non-qualified directory name. In this
                                                example, a sub-directory named "docuflex11.n" will be created
                                                at the existing/current directory.

Install Transall 11.n to <docuflex11.n>
{y or n}?>y                                     <= Enter 'y' to continue this installation.

Installation/Update in progress. Please wait...
Updated Base Components ...

...

Transall Installation Complete.

Docuflex Installation Complete.

>                                                 <= You are back at your ready prompt.

```

In the following example, we will update an existing Docuflex installation on the Linux operating system. We already have Docuflex, Common Objects and Transall installed into the same directory named "docuflex11.n".

NOTE

The Docuflex script will automatically invoke the Common Objects and Transall installation scripts. You can choose to install or bypass the installation of any of these components.

```
>setupflx11.3.lnx                                     <= At your ready prompt, enter the installation script name.

* * * Docuflex 11.n Installation/Update * * *
Loading, Please wait ...

Do you want to Install Docuflex 11.n?
Enter 'Y'es or 'N'o, or 'X' to cancel this process.
?>y                                                    <= Enter 'y' to install this component.
                                                         Enter 'n' to bypass the installation of this component
                                                         and continue on with the next component.
                                                         Enter 'x' to cancel all of this installation process.

Please select an Installation/Update Directory:
Press <Enter> to accept default: </home/acctflename/flx11.n>
?>docuflex11.n                                         <= Enter the directory name where you want to install.
                                                         In this example, the directory name already exists and will
                                                         cause the installation process to update the existing installation.

Docuflex installation <docuflex11.n> already exists.

Please select an update type
1 = Backup and Update Installation
2 = Update Installation
3 = Quit
?>1                                                    <= Choose 1 to first back up your existing installation files
                                                         to a sub-directory named "backup", then new binary files
                                                         modules will be installed.

Update Docuflex 11.n to <docuflex11.n>
{y or n}?>y                                           <= Enter 'y' to continue this update installation.

Preserving docuflex.dde.sample file...
Installation/Update in progress. Please wait...
Updated Base Components...

* * Common Object 11.n Installation/Update * * *
Loading, Please wait ...

Do you want to Install Common Objects 11.n?
Enter 'Y'es or 'N'o, or 'X' to cancel this process.
?>y                                                    <= Enter 'y' to install this component.
                                                         Enter 'n' to bypass the installation of this component
                                                         and continue with the next component.
                                                         Enter 'x' to cancel all of this installation process.

Please select an Installation/Update Directory:
Press <Enter> to accept default: </home/acctname/com11.n>
?>docuflex11.n
```

Continued on next page

Continued from previous page

Common Object installation <docuflex11.n> already exists.

Please select an update type

1 = Backup and Update Installation

2 = Update Installation

3 = Quit

?>1

<= Choose 1 to first back up your existing installation files to a sub-directory named "backup", then new binary files modules will be installed.

Update Common Object 11.n to <docuflex11.n>?

{y or n}?>y

<= Enter 'y' to continue this update installation.

Preserving isi.ini.sample file...

Installation/Update in progress. Please wait...

Updated Base Components ...

Common Object Installation Complete.

* * * Transall 11.n Installation/Update * * *

Loading, Please Wait ...

Do you want to Install Transall 11.n?

Enter 'Y'yes or 'N'o, or 'X' to cancel this process.

?>y

<= Enter 'y' to install this component.

Enter 'n' to bypass the installation of this component and continue with the next component.

Enter 'x' to cancel all of this installation process.

Please select an Installation/Update Directory:

Press <Enter> to accept default: </home/acctname/trn11.n>

?>docuflex11.n

Transall installation <docuflex11.n> already exists.

Please select an update type

1 = Backup and Update Installation

2 = Update Installation

3 = Quit

?>1

<= Choose 1 to first back up your existing installation files to a sub-directory named "backup", then new binary files modules will be installed.

Update Transall 11.n to <docuflex11.n>?

{y or n}?>y

<= Enter 'y' to continue this update installation.

Installation/Update in progress. Please wait...

Updated Base Components ...

...

Transall Installation Complete.

Docuflex Installation Complete.

>

<= You are back at your ready prompt.

*To Verify the Environment Variables***NOTE**

In the following two steps, LD_LIBRARY_PATH is the name of the environment variable on Linux and Sun, while the name is LIBPATH on AIX.

- 1 All Docuflex users must add the library directory to their LD_LIBRARY_PATH environment variable. Edit the login profile and modify the environment variable so that the operating system can find the shared object (.so) files that Docuflex uses.

```
LP=/home/docucorp/docuflex
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$LP
export LD_LIBRARY_PATH
```

- 2 Be sure to refresh the LD_LIBRARY_PATH environment variable by executing the login profile before trying to use Docuflex (e.g., first logout and then log back in). To verify that the environment variable has been updated correctly, type:

```
echo $LD_LIBRARY_PATH
```

you should see something similar to the following:

```
/usr/lib:/usr/bin/lib:/home/docucorp/docuflex
```

- 3 All Docuflex users must also add the executables directory to their PATH environment variable.

EXAMPLE

If *dflxcomp* and *dflxsave* are in **/home/docucorp/docuflex**, update the PATH with the following script fragment in the user's profile:

```
DFX=/home/docucorp/docuflex:
if [[ "$DFX" != "$PATH" ]]
then
    PATH=$DFX$PATH
    export PATH
fi
```

The syntax of the script fragment may vary depending on the shell you're using.

- 4 Verify that the Docucorp Common Objects have been installed.

Using Docuflex

Operating Docuflex on UNIX is identical to operating the application on a PC, except for the syntax of the path information (e.g., the absence of drive letters and forward slashes instead of backslashes)

See [“The Composition Engine”](#) on page 507 and [“The Post Processors”](#) on page 527 for more information.

DFLXCSV File Utility

Overview

The Docuflex comma-separated file processing utility (*DFLXCSV.EXE*) converts data obtained from comma-separated values (CSV) files into data files that Docuflex can use. This utility is a lightweight, WIN32, command-line application that you can substitute for Transall if you use only CSV-formatted files as input data for Docuflex.

DFLXCSV can scan a single CSV file, or a set of CSV files in a single run, and produce a Docuflex Schema (*.DDS) and Docuflex Data (*.DDF) file. The CSV files can contain data that is hierarchical in nature, if not in layout. You can then direct DFLXCSV to organize the data into transactions containing a robust data hierarchy for Docuflex.

Organizing the Data for DFLXCSV

DFLXCSV reads comma-separated files. These files contain records separated, or delimited, by “new line” symbols (e.g., Carriage return (ASC13), Line feed (ASC10) combination). The fields within the records are delimited by commas, and field data is optionally delimited by double quotes. If you want to specify delimiter values other than commas and double quotes, see “[DFLXCSV Command Line Syntax](#)” on page 663. Following these conventions, the data which DFLXCSV reads is similar to the following records:

James,Stewart,Knockleburgh,Jim,James S. Knockleburgh George,Walker,Bush,George W,George W. Bush

To interpret the CSV data, DFLXCSV looks for “header records” in the data file. Header records define the names and datatypes of fields in the data file, plus any hierarchical organization of the data records. You can insert these header records into the data file itself, or include them in a separate file.

You must supply DFLXCSV with a header record describing each potential “record type” so it can process the data correctly while reading the file. A record type is a particular grouping of fields on a record in a CSV file. Usually, a CSV file only contains a single record type; however, DFLXCSV supports CSV files with any number of record types commingled together. As a result, DFLXCSV recognizes two types of header records: single type and multiple type. Single type header records describe the fields of a CSV file containing a single record type, while multiple type header records describe the fields of a CSV file containing multiple record types.

Single Type Header Records

DFLXCSV recognizes a single type header record by the `*RecName='Name'` header string. A single type header string must be placed as the last field in the header record. It tells DFLXCSV the record name for the Docuflex Schema (e.g., 'Name') and the names and positions of the other columns for this record (e.g., First, Middle, Last, Nickname, and FullName in columns 1, 2, 3, 4, and 5 in the example below). The header string for a single header record does not actually define a field; it only marks the record as a header record and defines the record name. When you use a single type header record, DFLXCSV expects all the records following the header record, in all the input files processed in this run, to conform to the header record's field definitions.

If the CSV data is similar to the following records,

James,Stewart,Knockleburgh,Jim,James S. Knockleburgh George,Walker,Bush,George W,George W. Bush

then the following header record accurately describes the data to DFLXCSV:

First,Middle,Last,Nickname,FullName,*RecName='Name'

If you place the header record in a file by itself, you need to list the file on the command line, prior to the files containing the data records, when you execute DFLXCSV.

Multiple Type Header Records

DFLXCSV recognizes a multiple type header record by the `*RecName='Name'ID='Na'` header string. A multiple type header string can occur in any field in a header record, and it tells DFLXCSV:

- the record name for the Docuflex Schema (e.g., 'Name')
- the record data identifier (e.g., 'Na')
- the position in the record where the record identifier will be found (e.g., the first column)
- the names and positions of the other columns for this record (e.g., First, Middle, Last, Nickname, and FullName in columns 2, 3, 4, 5, and 6 in the example below)

The important difference between single and multiple record processing is the presence of a record data identifier (Record ID) field. The Record ID is a field in the CSV data whose value identifies a record as a particular type. In the example, the Record ID value is 'Na' in column 1. When DFLXCSV reads a CSV file and finds the value 'Na' in the first column, it maps the CSV data to the 'Name' record fields for Docuflex. For more information, see ["Hierarchical Data"](#) on page 659.

If the CSV data is similar to the following records,

Na,James,Stewart,Knockleburgh,Jim,James S. Knockleburgh Na,George,Walker,Bush,George W,George W. Bush

then the following header record accurately describes the data to DFLXCSV:

*RecName='Name'ID='Na',First,Middle,Last,Nickname,FullName

If you place the header record in a file by itself, you need to list the file on the command line, prior to the files containing the data records, when you execute DFLXCSV.

Hierarchical Data

DFLXCSV supports the organization of CSV data into a hierarchical structure for use by Docuflex. You can create this hierarchy by setting up header records that relate to each other. The following header records define a two-record hierarchy:

```
*RecName='Name' ID='Na',First,Middle,Last,Nickname,FullName
*RecName='Charge' ID='Cg',Vendor,Date,Amt,*ParentName='Name'
```

The ChargeID record is a child of the Name record, as defined by the presence of the *ParentName='Name' parent string. A parent string can occur only at the end of a header record. The parent string does not define a field in the record; it only defines the parent/child relationship. All header records except the first must have a parent string identifier (see “[Docuflex Transactions](#)” on page 661).

If the CSV data is similar to the following records,

```
Na,James,Stewart,Knockleburgh,Jim,James S. Knockleburgh
Cg,Tom Thumb,06/18/2002,125.32
Cg,Mobil,06/18/2002,22.59
Na,George,Walker,Bush,George W,George W. Bush
Cg,NRA,06/01/2002,75.00
Cg,Crawford Farm Supply,06/02/2002,545.16
Cg,Center for Public Speaking,06/03/2002,1537.23
```

and you apply the two header records, you'll receive the following hierarchical structure in Docuflex:

```
Name
  Charge
  Charge
Name
  Charge
  Charge
  Charge
```

In this example, DFLXCSV structures each Charge record under the last Name record found in the CSV data; therefore, you must organize the data carefully to get the correct Charge records under the correct Name records.

Data Joining

DFLXCSV also supports “joining” CSV data to form a data hierarchy. The following header records define a two-record hierarchy that is “joined” on the SSN field:

```
*RecName='Name' ID='Na',First,Middle,Last,Nickname,FullName,SSN
*RecName='Charge' ID='Cg',SSN,Vendor,Date,Amt,*ParentName='Name'
```

The Charge record is a child of the Name record. Charge is joined to Name via the SSN field because the SSN field is listed in both records.

If the CSV data is similar to the following records,

```
Na,James,Stewart,Knockleburgh,Jim,James S. Knockleburgh,045-76-4387
Na,George,walker,Bush,George W,George W. Bush,213-49-5021
Cg,045-76-4387,Tom Thumb,06/18/2002,125.32
Cg,045-76-4387,Mobil,06/18/2002,22.59
Cg,213-49-5021,NRA,06/01/2002,75.00
Cg,213-49-5021,Crawford Farm Supply,06/02/2002,545.16
Cg,213-49-5021,Center for public speaking,06/03/2002,1537.23
```

you'll receive the same hierarchical structure as in the previous section (see 659).

Since the data is joined, you do not have to organize it so that Name records are intermingled with Charge records (i.e., DFLXCSV is matching the Charge records to the correct Name records using the SSN field). If DFLXCSV finds a Charge record with an SSN value of '045-76-4387,' it searches for a Name record whose SSN value is also '045-76-4387' and places the Charge record underneath it.

This data results in two Name records being sent to Docuflex, the first with two Charge records and the second with three, joined on the value of SSN. You can place the joining SSN value in different field positions in each record, and more than one field can participate in the joining scheme. If the child and parent record share two, three, or more field names, DFLXCSV uses *all* the matching field names to join the data. In terms of data ordering, the only requirement is that parent records must be loaded before child records (i.e., a Name record with an SSN of '045-76-4387' needs to be loaded from the CSV file before any Charge records with an identical SSN can be loaded under it).

Ignoring Data in Some Columns and Rows— Comment Records

By leaving the field name blank in the header record, you can instruct DFLXCSV to ignore the data in a field:

```
*RecName='Name' ID='Na',First,,Last,Nickname,FullName
```

This header record causes DFLXCSV to ignore the data in the third field of the 'Na' record type because there's no field name. Nothing is sent to Docuflex for the data in this field and the values in this field are ignored by DFLXCSV (e.g., you could include comment information).

DFLXCSV also supports a special header record that identifies a record type as a comment record type. All the data in comment record types are ignored by DFLXCSV:

```
*RecName='Name' ID='Na',First,,Last,Nickname,FullName
*IgnoreID='Goo'
*RecName='Charge' ID='Cg',SSN,Vendor,Date,Amt,*ParentName='Name'
```

These header records define the 'Goo' record type as a comment record type and also define the third column of the 'Na' record type as being ignored. You can define as many Comment record types and ignored columns as necessary.

Docuflex Transactions

As stated earlier, all header records except the first *must* have a parent string identifier (i.e., the first record identified to DFLXCSV is always the primary record in any record hierarchy).

This primary record also serves a second purpose; it delimits transactions to Docuflex. In the previous example (see 659), DFLXCSV assigned two rows to the Name record. The first Name record contains two Charge records and the second contains three. When this data is transmitted to Docuflex, each Name record and its child rows are sent as separate Docuflex transactions. The first transaction includes one Name row with two Charge rows and the second transaction includes one Name row with three Charge rows.

Data Typing

With DFLXCSV, you can send data to Docuflex in many of the supported native data types, including String, Double, Long, and DateTime. DFLXCSV discovers a field's datatype from the header record definition. The default datatype is String; to set a field's datatype to something other than String, place an exclamation point "!" in the field's header record definition.

The following header record defines a record type with five fields, some of which include overridden datatypes:

```
*RecName='Transaction' ID='TA',Date!DateTime,User,Value!Double,Count!Long
```

The Date field is sent to Docuflex as a DateTime, User as a String, Value as a Double-precision floating point number, and Count as a Long integer.

Data Volume Considerations

DFLXCSV efficiently processes batches of data with up to 50 thousand records. If you need to process larger batches to a single Docuflex Data (*.DDF) file, consider splitting the data in half, then appending the resulting data files with the DOS file copy command's append '+' option.

If you process more than 50 thousand records in a single batch, DFLXCSV will attempt to process all the data; however, you may notice rapidly-declining performance, due to memory swapping, as the size of jobs exceed 50 thousand records.

DFLXCSV Command Line Syntax

```
DFLXCSV [/option -option ...] inCSVfile*.* [inCSVfile*.*...]
```

Options are preceded with a dash or a forward slash. The names of input CSV files are separated by a space. If a file name contains a space, enclose the name in double quotes.

Option	Value	Explanation
-D	[out DDF file name]	Generate a Docuflex Data File (.DDF) (e.g., /d "C:\Docuflex\Data files\MyFile.DDF").
-S	[out DDS file name]	Generate a Docuflex Data Schema (.DDS) (e.g., /s "C:\Docuflex\Schema files\MyFile.DDS").
-R		Ignore errors joining data and ignore rows with errors. By default, a join failure causes a fatal error and DFLXCSV stops processing. This option causes DFLXCSV to ignore records that cannot be "joined" to data already loaded for a transaction.
-J		Do <i>not</i> join the input data. Process records as if no joins exist. This option turns off the behavior in DFLXCSV, where it matches a child record to a parent record based on the same named fields in the two records. With this option set, DFLXCSV treats all data as if no join fields exist, even if they do.
-N	[name]	Docuflex destination name (e.g., /n MyDestName). The default value for this option is "DFLXCSV". This option sets the name of the Transall data destination for Docuflex, which is normally passed to Docuflex when you use Transall. Transall gets this name from the data destination defined in a Transall project targeting Docuflex.
-I		Ignore data records not defined with a header record. By default, any unrecognized record type causes a fatal error and DFLXCSV stops processing. This option causes DFLXCSV to ignore any unrecognized records and continue processing.
-F	[value]	Set field separator value (e.g., /f ^&). The default is ','. This option sets the value for which DFLXCSV will search to use in separating records into fields. This value can be a string and not just one character. The example sets the value to "^&".
-E	[value]	Set data delimiter value (e.g., /e #@). The default is "". This option sets the value for which DFLXCSV will search to use in delimiting data values. This value can be a string and not just one character. The example sets the value to "#@".

Option	Value	Explanation
-K		Keep joined columns in child records. By default, DFLXCSV does not pass redundant data that joins child rows to parent rows through to Docuflex. This option causes DFLXCSV to pass the redundant column data that joins child rows to parent rows through to Docuflex.
-C		Keep record ID columns in records. By default, DFLXCSV does not pass record type identifiers through to Docuflex. This option causes DFLXCSV to pass a DF\$RecID column through to Docuflex with the record type identifier value of each data row.
-X	[out file name]	Build an example input file with multiple record types. This option writes a small example CSV file.
-Y	[out file name]	Build an example input file with one record type (no ID field). This option writes a small example CSV file.
-Q		Suppress display of DFLXCSV startup banner. This option causes DFLXCSV not to print banner and progress messages; however, errors messages are still produced.

ISI.INI and Docuflex APIs

ISI.INI File

Overview

The *isi.ini* file is a general-purpose control file for many Skywire Software products. It contains, among other items, the names of your list of active printers, font locations for those printers, and a list of supported graphics types.

Sample ISI.INI

Here is a sample *isi.ini* file.

```
; =====
; ===== Print Defs & Fonts =====
; =====

; =====
; ===== DCD =====
; =====

{PrintDef - DCD}
FontSection=Metacode Printer,FILE:
;FontSection=AFP Printer,FILE:
Name=DCD
DataStreamNbr=32
DPI=300
Duplex=1
Color=1
PaperSizeNbr=1
Sheetwidth=8½"
SheetLength=11"
DefaultChain=DCD
TrayDef=TrayDef - METAMAIN
;TrayDef=TrayDef - AFP

; =====
; ===== BMP =====
; =====

{PrintDef - BMP}
FontSection=BMP Format,FILE:
DataStreamNbr=20
DPI=300

{BMP Format,FILE:}
Fonts=0
```

Continued on next page

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```

; =====
; ===== RTF =====
; =====
; =====

{PrintDef - RTF}
DataStreamNbr=12
FontSection=Rich Text Format,FILE:

{Rich Text Format,FILE:}
Fonts=0
GeneratePFMs=0

; =====
; ===== META =====
; =====
; =====

{PrintDef - META}
Name=META
DataStreamNbr=0
DPI=300
Duplex=1
Color=1
PaperSizeNbr=1
Sheetwidth=8½"
SheetLength=11"
DefaultChain=META
DJDEid=5b5be7c5d9d6e7
RAUXid=1111111111111111
ROFFid=1212121212121212
RPAGEid=01FFFF20FFFF01
RSTACKid=d9c5d7d6d9e340c5d5c4
DJDEidmode=1
RAUXidmode=2
ROFFidmode=2
RPAGEidmode=2
RSTACKidmode=1
DJDEidstart=0
RAUXidstart=0
ROFFidstart=0
RPAGEidstart=0
RSTACKidstart=0
DJDESkip=8
LowHPel=22
LowVPel=101
DefaultJDL=DPLJDL
DefaultJDE=ONLINE
DefaultFonts=
AdditionalDJDEs=
FontSection=Metacode Printer,FILE:
SwapJDEs=0
OfflinePrint=0
DoFormsNone=1
TrayDef=TrayDef - METAMAIN
OverlayDir=
SegmentDir=
MainTray=Upper Tray
AuxTray=Lower Tray

```

Continued on next page

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```

Tumble=0

{Metacode Printer,FILE:}
GeneratePFMs=0
ShowFontScores=0
Fonts=3
Font1=pfm(AR112)
Font2=pfm(AR212)
Font3=pfm(AR218)

; =====
; ===== AFP =====
; =====

{PrintDef - AFP}
Name=AFP
FontSection=AFP Printer,FILE:
PaperSizeNbr=1
DefaultChain=AFP
Orientation=1
Duplex=1
Copies=1
DataStreamNbr=1
Color=0
DPI=240
ReshapeChars=0
GraphAbility=0
ColorRGB=0,0,0
Normalize=1
SetLogicalPageBottom=0
LogicalPageBottom=1
BindingEdge=L
FontIndexEnable=0
FontIndexBase=0
SheetLength=11"
SheetWidth=8½"
StreamAFP=0
DrawLines=1
ImageFormat=0
GOCACapable=0
ColorText=0
GOCACapable=0
TrayDef=TrayDef - AFP

{AFP Printer,FILE:}
GeneratePFMs=0
ShowFontScores=0
Fonts=3
Font1=pfm(AR112)
Font2=pfm(AR212)
Font3=pfm(AR218)

; =====
; ===== TEXT =====
; =====

{PrintDef - TEXT}
FontSection=Text Format,FILE:

{Text Format,FILE:}
Fonts=0

{TrayDef - DCDTrays}
TrayDefs=5
DataStreamNbr=32

```

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```
TD1.Name=MAIN
TD1.Tray=1
TD1.Offset=0
TD1.Mode=1
TD1.JDLname=DPLJDL
TD1.JDename=ONLINE
TD1.PaperSizeNbr=-1
TD1.Number=0
TD1.LowHPel=22
TD1.LowVPel=101
TD1.PaperSize=0
TD1.UserCode=0
TD2.Name=AUX
TD2.Tray=4
TD2.Offset=0
TD2.Mode=1
TD2.JDLname=DPLJDL
TD2.JDename=ONLINE
TD2.PaperSizeNbr=-1
TD2.Number=0
TD2.LowHPel=22
TD2.LowVPel=101
TD2.PaperSize=0
TD2.UserCode=0
TD3.Name=MANOFF
TD3.Tray=1
TD3.Offset=1
TD3.Mode=1
TD3.JDLname=DPLJDL
TD3.JDename=ONLINE
TD3.PaperSizeNbr=-1
TD3.Number=0
TD3.LowHPel=22
TD3.LowVPel=101
TD3.PaperSize=0
TD3.UserCode=0
TD4.Name=AUXOFF
TD4.Tray=4
TD4.Offset=1
TD4.Mode=1
TD4.JDLname=DPLJDL
TD4.JDename=ONLINE
TD4.PaperSizeNbr=-1
TD4.Number=0
TD4.LowHPel=22
TD4.LowVPel=101
TD4.PaperSize=0
TD4.UserCode=0
TD5.Name=MANTUM
TD5.Tray=1
TD5.Offset=0
TD5.Mode=2
TD5.JDLname=DPLJDL
TD5.JDename=ONLINE
TD5.PaperSizeNbr=-1
TD5.Number=0
TD5.LowHPel=22
TD5.LowVPel=101
TD5.PaperSize=0
TD5.UserCode=0

{TrayDef - AFP}
TrayDefs=1
DataStreamNbr=1
TD1.Name=
```

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```
TD1.Tray=1
TD1.Offset=0
TD1.Mode=1
TD1.SheetLength=11"
TD1.SheetWidth=8½"
TD1.PaperBinDesc=MAIN : Letter (8½ x 11")
TD1.JDLname=DPLJDL
TD1.JDename=ONLINE
TD1.PaperSizeNbr=1
TD1.Number=0
TD1.LowHPel=22
TD1.LowVPel=101
TD1.PaperSize=0
TD1.UserCode=0
TD2.Name=AUX
TD2.Tray=2
TD2.Offset=0
TD2.Mode=1
TD2.SheetLength=11"
TD2.SheetWidth=8½"
TD2.PaperBinDesc=AUX : Letter (8½ x 11")
TD2.JDLname=DPLJDL
TD2.JDename=ONLINE
TD2.PaperSizeNbr=1
TD2.Number=0
TD2.LowHPel=22
TD2.LowVPel=101
TD2.PaperSize=0
TD2.UserCode=0

{TrayDef - METAMAIN}
TrayDefs=2
DataStreamNbr=0
TD1.Name=MAIN
TD1.Tray=1
TD1.Offset=0
TD1.Mode=1
TD1.SheetLength=11"
TD1.SheetWidth=8½"
TD1.PaperBinDesc=MAIN : Letter (8½ x 11") JDL=DPLJDL , JDE=ONLINE
TD1.JDLname=DPLJDL
TD1.JDename=ONLINE
TD1.PaperSizeNbr=1
TD1.Number=0
TD1.LowHPel=22
TD1.LowVPel=101
TD1.PaperSize=0
TD1.UserCode=0
TD2.Name=AUX
TD2.Tray=2
TD2.Offset=0
TD2.Mode=1
TD2.SheetLength=11"
TD2.SheetWidth=8½"
TD2.PaperBinDesc=AUX : Letter (8½ x 11") JDL=DPLJDL , JDE=ONLINE
TD2.JDLname=DPLJDL
TD2.JDename=ONLINE
TD2.PaperSizeNbr=1
TD2.Number=0
TD2.LowHPel=22
TD2.LowVPel=101
TD2.PaperSize=0
TD2.UserCode=0
```

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```
{INPUT PRINTDEFS}
PDL_0=PrintDef - META
PDL_1=PrintDef - AFP
PDL_12=PrintDef - RTF
PDL_14=PrintDef - TEXT
PDL_20=PrintDef - BMP
PDL_32=PrintDef - DCD

; =====
; ===== Convert Chains =====
; ===== To PDL Types =====
; =====
{CHAIN_2_PDL}
META=0
MET=0
AFP=1
LINE=2
RTF=12
TEXT=14
TXT=14
BMP=20
DCD=32
DCDM=32
DCDA=32

; =====
; ===== Convert PDL Types =====
; ===== To DLL Names =====
; =====
{PDL Modules}
PDL_0=ISIMETA
PDL_1=ISIAFP
PDL_12=ISIRTF
PDL_14=ISITEXT
PDL_20=ISIBMP
PDL_21=ISIJPEG
PDL_32=ISIDCD
```

Docuflex Application Programming Interfaces

Skywire Software distributes three Application Programming Interface (API) DLLs that provide "C" programming language functions to control Docuflex composition engine, output processor, and archival processor behavior:

- DFLXCAPI.W32—API for Docuflex composition engine (DFLXCOMP)
 - DFLXCAPI.H—sample source for use with dflxcapi.w32
 - DFLXCAPI.BAS—sample source for use with dflxcapi.w32
- DFLXOAPI.W32—API for Docuflex output processor (DFLXOUT)
 - DFLXOAPI.H—sample source for use with dflxoapi.w32
 - DFLXOAPI.BAS—sample source for use with dflxoapi.w32
- DFLXSAPI.W32—API for Docuflex archive (DFLXSAVE)
 - DFLXSAPI.H—sample source for use with dflxsapi.w32
 - DFLXSAPI.BAS—sample source for use with dflxsapi.w32

The functions are described as Visual Basic function declarations, as taken from the DFLX?API.BAS files.

DFLXCAPI.W32

Initialize API for use; returns a *handle* in DFLX reference variable

Declare Function DFLXC_Init Lib "DFLXCAPI.W32" (ByRef hDflx As Long) As Long

Delivers the current log filename into the specified buffer [Optional]

Declare Function DFLXC_GetLogFile Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal buffer As String, ByVal maxlen As Integer) As Long

Specifies the log filename [Optional]

Declare Function DFLXC_SetLogFile Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal LogFileName As String) As Long

Overrides output filename(s) defined in the Docuflex project [Optional]

Declare Function DFLXC_SetOutputFile Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal OutputFile As String) As Long

Specifies the recipient to be processed; all will be processed if none is specified [Optional]

Declare Function DFLXC_SetRecipient Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal RecipName As String) As Long

Specifies project (*.DDP) file to be processed

Declare Function DFLXC_SetProjectFile Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal ProjectFile As String) As Long

Specifies data (*.DDF) file to be processed

Declare Function DFLXC_SetDataFile Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal DataFile As String) As Long

Specifies which environment section to use

Declare Function DFLXC_SetEnvName Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal EnvName As String) As Long

Specifies configuration (*.INI) file to be processed

Declare Function DFLXC_SetConfigFile Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal ConfigFile As String) As Long

Starts Docuflex composition processing

Declare Function DFLXC_Process Lib "DFLXCAPI.W32" (ByVal hDflx As Long) As Long

Free resources being used by the API

Declare Function DFLXC_Terminate Lib "DFLXCAPI.W32" (ByVal hDflx As Long) As Long

Get a count of referenced DDPs in master DDP

Declare Function DFLXC_GetReferenceCount Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal ICount As Long) As Long

Get the name of a referenced DDP by Ndx (0-based)

Declare Function DFLXC_GetReference Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal Ndx As Long, ByVal RefName As String) As Long

Add a reference to a DDP that is embedded or linked

Declare Function DFLXC_AddReference Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal DDPFileName As String, ByVal bEmbed As Long) As Long

Update a reference to a DDP to add Documange properties

Declare Function DFLXC_UpdateReference Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal Ndx As Long, ByVal DBKey As String, ByVal DocumentName As String, ByVal LastChgDate As String, ByVal Status As String) As Long

Remove a referenced DDP by Ndx (0-based)

Declare Function DFLXC_RemoveReference Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal Ndx As Long) As Long

Save master DDP to desired filename

Declare Function DFLXC_SaveProject Lib "DFLXCAPI.W32" (ByVal hDflx As Long, ByVal DDPName As String) As Long

DFLXOAPI.W32

Initialize API for use; returns a *handle* in DFLX reference variable

Declare Function DFLXO_Init Lib "DFLXOAPI.W32" (ByRef hDflx As Long) As Long

Delivers the current log filename into the specified buffer [Optional]

Declare Function DFLXO_GetLogFile Lib "DFLXOAPI.W32" (ByVal hDflx As Long, ByVal buffer As String, ByVal maxlen As Integer) As Long

Specifies the log filename [Optional]

Declare Function DFLXO_SetLogFile Lib "DFLXOAPI.W32" (ByVal hDflx As Long, ByVal LogFileName As String) As Long

Specifies project (*.DDP) file to be processed

Declare Function DFLXO_SetProjectFile Lib "DFLXOAPI.W32" (ByVal hDflx As Long, ByVal ProjectFile As String) As Long

Specifies which environment section to use

Declare Function DFLXO_SetEnvName Lib "DFLXOAPI.W32" (ByVal hDflx As Long, ByVal EnvName As String) As Long

Specifies configuration (*.INI) file to be processed

Declare Function DFLXO_SetConfigFile Lib "DFLXOAPI.W32" (ByVal hDflx As Long, ByVal ConfigFile As String) As Long

Starts Docuflex composition processing

Declare Function DFLXO_Process Lib "DFLXOAPI.W32" (ByVal hDflx As Long) As Long

Free resources being used by the API

Declare Function DFLXO_Terminate Lib "DFLXOAPI.W32" (ByVal hDflx As Long) As Long

DFLXSAPI.W32

Initialize API for use; returns a *handle* in DFLX reference variable

Declare Function DFLXS_Init Lib "DFLXSAPI.W32" (ByRef hDflx As Long) As Long

Delivers the current log filename into the specified buffer [Optional]

Declare Function DFLXS_GetLogFile Lib "DFLXSAPI.W32" (ByVal hDflx As Long, ByVal buffer As String, ByVal maxlen As Integer) As Long

Specifies the log filename [Optional]

Declare Function DFLXS_SetLogFile Lib "DFLXSAPI.W32" (ByVal hDflx As Long, ByVal LogFileName As String) As Long

Specifies project (*.DDP) file to be processed

Declare Function DFLXS_SetProjectFile Lib "DFLXSAPI.W32" (ByVal hDflx As Long, ByVal ProjectFile As String) As Long

Specifies which environment section to use

Declare Function DFLXS_SetEnvName Lib "DFLXSAPI.W32" (ByVal hDflx As Long, ByVal EnvName As String) As Long

Specifies configuration (*.INI) file to be processed

Declare Function DFLXS_SetConfigFile Lib "DFLXSAPI.W32" (ByVal hDflx As Long, ByVal ConfigFile As String) As Long

Starts Docuflex composition processing

Declare Function DFLXS_Process Lib "DFLXSAPI.W32" (ByVal hDflx As Long) As Long

Free resources being used by the API

Declare Function DFLXS_Terminate Lib "DFLXSAPI.W32" (ByVal hDflx As Long) As Long

Edit Control Functions

Editing text in Docuflex Studio takes place within two member types—Content Text and Content Form. Content Text members are edited in the Source window, while Content Form members are edited in their own “rich editor” that allows Skywire Software to use our own composition logic to ensure that what is seen on the screen is exactly what is generated as print output.

The following functions are very similar to what you might have seen in other, purely word-processing, applications; however, these belong exclusively to Docuflex Studio:

Function	Ctl Keys	Key	Cursor Movement	Causes Re-Composition	In Content Text	In Text Box In Content Form	Added by Studio	Comments
Insert Character @ Cursor		Char	Y	Y	Y	Y		
Insert Tab	Shift	Tab Tab	Y	Y	Y	Y		
Insert Tab	Ctl	'I'	Y	Y	Y	Y		
Cursor Forward		R.Arrow	Y		Y	Y		
Cursor Backward		L.Arrow	Y		Y	Y		
Cursor Up One Line		U.Arrow	Y		Y	Y		
Cursor Down One Line		D.Arrow	Y		Y	Y		
Cursor Begin Line		Home	Y		Y	Y		
Cursor End Line		End	Y		Y	Y		
Cursor Up One Screen (Scrolling)		Page Up	Y		Y	Y		
Cursor Down One Screen (Scrolling)		Page Down	Y		Y	Y		
Delete Character Before Cursor		Bkspc	Y	Y	Y	Y		
Delete Character After Cursor		Delete	N	Y	Y	Y		
Set Cursor Position			Y					
Cursor Word Forward	Ctl	R.Arrow	Y		Y	Y		
Cursor Word Backward	Ctl	L.Arrow	Y		Y	Y		
Cursor Paragraph Up	Ctl	U.Arrow	Y		Y	Y		
Cursor Paragraph Down	Ctl	D.Arrow	Y		Y	Y		
Cursor Begin Document	Ctl	Home	Y		Y	N		N/A in Content Form
Cursor End Document	Ctl	End	Y		Y	N		N/A in Content Form
Cursor Top Prev Page	Ctl	Page Up	Y		Y	N		N/A in Content Form

Function	Ctl Keys	Key	Cursor Movement	Causes Re-Composition	In Content Text	In Text Box In Content Form	Added by Studio	Comments
Cursor Top Next Page	Ctl	Page Down	Y		Y	N		N/A in Content Form
Delete Word Before Cursor	Ctl	Bkspc	Y	Y	N	Y		Filtered out by Studio
Delete Word After Cursor	Ctl	Delete		Y	N	Y		Filtered out by Studio
Extend Selection	Shift	Any Cursor Movement Cmd	Y		Y	Y		
Delete Selection		Delete	Y	Y	Y	Y		
Replace Selection			Y	Y	Y	Y		
Search	Ctl	f	Y		Y	N		Not in Content Form
Select All	Ctl Ctl	'a' Nbr Pad '5'	Y		Y	Y		
Undo Last Action	Ctl	z	Y	Y	Y	Y		
Cut	Ctl	x	Y	Y	Y	Y		Text Copied / Pasted from / to is not RTF. Font style based on destination.
Copy	Ctl	c			Y	Y		Text Copied / Pasted from / to is not RTF. Font style based on destination.
Paste	Ctl	v	Y	Y	Y	Y		Text Copied / Pasted from / to is not RTF. Font style based on destination.
Insert Field	Ctl	F9	Y	Y	Y	Y	Y	
Insert Cell Break			Y	Y	Y	N	Y	Content Text only, N/A in Content Form
Insert Verbiage Break			Y	Y	Y	N	Y	Content Text only, N/A in Content Form
Edit Field				Y	Y	Y	Y	
Edit Verbiage Break				Y	Y	N	Y	Content Text only, N/A in Content Form
Split At Cursor			Y	Y	Y	N	Y	Content Text only, N/A in Content Form
Split at Paragraph			Y	Y	Y	N	Y	Content Text only, N/A in Content Form

Function	Ctl Keys	Key	Cursor Movement	Causes Re-Composition	In Content Text	In Text Box In Content Form	Added by Studio	Comments
Mouse Move			Y		Y	Y		
Mouse Lbutton Down			Y		Y	Y		
Mouse Lbutton Up					Y	Y		

Generating PowerPoint and RTF

Introduction

This appendix presents a “best practices” guide for producing Microsoft PowerPoint and Rich Text Format (RTF) output from Docuflex. Because not every feature supported by Docuflex can be faithfully recreated in PowerPoint and RTF, you should build your Docuflex project with a “how would I format this in Word (or PowerPoint)” mentality. Such an approach will most likely involve bypassing some of the more-advanced Docuflex formatting approaches, like absolute positioning and sophisticated StartParms.

Generating PowerPoint Output

The PowerPoint page description language (PDL) includes a new default behavior to make PowerPoint output much more user friendly. Following is a brief description of the new behavior, a description of the option that reverts the PDL to its original behavior, and a discussion of some considerations of which you should be aware when creating a project that generates PowerPoint output.

PDL Behavior

The PowerPoint PDL originally generated a single, EMF-based image for each slide (which comprised all objects in that slide). As such, there was no way for you to alter the composed slides other than adding new content. This approach limited the amount of “post-composition” functionality and detracted from its usefulness. The new default behavior for the PowerPoint PDL is drastically different. Now, rather than a single image, each slide consists of the actual shapes, tables, and text boxes. You can edit these items since they are actual PowerPoint elements. Additionally, if the PowerPoint PDL encounters the Docuflex Reserved tag DCP.PAGE.NUMBER, the text resulting from this tag is converted into the Powerpoint slide number.

New Control Panel Option

If you want to revert to the original image-based behavior of the PowerPoint PDL, you can access the option on the Advanced Options tab of the Printer Definition applet in the Docucorp Control Panel (see ["To Specify Advanced Options for PowerPoint Output"](#) on page 65 of the Control Panel user guide). Enable the **Output each slide as an image** check box—this option is disabled by default.

Docuflex Project Considerations

- If the project contains rounded rectangles with different vertical and horizontal radii, the lesser of the two is honored (since PowerPoint only honors one radius).
- Each table cell is only capable of containing one style of text justification (e.g., left, centered, right). If you define more than one justification within a single table cell, the last one specified is honored.
- Jagged tables (i.e., tables that contain rows with a different number of columns or rows containing columns with different column widths) are handled differently than “regular” tables. Such jagged tables will be comprised of a single table per row of the entire table. In other words, each row of the table becomes its own, single-row table.
- PowerPoint does not support non-text objects within a table cell; therefore, any such images or vectors will be absolutely positioned where they are supposed to be, but not contained within the actual structure of the table object.
- Table borders are handled differently in PowerPoint than in Docuflex. PowerPoint table borders are shared between neighbors. There is no distinction between table border, row border, and cell border. A border is simply a barrier between cells. Docuflex, on the other hand, allows for tables, rows, and cells to have unique border definitions. To accommodate for this when creating PowerPoint output, the most specific property defined is the one honored (e.g., a table with both row borders and cell borders results in the cell borders taking priority).
- Only single-line spacing is honored within a table cell. Any text with one-and-one-half, double, or triple line spacing is generated as single-spaced.
- Irregular rectangles (e.g., differing border widths), or any portions thereof, are generated as their individual components. Each visual border component is represented with a line, plus a rectangle for the background shading, if applicable.
- Any time you use tab stops with Content Text members destined for a table cell, those tabs are translated back into “standard” tab stops rather than the Docuflex Tab style.

Generating RTF Output

The RTF page description language (PDL) includes new default behaviors to make RTF output much more user friendly. Following is a brief description of the new behaviors, a description of the options that affect the behaviors, and a discussion of some considerations of which you should be aware when creating a project that generates RTF output.

PDL Behavior

The RTF PDL originally generated a document with absolute positioning, meaning that the contents mirrored the output of Docuflex but was not very easy to edit. Also, any hypertext links included in the document retained the character formatting from Docuflex, rather than the blue, underlined format employed by Word.

During RTF file generation, the following Docuflex tags get converted to Microsoft Word merge fields and the values for the fields are substituted:

Docuflex Reserved Tag	Microsoft Word Merge Field
DCP.DATE	{ DATE * MERGEFORMAT }
DCP.TIME	{ TIME * MERGEFORMAT }
DCP.OUT.FILE.NAME	{ FILENAME * MERGEFORMAT }
DCP.PAGE.NUMBER	{ PAGE * MERGEFORMAT }
DCP.TOTAL.PAGES	{ NUMPAGES * MERGEFORMAT }
DCP.SECTION.NUMBER	{ SECTION * MERGEFORMAT }
DCP.OUT.FILE.DOCLN	{ FILESIZE * MERGEFORMAT }

New Control Panel Options

If you want to revert to the original behavior of the RTF PDL, you can access the options on the Advanced Options tab of the Printer Definition applet in the Docucorp Control Panel (see "[To Specify Advanced Options for RTF Output](#)" on page 60 of the Control Panel user guide). The **Allow output to flow as much as possible** check box is enabled by default to allow for easier editing of your RTF document in Word. If you disable the option, the contents of your document are absolutely positioned for high document fidelity, but your editing actions are limited. The **Output Hyperlinks in a blue underlined format** check box is enabled to ensure that hypertext links conform to a format consistent with Microsoft Word. If you disable this option, your Docuflex character format is retained.

Docuflex Project Considerations

You must refrain from using Docuflex content positioning techniques that do not have a parallel in standard RTF or Microsoft Word. So while creating a Docuflex project, try to implement the desired composition feature as you would in Microsoft Word (e.g., Word does not employ the use of Page Frames per se).

Pages and Page Frames

- For best results, use page frames called Body, Header, and Footer. These standard names ensure that you receive the maximum editing power for the RTF document.
- Changes to the position of, or content in, the Header or Footer page frames requires a section break.
- Page and page frame orientations of “Reverse Portrait” and “Reverse Landscape” are not supported in RTF; these features are controlled in Microsoft Word via print driver.
- Use Content Text members for positioning instead of page frames.
- If the Header page frame contains an image that you want to position three inches from the left margin, for example, use a Content Text member that employs tabs to create the three inches of space. Then, create a Pre-Composed Document member that references the image and set its StartParm to “Continuous”.
- Using Page Frame shading and borders is discouraged as this approach usually results in the contents being placed in text boxes.

Members

- Instead of using SpaceBefore and SpaceAfter component properties to position the member, press **ENTER** to generate empty paragraphs.
- Member positioning via Height, Left, Top, and Width component properties usually results in the contents being placed in text boxes.
- Avoid the use of background images (i.e., BackgroundFormName).
- Vertical tabs (**SHIFT+ENTER**) create new rows in Docuflex, but the RTF PDL doesn't recognize these devices.
- Complex StartParms (e.g., EvenWithPrevMemberTop) do not have a parallel in Word and usually result in the contents being placed in text boxes.

Tables

- Refrain from using Paragraph borders inside a Table Cell; instead, use Row or Cell border properties.
- Microsoft Word does not apply table margins if you do not draw border lines, whereas Docuflex always applies margins.
- The Docuflex feature of having multiple columns under a Table Cell is not available in Microsoft Word/RTF. The RTF output will contain Text Boxes for the placement of content to get the output to match Docuflex. This Docuflex feature should be avoided when editing the RTF output is desired for the content within the multi-column Table Cell.

Translating Characters for AFP and Metacode Printing

Introduction

You can use CodeDef support to translate ANSI characters so they are available for AFP and Metacode processing. The CodeDef file is an ASCII file divided into these four tables:

- Internal-to-ANSI table
- ANSI-to-Internal table
- ANSI-to-EBCDIC table
- EBCDIC-to-ANSI table

NOTE

Internal is determined by the native translation the software is executing on for a particular platform. For example, internal would be EBCDIC for an IBM 370 platform.

Each table is preceded by a section header to identify which type of translation table it represents. In many cases, the Internal-to-ASCII table and the ASCII-to-Internal table can map to itself. Therefore, you can define one table for both mappings. The section header can indicate this 2-way mapping as `{I<->A}`.

```
; CodeDef for ASCII-native platform
; NOTE: This is a special CodeDef that is to
; be used for mapping AFP output using
; the T1ISI121 AFP code page.
; -----
; {I<->A}
00 01 02 03 04 05 06 07 08 09 0a 0b 0c 0d 0e 0f
10 11 12 13 14 15 16 17 18 19 1a 1b 1c 1d 1e 1f
20 21 22 23 24 25 26 27 28 29 2a 2b 2c 2d 2e 2f
30 31 32 33 34 35 36 37 38 39 3a 3b 3c 3d 3e 3f
40 41 42 43 44 45 46 47 48 49 4a 4b 4c 4d 4e 4f
50 51 52 53 54 55 56 57 58 59 5a 5b 5c 5d 5e 5f
60 61 62 63 64 65 66 67 68 69 6a 6b 6c 6d 6e 6f
70 71 72 73 74 75 76 77 78 79 7a 7b 7c 7d 7e 7f
80 81 82 83 84 85 86 87 88 89 8a 8b 8c 8d 8e 8f
90 91 92 93 94 95 96 97 98 99 9a 9b 9c 9d 9e 9f
a0 a1 a2 a3 a4 a5 a6 a7 a8 a9 aa ab ac ad ae af
b0 b1 b2 b3 b4 b5 b6 b7 b8 b9 ba bb bc bd be bf
c0 c1 c2 c3 c4 c5 c6 c7 c8 c9 ca cb cc cd ce cf
d0 d1 d2 d3 d4 d5 d6 d7 d8 d9 da db dc dd de df
e0 e1 e2 e3 e4 e5 e6 e7 e8 e9 ea eb ec ed ee ef
f0 f1 f2 f3 f4 f5 f6 f7 f8 f9 fa fb fc fd fe ff
```

(continued)

{E->I}															
00	01	02	03	9c	09	86	7f	97	8d	8e	0b	0c	0d	0e	0f
10	11	12	13	9d	85	08	87	18	19	92	8f	1c	1d	1e	1f
80	81	82	83	84	0a	17	1b	88	89	8a	8b	8c	05	06	07
90	91	16	93	94	95	96	04	98	99	9a	9b	14	15	9e	1a
20	a0	a1	a2	a3	a4	a5	a6	a7	a8	5b	2e	3c	28	2b	5d
26	a9	aa	ab	ac	ad	ae	af	b0	b1	21	24	2a	29	3b	5e
2d	2f	b2	b3	b4	b5	b6	b7	b8	b9	7c	2c	25	5f	3e	3f
ba	bb	bc	bd	be	bf	c0	c1	c2	60	3a	23	40	27	3d	22
c3	61	62	63	64	65	66	67	68	69	c4	c5	c6	c7	c8	c9
ca	6a	6b	6c	6d	6e	6f	70	71	72	cb	cc	cd	ce	cf	d0
d1	7e	73	74	75	76	77	78	79	7a	d2	d3	d4	d5	d6	d7
d8	d9	da	db	dc	dd	de	df	e0	e1	e2	e3	e4	e5	e6	e7
7b	41	42	43	44	45	46	47	48	49	e8	e9	ea	eb	ec	ed
7d	4a	4b	4c	4d	4e	4f	50	51	52	ee	ef	f0	f1	f2	f3
5c	9f	53	54	55	56	57	58	59	5a	f4	f5	f6	f7	f8	f9
30	31	32	33	34	35	36	37	38	39	fa	fb	fc	fd	fe	ff
{I->E}															
00	01	02	03	37	2d	2e	2f	16	05	25	0b	0c	0d	0e	0f
10	11	12	13	3c	3d	32	26	18	19	3f	27	1c	1d	1e	1f
40	5a	7f	7b	5b	6c	50	7d	4d	5d	5c	4e	6b	60	4b	61
f0	f1	f2	f3	f4	f5	f6	f7	f8	f9	7a	5e	4c	7e	6e	6f
7c	c1	c2	c3	c4	c5	c6	c7	c8	c9	d1	d2	d3	d4	d5	d6
d7	d8	d9	e2	e3	e4	e5	e6	e7	e8	e9	4a	e0	4f	5f	6d
79	81	82	83	84	85	86	87	88	89	91	92	93	94	95	96
97	98	99	a2	a3	a4	a5	a6	a7	a8	a9	c0	6a	d0	a1	07
20	21	22	23	24	15	06	17	28	29	2a	2b	2c	09	0a	1b
30	31	1a	33	34	35	36	08	38	39	3a	3b	04	14	3e	e1
41	42	43	44	45	46	47	48	49	51	52	53	54	55	56	57
58	59	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78	80	8a	8b	8c	8d	8e	8f	90	9a	9b	9c	9d	9e
9f	a0	aa	ab	ac	ad	ae	af	b0	b1	b2	b3	b4	b5	b6	b7
b8	b9	ba	bb	bc	bd	be	bf	ca	cb	cc	cd	ce	cf	da	db
dc	dd	de	df	ea	eb	ec	ed	ee	ef	fa	fb	fc	fd	fe	ff

Sample CodeDef File for T1SI121

Each table contains 256 1-byte entries and each value is represented as a hexadecimal number. Each table provides a transformation matrix into the other character set. For example, the value of an ANSI blank is hexadecimal 20 (X'20'). By locating **2** on the vertical cell locator column and **0** on the horizontal cell locator row of the ANSI-to-EBCDIC table, you find that the common cell contains the EBCDIC value of an ANSI blank — hexadecimal 40 (X'40'). If you then go to the EBCDIC-to-ANSI table and use the cell locators to find the common cell for **40**, you see the value of an ANSI blank — hexadecimal 20 (X'20').

	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-A	-B	-C	-D	-E	-F
0-	00	01	02	03	37	2d	2e	2f	16	05	15	0b	0c	0d	0e	0f
1-	10	11	12	13	3c	3d	32	26	18	19	3f	27	1c	1d	1e	1f
2-	40	5a	7f	7b	5b	6c	50	7d	4d	5d	5c	4e	6b	60	4b	61
3-	f0	f1	f2	f3	f4	f5	f6	f7	f8	f9	7a	5e	4c	7e	6e	6f
4-	7c	c1	c2	c3	c4	c5	c6	c7	c8	c9	d1	d2	d3	d4	d5	d6
5-	d7	d8	d9	e2	e3	e4	e5	e6	e7	e8	e9	ad	e0	bd	5f	6d
6-	79	81	82	83	84	85	86	87	88	89	91	92	93	94	95	96
7-	97	98	99	a2	a3	a4	a5	a6	a7	a8	a9	c0	4f	d0	a1	07
8-	20	21	22	23	24	15	06	17	28	29	2a	2b	2c	09	0a	1b
9-	30	31	1a	33	34	35	36	08	38	39	3a	3b	04	14	3e	e1
A-	41	42	4a	44	45	46	47	48	49	51	52	53	54	55	56	57
B-	58	59	62	63	64	65	66	67	68	69	70	71	72	73	74	75
C-	76	77	78	80	8a	8b	8c	8d	8e	8f	90	9a	9b	9c	9d	9e
D-	9f	a0	aa	ab	ac	ad	ae	af	b0	b1	b2	b3	b4	b5	b6	b7
E-	b8	b9	ba	bb	bc	bd	be	bf	ca	cb	cc	cd	ce	cf	da	db
F-	dc	dd	de	df	ea	eb	ec	ed	ee	ef	fa	fb	fc	fd	fe	ff

Default ANSI-to-EBCDIC table (used for writing AFP)

	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-A	-B	-C	-D	-E	-F
0-	00	01	02	03	9c	09	86	7f	97	8d	8e	0b	0c	0d	0e	0f
1-	10	11	12	13	9d	0a	08	87	18	19	92	8f	1c	1d	1e	1f
2-	80	81	82	83	84	0a	17	1b	88	89	8a	8b	8c	05	06	07
3-	90	91	16	93	94	95	96	04	98	99	9a	9b	14	15	9e	1a
4-	20	a0	a1	a2	a3	A4	a5	a6	a7	a8	A2	2e	3c	28	2b	7c
5-	26	a9	aa	ab	ac	ad	ae	af	b0	b1	21	24	2a	29	3b	5e
6-	2d	2f	b2	b3	b4	B5	b6	b7	b8	b9	7c	2c	25	5f	3e	3f
7-	ba	bb	bc	bd	be	bf	c0	c1	c2	60	3a	23	40	27	3d	22
8-	c3	61	62	63	64	65	66	67	68	69	C4	7b	c6	c7	c8	c9
9-	ca	6a	6b	6c	6d	6e	6f	70	71	72	cb	Cc	Cd	ce	Cf	d0
A-	d1	7e	73	74	75	76	77	78	79	7a	D2	d3	d4	5b	d6	d7
B-	d8	d9	da	db	dc	dd	de	df	e0	e1	E2	e3	e4	5d	e6	e7
C-	7b	41	42	43	44	45	46	47	48	49	E8	e9	Ea	eb	Ec	ed
D-	7d	4a	4b	4c	4d	4e	4f	50	51	52	ee	Ef	f0	f1	f2	f3
E-	5c	9f	53	54	55	56	57	58	59	5a	F4	f5	f6	f7	f8	f9
F-	30	31	32	33	34	35	36	37	38	39	fa	Fb	Fc	fd	Fe	ff

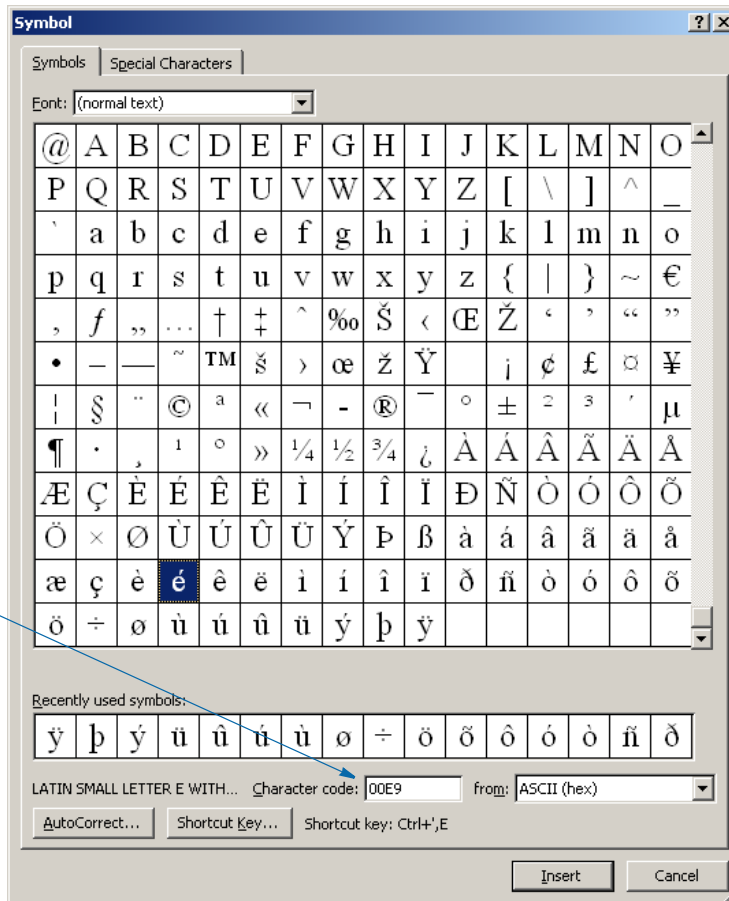
Default EBCDIC-to-ANSI table (used when reading AFP)

Modifying a CodeDef to Include International and Special Characters for AFP

Follow these steps to add a special character, such as the é in résumé, into the code page.

- 1 Locate the character you want to print in the Symbol window. At the bottom of the window, use the ASCII (hex) values and remember the character code **E9**.

Here is the character code.



- 2 Determine the EBCDIC value of that character (listed as a hexadecimal value). You should have received printed copies of your code pages when you purchased your fonts. Here is an excerpt:

HEX DIGITS 1ST → 2ND ↓	4-	5-	6-	7-	8-	9-	A-	B-
-0	(SP) SP010000	& SM030000	- SP100000	ø LO610000	Ø LO620000	° SM190000	μ SM170000	^ SD150000
-1	(RSP) SP300000	é LE110000	/ SP120000	É LE120000	a LA010000	j LJ010000	~ SD190000	£ SC020000
-2	â LA150000	ê LE150000	Â LA180000	Ê LE180000	b LB010000	k LK010000	s LS010000	¥ SC050000
-3	ä LA170000	ë LE170000	Ä LA180000	Ë LE180000	c LC010000	l LL010000	t LT010000	• SD630000
-4	à LA130000	è LE130000	À LA140000	È LE140000	d LD010000	m LM010000	u LU010000	© SM520000
-5	á LA110000	í LI110000	Á LA120000	Í LI120000	e LE010000	n LN010000	v LV010000	§ SM240000

- 3 Based on the sample AFP code page, the value is **51**. Now update the CodeDef tables to perform the translation.

Writing AFP Output

- 1 Go to cell location **E9** in the **{I->E}** Internal-to-EBCDIC table (the ANSI value of the special character). To locate the proper cell, find **E** on the vertical cell locator column and **9** on the horizontal cell locator row. The value in this cell is **cb**.
- 2 Change this value (**cb**) to **51** (the EBCDIC value of the special character).
- 3 Search for the value of **51** in the same table and change the value to **cb** (the value changed in Step 1).

	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-A	-B	-C	-D	-E	-F
0-	00	01	02	03	37	2d	2e	2f	16	05	15	0b	0c	0d	0e	0f
1-	10	11	12	13	3c	3d	32	26	18	19	3f	27	1c	1d	1e	1f
2-	40	5a	7f	7b	5b	6c	50	7d	4d	5d	5c	4e	6b	60	4b	61
3-	f0	f1	f2	f3	f4	f5	f6	f7	f8	f9	7a	5e	4c	7e	6e	6f
4-	7c	c1	c2	c3	c4	C5	c6	c7	c8	c9	D1	d2	d3	d4	d5	d6
5-	d7	d8	d9	e2	e3	e4	e5	e6	e7	e8	E9	Ad	e0	bd	5f	6d
6-	79	81	82	83	84	85	86	87	88	89	91	92	93	94	95	96
7-	97	98	99	a2	a3	a4	a5	a6	a7	a8	A9	c0	4f	d0	a1	07
8-	20	21	22	23	24	15	06	17	28	29	2a	2b	2c	09	0a	1b
9-	30	31	1a	33	34	35	36	08	38	39	3a	3b	04	14	3e	e1
A-	41	42	4A	44	45	46	47	48	49	cb	52	53	54	55	56	57
B-	58	59	62	63	64	65	66	67	68	69	70	71	72	73	74	75
C-	76	77	78	80	8a	8b	8c	8d	8e	8f	90	9a	9b	9c	9d	9e
D-	9f	a0	Aa	ab	ac	ad	ae	af	b0	b1	B2	b3	b4	b5	b6	b7
E-	b8	b9	Ba	bb	bc	bd	be	bf	ca	51	cc	cd	ce	cf	Da	db
F-	dc	dd	De	df	ea	eb	ec	ed	ee	ef	fa	fb	fc	fd	Fe	ff

Modified ANSI-to-EBCDIC table

Reading AFP Input

Follow these steps to read AFP input:

- 1 Go to cell location **51** in the **{E->I}** EBCDIC-to-Internal table (the EBCDIC value of the special character). To locate the proper cell, find **5** on the vertical cell locator column and **1** on the horizontal cell locator row. The value in this cell is **a9**.
- 2 Change this value (**a9**) to **e9** (the ANSI value of the special character).
- 3 Search for the value of **e9** in the same table and change the value to **a9** (the value changed in Step 1).

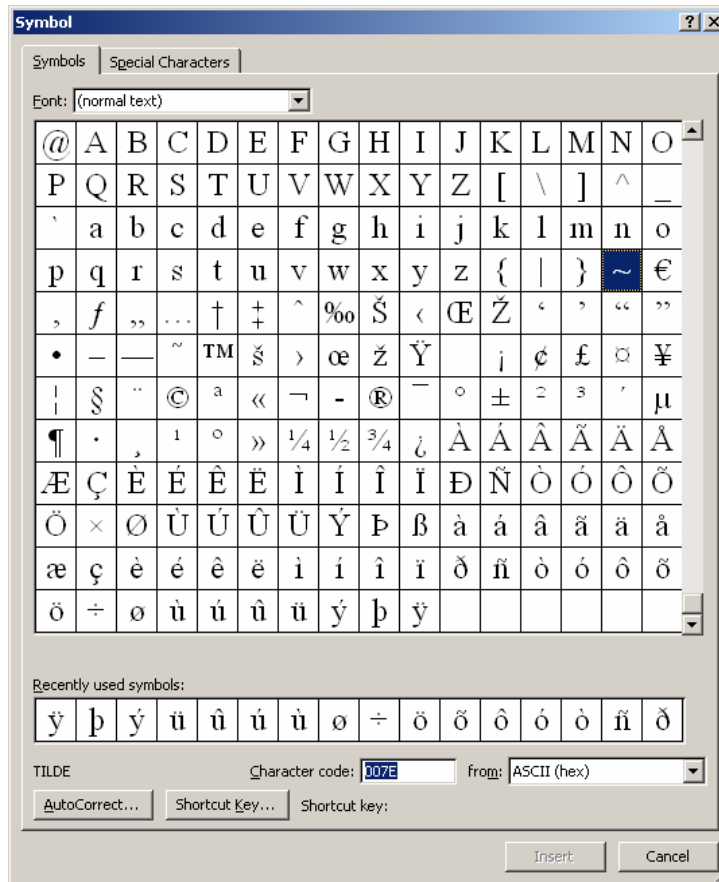
	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-A	-B	-C	-D	-E	-F
0-	00	01	02	03	9c	09	86	7f	97	8d	8e	0b	0c	0d	0e	0f
1-	10	11	12	13	9d	0a	08	87	18	19	92	8f	1c	1d	1e	1f
2-	80	81	82	83	84	0a	17	1b	88	89	8a	8b	8c	05	06	07
3-	90	91	16	93	94	95	96	04	98	99	9a	9b	14	15	9e	1a
4-	20	a0	a1	a2	a3	A4	a5	a6	a7	a8	A2	2e	3c	28	2b	7c
5-	26	e9	aa	ab	ac	ad	ae	af	b0	b1	21	24	2a	29	3b	5e
6-	2d	2f	b2	b3	b4	B5	b6	b7	b8	b9	7c	2c	25	5f	3e	3f
7-	ba	bb	bc	bd	be	bf	c0	c1	c2	60	3a	23	40	27	3d	22
8-	c3	61	62	63	64	65	66	67	68	69	C4	7b	c6	c7	c8	c9
9-	ca	6a	6b	6c	6d	6e	6f	70	71	72	cb	Cc	Cd	ce	Cf	d0
A-	d1	7e	73	74	75	76	77	78	79	7a	D2	d3	d4	5b	d6	d7
B-	d8	d9	da	db	dc	dd	de	df	e0	e1	E2	e3	e4	5d	e6	e7
C-	7b	41	42	43	44	45	46	47	48	49	E8	a9	Ea	eb	Ec	ed
D-	7d	4a	4b	4c	4d	4e	4f	50	51	52	ee	Ef	f0	f1	f2	f3
E-	5c	9f	53	54	55	56	57	58	59	5a	F4	f5	f6	f7	f8	f9
F-	30	31	32	33	34	35	36	37	38	39	fa	Fb	Fc	fd	Fe	ff

Modified EBCDIC-to-ANSI table

Modifying a CodeDef to Include International and Special Characters for Metacode

These steps demonstrate how to map the tilde character (~) for a Xerox font.

- 1 Locate the character you want to print from the Symbol window. At the bottom of the dialog, use the ASCII hexadecimal values and remember the character code **7E**.



- 2 Determine the ASCII value of the character (listed as a hexadecimal value).

You should produce a sample from your Xerox printer of the font you want to use for your application. Using the following sample Xerox Standard ASCII character set assignment table, the value is **1D**.

		MOST SIGNIFICANT BITS									
Hexadecimal		0	1	2	3	4	5	6	7	8	9
Binary		0000	0001	0010	0011	0100	0101	0110	0111	1000	1001
LEAST SIGNIFICANT BITS	0	0000			0	@	P	e	p		
	1	0001		!	1	A	Q	a	q		
	2	0010		"	2	B	R	b	r		
	3	0011		#	3	C	S	c	s		
	4	0100		\$	4	D	T	d	t		
	5	0101		%	5	E	U	e	u		
	6	0110		&	6	F	V	f	v		
	7	0111		'	7	G	W	g	w		
	8	1000		(	8	H	X	h	x		
	9	1001		)	9	I	Y	i	y		
	A	1010		:	*	J	Z	j	z		
	B	1011		;	+	K	[	k			
	C	1100		<	.	L	\	l			
	D	1101		=	~	M	]	m			
	E	1110		>	¼	N	^	n			
	F	1111		?	½	O	_	o			

- 3 Update the CodeDef tables to perform the translation

Writing Metacode Output

- 1 Go to cell location 7E in the {I->A} Internal-to-ASCII table (the ANSI value of the desired special character). To locate the right cell, find **7** on the vertical cell locator column and **E** on the horizontal cell locator row. The value in this cell is **7b**.
- 2 Change this value (**7B**) to **1d** (the ASCII value of the desired special character).
- 3 Search for the value of **1d** in the same table and change the value to **7b** (the value changed in Step 1).

	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-A	-B	-C	-D	-E	-F
0-	00	01	02	03	04	05	06	07	08	09	0a	0b	0c	0d	0e	0f
1-	fa	f9	F8	f7	ce	cd	d8	e4	f2	f1	cb	e3	ee	ed	ec	eb
2-	20	21	22	23	24	25	26	27	28	29	2a	2b	2c	2d	2e	2f
3-	30	31	32	33	34	35	36	37	38	39	3a	3b	3c	3d	3e	3f
4-	40	41	42	43	44	45	46	47	48	49	4a	4b	4c	4d	4e	4f
5-	50	51	52	53	54	55	56	57	58	59	5a	5b	5c	5d	7b	5f
6-	a1	61	62	63	64	65	66	67	68	69	6a	6b	6c	6d	6e	6f
7-	70	71	72	73	74	75	76	77	78	79	7a	1a	1b	1c	1d	7f
8-	ea	e9	E8	e7	e6	f5	86	f3	e2	e1	e0	df	de	8d	8e	ef
9-	da	d9	F0	d7	d6	d5	d4	97	d2	d1	d0	cf	9c	f6	cc	9f
A-	ca	c9	60	c7	c6	c5	c4	c3	c2	c1	c0	bf	be	bd	bc	bb
B-	ba	b9	B8	b7	b6	b5	b4	b3	b2	b1	b0	af	ae	ad	ac	ab
C-	19	18	aa	1e	a9	c5	10	8a	8b	94	1f	90	cc	cd	8d	7c
D-	93	8c	91	7d	7e	d5	d6	92	80	81	81	83	84	85	86	87
E-	88	89	a8	17	7f	e5	95	16	a7	a6	13	15	14	a4	a3	a2
F-	8f	8e	a1	a0	11	9d	15	9c	9b	9a	10	99	98	97	96	0b

Modified Internal to ASCII table

Reading Metacode Input

Follow these steps to read Metacode input:

- 1 Go to cell location **1D** in the **{A->}** EBCDIC-to-Internal table (the ASCII value of the character). To locate the right cell, find **1** on the vertical cell locator column and **D** on the horizontal cell locator row. The value in this cell is **5e**.
- 2 Change this value (**5e**) to **7e** (the ANSI value of the desired special character).
- 3 Search for the value of **7e** in the same table and change the value to **5e** (the value changed in Step 1).

	-0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-A	-B	-C	-D	-E	-F
0-	00	01	02	03	04	05	06	07	08	09	0a	0b	0c	0d	0e	0f
1-	c6	f4	49	ea	Ec	f6	e7	e3	c1	c0	7b	7c	7d	7e	c3	ca
2-	20	21	22	23	24	25	26	27	28	29	2a	2b	2c	2d	2e	2f
3-	30	31	32	33	34	35	36	37	38	39	3a	3b	3c	3d	3e	3f
4-	40	41	42	43	44	45	46	47	48	49	4a	4b	4c	4d	4e	4f
5-	50	51	52	53	54	55	56	57	58	59	5a	5b	5c	5d	5e	5f
6-	a2	61	62	63	64	65	66	67	68	69	6a	6b	6c	6d	6e	6f
7-	70	71	72	73	74	75	76	77	78	79	7a	5e	cf	d3	d4	e4
8-	d8	d9	da	db	Dc	dd	de	df	e0	e1	c7	c8	d1	ce	f1	f0
9-	cb	d2	d7	d0	c9	e6	fe	fd	fc	fb	f9	f8	f7	f5	f4	9f
A-	f3	f2	ef	ee	Ed	eb	e9	e8	e2	c4	c2	bf	be	bd	bc	bb
B-	ba	b9	b8	b7	b6	b5	b4	b3	b2	b1	b0	af	ae	ad	ac	ab
C-	aa	a9	a8	a7	a6	a5	a4	a3	a2	a1	a0	1a	9e	15	14	9b
D-	9a	99	98	04	96	95	94	93	16	91	90	07	06	05	8c	8b
E-	8a	89	88	1b	17	0a	84	83	82	81	80	1f	1e	1d	1c	8f
F-	92	19	18	87	08	85	9d	13	12	11	10	0f	0e	0d	0c	0b

Modified ASCII to Internal table

Using ISI121 or Other Custom CodeDefs

These examples show how you can implement a custom CodeDef by adding entries to the AFP or Metacode font sections of your system's ISI.INI file.

To use a custom CodeDef, such as ISI121.COD which provides mapping for the {, }, [,], and | (pipe) characters, you can code one of the following types of entries:

- If only particular fonts in the font section use a custom CodeDef, include a statement following each font entry that specifies the CodeDef to use for that font. For example, to specify the ISI121 CodeDef for Arial fonts, include the entries like this:

```
[AFP Printer,FILE:]
Fonts=9
Font1=C:\AFPWIN2\X0H24002.PFM; Helvetica AFP T1001003 10 point
Font2=C:\AFPWIN2\X0H24062.PFM; Helvetica AFP T1001003 6 point
Font3=C:\AFPWIN2\X0H24072.PFM; Helvetica AFP T1001003 7 point
Font4=C:\AFPWIN2\X0H24082.PFM; Helvetica AFP T1001003 8 point
Font5=C:\AFPWIN2\X0H24092.PFM; Helvetica AFP T1001003 9 point
Font6=C:\AFPWIN2\AR112.PFM; Arial 12 point
CodeDef6=C:\Docucorp\Comobj\isi121.cod
Font7=C:\AFPWIN2\AR114.PFM; Arial 14 point
CodeDef7=C:\Docucorp\Comobj\isi121.cod
Font8=C:\AFPWIN2\AR116.PFM; Arial 16 point
CodeDef8=C:\Docucorp\Comobj\isi121.cod
Font9=C:\AFPWIN2\AR118.PFM; Arial 18 point
CodeDef9=C:\Docucorp\Comobj\isi121.cod
```

- If all the fonts in the font section will use a custom CodeDef, include a single statement that specifies the CodeDef to use for the fonts. For example, to specify the ISI121 CodeDef for all fonts in the section, include an entry like this:

```
[AFP Printer,FILE:]
DefaultCodeDef=C:\Docucorp\Comobj\isi121.cod
Fonts=9
Font1=C:\AFPWIN2\AR104.PFM; Arial 4 point
Font2=C:\AFPWIN2\AR106.PFM; Arial 6 point
Font3=C:\AFPWIN2\AR108.PFM; Arial 8 point
Font4=C:\AFPWIN2\AR110.PFM; Arial 10 point
Font5=C:\AFPWIN2\AR111.PFM; Arial 11 point
Font6=C:\AFPWIN2\AR112.PFM; Arial 12 point
Font7=C:\AFPWIN2\AR114.PFM; Arial 14 point
Font8=C:\AFPWIN2\AR116.PFM; Arial 16 point
Font9=C:\AFPWIN2\AR118.PFM; Arial 18 point
```

- If you are using a font matching table, the CodeDef files are associated by the font's face name. This means you must set up a CodeDefs section in the INI file that contains the font section. For example, to specify the ISI121 CodeDef for all Arial fonts in the font matching table, include an entry like this:

```
[CODEDEFS]
Arial= C:\Docucorp\Comobj\isi121.cod
```


Setting Docuflex Project Node Properties Through Script

Overview

NOTE

This section describes advanced functionality and should be used with caution.

There are times when it is necessary to let the data drive the look of a composed document. One approach is to create multiple members with inclusion rules that reference the various needed appearances and then the proper appearance is “included” during composition. This approach leads to duplicate maintenance of components in a Docuflex project. Another approach is to use script to dynamically alter the properties of components and this approach allows the Docuflex project to be simpler.

Four script functions assist in the alteration of properties on project components (nodes). These script functions must appear in a rule that is applied in the proper place within a project. For member nodes, the rule may be applied as a “PreComposition” rule and the property changes will be active while the member is composition. For changes applied to frame or table definition node, the rule should be applied as PostInclusion or PreComposition on a section prior to any members being composed into the frame or table.

Property changes made by script will appear in the Component Properties just as if the user had changed them in Docuflex Studio. The changes are “permanent” and will be saved with the project.

Node and Property Functions with Descriptions and Examples

DF\$GetProjectNodeHandle(<String sNodeName>) As Long

DF\$GetProjectNodeHandle() returns a "long" handle to a node in the project. The sNodeName parameter is either the path name of the node in the project or "" to request the handle of the current member (using "" applies to PreComposition rules on members only). The node handle may be used with the "Get" and "Set" methods that follow.

Examples:

```
Dim hNode as Long
hNode = DF$GetProjectNodeHandle( "Style Definitions\Color Styles\Heading" )
hNode = DF$GetProjectNodeHandle( "" )
```

DF\$GetProjectNodePropHandle(<Long hNode>, <String sPropName>) As Long

DF\$GetProjectNodePropHandle() returns a "long" handle (property identifier) that represents the property with the name sPropName. The property identifier may be used with the "Get" and "Set" methods that follow.

The property names sometimes vary from the names shown in the Component Properties grid in Docuflex Studio. Please see the "Property Names" table below for the names to be used with DF\$GetProjectNodePropHandle().

For frequently used properties, it may be desirable to eliminate the call to DF\$GetProjectNodePropHandle() and use pre-determined property ID values that are defined with Const. A number of Const values appear in the Declarations rule of the SettingNodeProperties sample project.

Examples:

```
Dim lPropID as Long
lPropID = DF$GetProjectNodePropHandle( hNode, "BorderLines" )
lPropID = DF$GetProjectNodePropHandle( hNode, "AreaTop" )
```

DF\$GetProjectNodePropValue(<Long hNode>, <Long lPropID>) As String

DF\$GetProjectNodePropValue() returns a string value that represents the value of the property specified by lPropID.

Examples:

```
Dim lPropID as Long
Dim sValue As String
Dim lValue as Long
lPropID = DF$GetProjectNodePropHandle( hNode, "StartParm" )
sValue = DF$GetProjectNodePropValue( hNode, lPropID )

lPropID = DF$GetProjectNodePropHandle( hNode, "AreaLeft" )
lValue = CLng( DF$GetProjectNodePropValue( hNode, lPropID ) )
```

DF\$SetProjectNodePropValue(<Long hNode>, <Long lPropID>, <String sValue>)

DF\$SetProjectNodePropValue() sets the value of the property specified by lPropID. The sValue parameter may be given as a string or a numeric value.

Examples:

```
Dim lPropID as Long
lPropID = DF$GetProjectNodePropHandle( hNode, "BorderLines" )
DF$SetProjectNodePropValue( hNode, lProp, "3" )

lPropID = DF$GetProjectNodePropHandle( hNode, "AreaLeftOrigin" )
DF$SetProjectNodePropValue( hNode, lProp, 2 * 14400 ) ' 2 inches
```

Property Names

NOTE

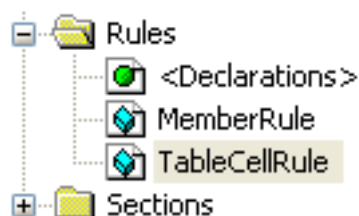
For dimensional properties, SysRes equals 14,400 units per inch.

Name in Component Properties	Name for DF\$GetProjectNodePropHandle	Required Value
Common		
Height	AreaHeight	Size in SysRes
Left	AreaLeftOrigin	Size in SysRes
Top	AreaTopOrigin	Size in SysRes
Width	AreaWidth	Size in SysRes
Frame or Table Definition		
BackColor	BgColorRef	Handle returned by DF\$GetProjectNodeHandle
BorderColor	FgColorRef	Handle returned by DF\$GetProjectNodeHandle
BorderLines	BorderLines	Count: 0 or more
BorderLineWidthBottom	BorderLineWidthBottom	Size in SysRes
BorderLineWidthLeft	BorderLineWidthLeft	Size in SysRes
BorderLineWidthRight	BorderLineWidthRight	Size in SysRes
BorderLineWidthTop	BorderLineWidthTop	Size in SysRes
BorderMarginBottom	BorderMarginBottom	Size in SysRes
BorderMarginLeft	BorderMarginLeft	Size in SysRes
BorderMarginRight	BorderMarginRight	Size in SysRes
BorderMarginTop	BorderMarginTop	Size in SysRes
BorderStyleBottom	BorderStyleBottom	Solid, Dash, etc.
BorderStyleLeft	BorderStyleLeft	Solid, Dash, etc.
BorderStyleRight	BorderStyleRight	Solid, Dash, etc.
BorderStyleTop	BorderStyleTop	Solid, Dash, etc.
EllipseHeight	AreaRRHeight	Size in SysRes
EllipseWidth	AreaRRWidth	Size in SysRes
IndentationBottom	AreaIndentWidthsBottom	Size in SysRes
IndentationLeft	AreaIndentWidthsLeft	Size in SysRes
IndentationRight	AreaIndentWidthsRight	Size in SysRes
IndentationTop	AreaIndentWidthsTop	Size in SysRes

Name in Component Properties	Name for DF\$GetProjectNodePropHandle	Required Value
Member		
StartParm	StartParm	0(NewParagraph), 1(Continuous), 5(NewPage), 8(NewSheet), etc
VerticalAlign	VerticalAlign	0(Top), 1(Bottom), 2(Center)
SpaceBefore	SpaceBefore	Size in SysRes
SpaceAfter	SpaceAfter	Size in SysRes
FrameOrTableCell	Frame	Handle returned by DF\$GetProjectNodeHandle
Color Style		
Color	FgColor DOI_FG_COLOR	RGB color value

SettingNodeProperties Sample Project

Docuflex includes a sample project that demonstrates these property setting functions. **SettingNodeProperties.ddp** contains two rules that set node properties.



MemberRule is a rule that is applied as the PreComposition rule on the “Text Member” member. MemberRule changes the “Left” and “SpaceBefore” properties of the “Text Member” member.

TableCellRule is a rule that applied as the PreInclusion Rule on the “Table” member. TableCellRule acquires the handle for “Cell1” cell in the “Table1” table definition. The rule changes “BackColor”, “BorderLines”, “BorderColor” and a number of other properties of “Cell1”.

Setting PG Chart Properties Through Script

Overview

NOTE

This section describes advanced functionality and should be used with caution.

It is possible to use a script to let the data drive the look of a chart. For example, if you have color preferences or need larger font sizes then they can be set through a script instead of creating multiple charts. To set PG chart properties through a script you first must create a rule that contains the script. That rule can then be applied to the PG Chart through the ChartOverride property.

The main function used is DF\$PGSetGraphAttr. In general, the parameters it takes are:

DF\$PGSetGraphAttr(	Object being set,
	Series to be set on,
	Group to be set on,
	Attribute to be set,
	New value)

The first four parameters are integers. When passing these values it is helpful to use defines instead of just passing the numerical values. The sample below shows a few of the more common ones. A more complete list appears in [“The PGChartSample Project”](#) on page 699.

Const	NULL_ID	=	-3
Const	O2D_DATA_LINE	=	258
Const	A_LINECOLOR_RGB	=	588

For many calls not all parameters are used. In those cases NULL_ID (-3) is passed instead. For example, if we want to set the line color on the second series of a chart then a call like this is made:

```
DF$PGSetGraphAttr(O2D_DATA_LINE, 1, NULL_ID, A_LINECOLOR_RGB, g_RGB)
```

In this example:

- **O2D_DATA_LINE** - the object is the data line.
- **1** - the series number is 1 (always zero based).
- **NULL_ID** - there is no group so NULL_ID is passed.
- **A_LINECOLOR_RGB** - the attribute we want to set on the line is the line color.
- **g_RGB** - the RGB structure that PG charts take with the new color in it.

When setting width and font sizes there are two calls, one if the object is “locked” and another if it is not. When an item is “locked” the values specified are in measurable units. For example, if you want to set the width of the border of a chart you can make either call:

```
iLock = 1 'TRUE The line will be locked
DF$PGSetGraphAttr(O5D_BACKGROUND, NULL_ID, NULL_ID, A_LOCK_FONT_SIZE, iLock)
DF$PGSetGraphAttr(O5D_BACKGROUND, NULL_ID, NULL_ID, A_LINEWIDTH_POINT_100, iWidth)
-Or-
iLock = 0 'FALSE The line will not be locked
DF$PGSetGraphAttr(O5D_BACKGROUND, NULL_ID, NULL_ID, A_LOCK_FONT_SIZE, iLock)
DF$PGSetGraphAttr(O5D_BACKGROUND, NULL_ID, NULL_ID, A_LINEWIDTH, iWidth)
```

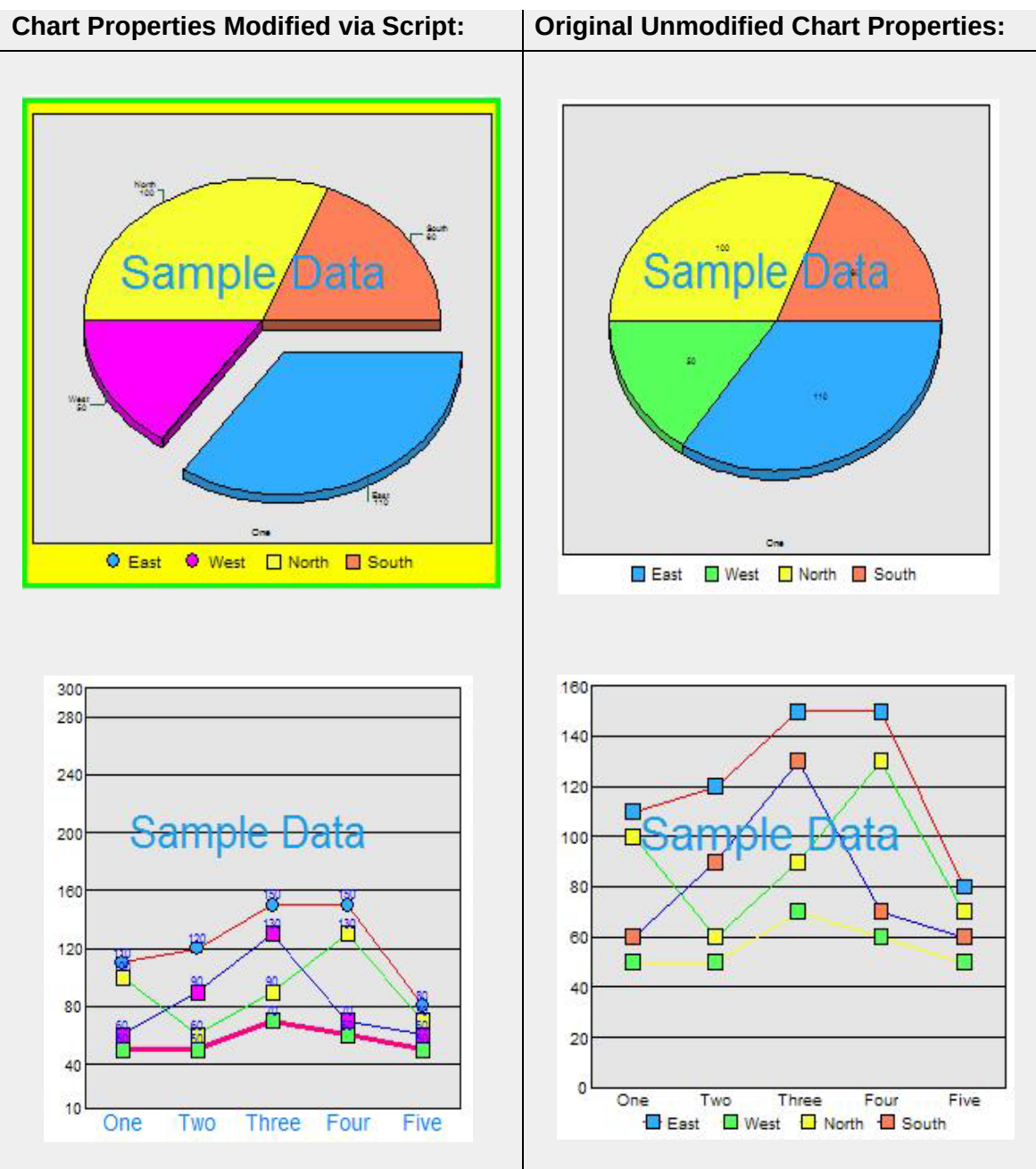
In the first set of calls the line gets “locked” so iWidth will be 1/100th of a point. If iWidth was set to 300 the line would be 3 points wide. In the second set of calls the line is not “locked” so a value of 50...100 is roughly equivalent to one pixel. We recommend always using the “locked” versions since the result are more exact.

NOTE

This call is only allowed in rules used in the ChartOverride property. Attempting to make this call at other times will cause errors.

The PGChartSample Project

The following sample project illustrates what can be done to a chart through script. The PGChartSample project contains four charts. The first two are pie charts and the second two are line charts. Each chart uses default data so no ddf file is needed. The charts on the left have their properties changed via script while the charts on the right are unmodified.

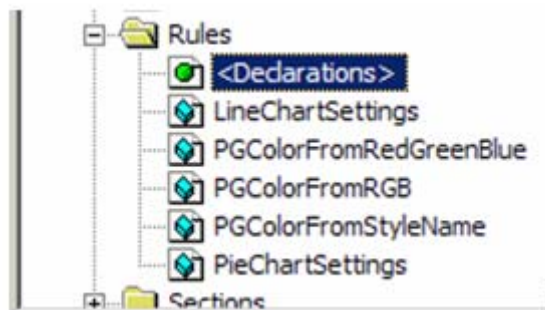


In the Declarations rule there are many Consts defined along with structures and global instances for each one. For example:

```
' Global Declarations

' Simulate PG defines
  Const DOALL = -11
  Const NULL_ID = -3
  Const O5D_BACKGROUND = 1
  Const A2D_MARKERSHAPE = 60
  Const A2D_SCALE_Y1 = 93
  Const A2D_SHOW_DATATEXT = 113
  Const A2D_SHOW_LEGEND = 116
  Const API_SHOW_FEELER = 204
  Const API_SHOW_LBLFEELER = 205
  Const API_SLICE_MOVE = 209
  Const O2D_DATA LINE = 258
  Const O2D_DATAMARKER = 259
  Const O2D_DATATEXT = 260
  Const O2D_O1_LABEL = 272
  Const O2D_RISER = 286
  Const OPI_SLICE = 341
  Const ASG_SERIES_COLOR = 556
  Const A_AREACOLOR_RGB = 564
  Const A_FONTCOLOR_RGB = 574
  Const A_FONTSIZE_VC = 583
  Const A_LINECOLOR_RGB = 588
  Const A_LINEWIDTH = 591
  Const A_FONTSIZE_POINT_100 = 603
```

There are five rules defined:



LineChartSettings and **PieChartSettings** are the two rules that are used on the PieChart and LineChart members. The other three are rules that setup the global color structure that gets passed when setting colors on object. The first, **PGColorFromRedGreenBlue**, takes values for red, green, and blue. The second, **PGColorFromRGB**, takes an RGB value while the third, **PGColorFromStyleName**, takes the name of the color style to use.

Sample Calls

These are partial examples of what can be set along with the script to make the call. If there are settings that you don't find that you want to set by script, please contact Customer Support and they may be able to add them.

```

Chart Border width
    DF$PGSetGraphAttr(O5D_BACKGROUND, NULL_ID, NULL_ID, A_LINEWIDTH_POINT_100, iwidth)
Chart Border Color
    DF$PGSetGraphAttr(O5D_BACKGROUND, NULL_ID, NULL_ID, A_LINECOLOR_RGB, g_RGB)
Chart Background Color
    DF$PGSetGraphAttr(O5D_BACKGROUND, NULL_ID, NULL_ID, A_AREACOLOR_RGB, g_RGB)
Series Color
    DF$PGSetGraphAttr(NULL_ID, NULL_ID, NULL_ID, ASG_SERIES_COLOR, g_SeriesColor)
Series Marker of the first series
    DF$PGSetGraphAttr(O2D_RISER, 0, NULL_ID, A2D_MARKERSHAPE, iNewMarker)
Axis Min and Max Values
    g_ScaleValues.iManualScale = MANUAL_SCALE
    g_ScaleValues.fMax          = 300
    g_ScaleValues.fMin          = 10
    DF$PGSetGraphAttr(NULL_ID, NULL_ID, NULL_ID, A2D_SCALE_Y1, g_ScaleValues)
Line width and Color of a line chart on the second series
    DF$PGSetGraphAttr(O2D_DATA_LINE, 1, NULL_ID, A_LINECOLOR_RGB, g_RGB)
    DF$PGSetGraphAttr(O2D_DATA_LINE, 1, NULL_ID, A_LINEWIDTH_POINT_100, iwidth)
Show Marker Values
    iShowLabels = DATATEXT_VALUE
    DF$PGSetGraphAttr(NULL_ID, NULL_ID, NULL_ID, A2D_SHOW_DATATEXT, iShowLabels)
Marker Text Format (Color and Font size). Not series independent.
    DF$PGSetGraphAttr(O2D_DATATEXT, NULL_ID, NULL_ID, A_FONTCOLOR_RGB, g_RGB)
    DF$PGSetGraphAttr(O2D_DATATEXT, NULL_ID, NULL_ID, A_FONTSIZE_POINT_100, iFontSize)
Marker Color
    DF$PGSetGraphAttr(NULL_ID, NULL_ID, NULL_ID, ASG_SERIES_COLOR, g_SeriesColor)
Axis Labels Text Format (Color and Font size)
    DF$PGSetGraphAttr(O2D_O1_LABEL, NULL_ID, NULL_ID, A_FONTCOLOR_RGB, g_RGB)
    DF$PGSetGraphAttr(O2D_O1_LABEL, NULL_ID, NULL_ID, A_FONTSIZE_POINT_100, iFontSize)
Hide Legend
    DF$PGSetGraphAttr(NULL_ID, NULL_ID, NULL_ID, A2D_SHOW_LEGEND, iFalse)
Pie Slice Color of the second slice
    DF$PGSetGraphAttr(OPI_SLICE, 1, NULL_ID, A_AREACOLOR_RGB, g_RGB)
Exploding a Slice on a Pie Chart
    g_SeriesStruct.iSeries = 0
    g_SeriesStruct.iValue  = 25 ' This value in percent
    DF$PGSetGraphAttr(NULL_ID, NULL_ID, NULL_ID, API_SLICE_MOVE, g_SeriesStruct)

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