Spread Designer Guide

This guide provides introductory task and user interface descriptions of the Spread Designer for developers using Spread Windows Forms. It describes how to quickly customize a Spread component using the graphical user interface of the Spread Designer.

- **Introduction to Spread Designer**
- **Spread Designer User Interface**
- **Spread Designer Dialogs**
- **Spread Designer Editors**
- **Designing in the Data Area**
- **Working with the Design**
- **Designing Shapes**

For a complete list of documentation, refer to the **Spread Windows Forms Documentation (on-line documentation)**.

1 Table of Contents

Introduction to Spread Designer

You can quickly design a spreadsheet component using the Spread Designer. Whether you are prototyping a complete spreadsheet component or simply customizing some aspect of an existing spreadsheet component, the dedicated graphical interface offers many features to save time and effort. It also provides a way for you to add data to and set properties for the component, including properties that are not available at design time in Visual Studio. You can set both design-time and run-time properties. In most cases you can preview changes before applying them to the spreadsheet. Once all the changes are made, you apply the changes to the spreadsheet component on your form. With the Spread Designer, customizations can be made quickly and easily.

The Spread Designer also allows you to save your work to a file and share that file with others. You can save your design as a file and open files of previous work or from another team member from within Spread Designer.

Spread Designer lets you make just about any customization to the spreadsheet component as well as add shapes to improve the user interface. There are dozens of built-in shapes and the ability to customize them.

For more details, refer to these introductory topics:

- **Overview of Spread Designer Features**
- **Starting Spread Designer**
- **Getting Started Designing**
- **Simple Example Using Spread Designer**
- **Running Spread Designer Stand Alone**
- **Understanding the Built-in Shapes**

Then, when you are finished with the introductory material, find the more detailed explanations in these topics:

- **Spread Designer User Interface**
- **Designing in the Data Area**
- **Working with the Design**
- **Designing Shapes**

Overview of Spread Designer Features

The Spread Designer offers these advanced features

- Set properties and prototype design with little effort
    - For more information, see **Spread Designer User Interface**.
- Multiple ways of accomplishing a task: menu, toolbar, properties list
    - For more information, see **Spread Designer User Interface**.

- Multiple toolbars for shortcuts
    - For more information, see **Spread Designer Toolbars**.
- Custom names in formula references
- Recent (Most-recently-used) files list
    - For more information, see **File Menu**.
- Add shapes to enhance the appearance
    - For more information, see **Designing Shapes**.
- Ability to preview before applying to sheet
    - For more information, see **Previewing a Sheet in Spread Designer**.
- Ability to save to XML for re-use
    - For more information, see **Saving and Opening Design Files**.
- Ability to print
    - For more information, see **Printing a Sheet from Spread Designer**.

For more information about Spread Designer, return to the **Introduction to Spread Designer**.

Starting Spread Designer

You can start Spread Designer from inside your Visual Studio .NET project by doing one of the following:

- Right-click on the FpSpread component on your form and choose Spread Designer.
- Select the component on the form, press F4 to display the **Properties** window, and select the Spread Designer verb at the bottom of the **Properties** window.

You can also run Spread Designer outside of Visual Studio .NET as a stand-alone application. To do so, run the FarPoint.SpreadDesigner.EXE from the product bin folder.

When running Spread Designer in stand alone mode, several options are grayed out and not available to use. These are options that are available with the version that integrates with Visual Studio but are not needed when Spread Designer is run as an independent program.

For more information about Spread Designer, return to the **Introduction to Spread Designer**.

Getting Started Designing

To begin designing your Spread component in the Spread Designer:

- Set preferences, as described in the **Settings Menu**.
- Set the Spread settings, as described in the **Spread Settings Dialog**.
- Set up the sheets and customize the sheet settings, as described in the **Sheet**

Settings Dialog.

- Work in the data area of the sheet, as described in **Designing in the Data Area**.
- Optionally, add shapes to highlight areas of the sheet, as described in **Designing Shapes**.
- Save your work to a file, apply the settings to the component on the form, or print a copy, as described in **Working with the Design**.

For more information about Spread Designer, return to the **Introduction to Spread Designer**.

Simple Example Using Spread Designer

This simple example steps you through creating a spreadsheet in Spread Designer. It creates a spreadsheet to help with tracking which products in an inventory are selling well. This example can be used with Spread Designer in stand-alone mode or from inside a development environment such as Visual Studio.

For more information about Spread Designer, return to the **Introduction to Spread Designer**.

First, launch the Spread Designer

1. Launch the Spread Designer.

Then setup the spreadsheet.

1. Set the size of the spreadsheet. Click on the sheet corner to select entire sheet. In the property list, scroll down to Layout. You see that the number of rows and columns are each 500. Click on these to edit them. Change them each to 10.
2. Edit the headers with meaningful labels. Select a single row by clicking on that row's header. Right-click and select the "**Headers**" verb. The **Header Editor** is displayed. Change the width to 60 and click ok. A pop-up appears asking whether or not you would like to apply this to the entire header section; click **Yes**.
3. Now right-click on the label "A" for column A. Choose **Headers** and change the label to "Product" by typing in the Text property in the property list.
4. Next, change the Background color to yellow in the property list and then click **OK** and **Yes** to the dialog. Then, right-click on the column header again, select column width, and change the width to 75. Select **OK**. Click on the label "B" for column B. Using the same steps, change the label to "# Produced." Change the cell type to number by right-clicking on the selected column and selecting the **CellTypes** menu option. Change the width to 75. Click on label "C" for column C. Change the label to "# Sold." Change the cell type to number and the cell width to 75.
5. Click on label "D" for column D. Change the label to "Price." Change the cell type to currency. Change the width to 75.
6. Click on label "E" for column E. Change the label to "Income." Change the cell type to currency. Set the foreground color to blue. Select cells E1 through E4. Then in the formula bar, click =, and type C1*D1 in the formula text box. Select **Apply** and **OK**. Set the "locked" option to true (right-click on header, select headers, set Locked property in property list). Set the column width to 85.
7. Click on label "F" for column F. Change the label to "Product Status." Change the cell type to combo box (right-click on selected column, select **CellTypes** menu, combo cell, and click the **Items** tab).

8. In the **Items** tab, type "Continue" on the first line and on the second line type "Discontinue." Click **OK**. Change the column width to 85. Now, click the label "5" on row 5, and change the row header text to "Total." Also change the label of row 6 to "Average."
9. Enter the formula SUM(B1:B4) in the cell located at the intersection of the "# produced" column and the "Total" row. Enter the formula SUM(C1:C4) in the cell at the "# Sold" column and the "Total" row. Zero values appear in the formula cells. In the cell intersection of the "Total" row and the column labeled income, enter the formula SUM (E1:E4).
10. Finally, in the cell intersection of the row labeled "Average" and the column labeled income, enter the formula Average(E1:E4). This gives you your average income. You can see that the number of items sold changes your average income, something you may not have recognized without the use of Spread Designer.

Let's apply the changes.

1. To apply the changes, simply exit Spread Designer, and you are returned to your original spreadsheet, now completely resembling the application you have just created in Spread Designer.
2. You may now enter data into any of the "# sold" or "# produced" cells, and you see the income totals change. You may also change the prices to see how that would effect the income.

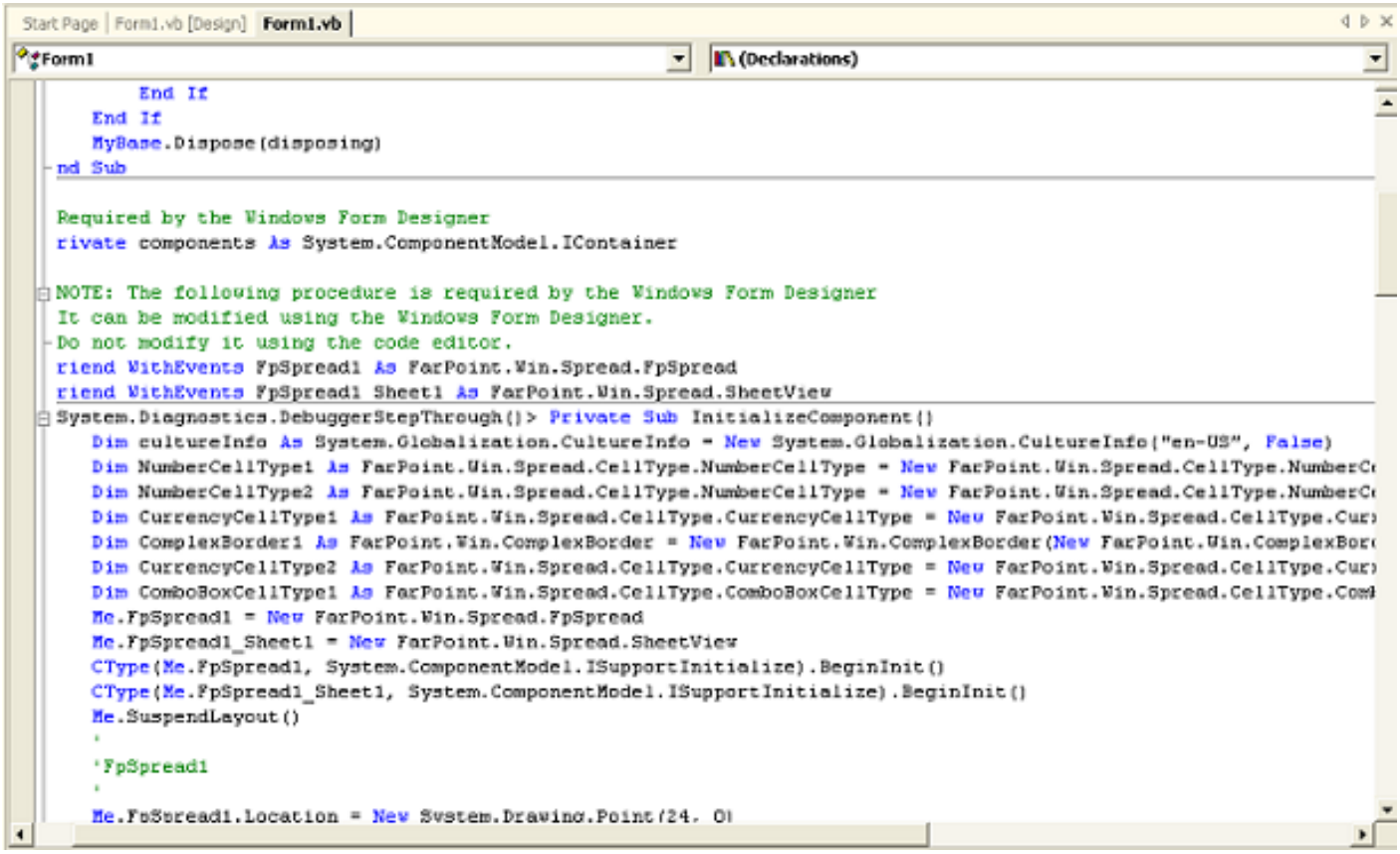
The next step is building your application.

1. To build your application, click on the build header in the main toolbar, and scroll down to "**Buildfilename**."
2. Visual Studio creates an executable file and places it in your Visual Studio projects folder.

Then we can save the file and exit.

1. Click on **File** and **Save** in the main tool bar to save your project.

The result of applying the setting to the Spread component from the Designer is that code is put in the part of the form code as illustrated here.



Running Spread Designer Stand Alone

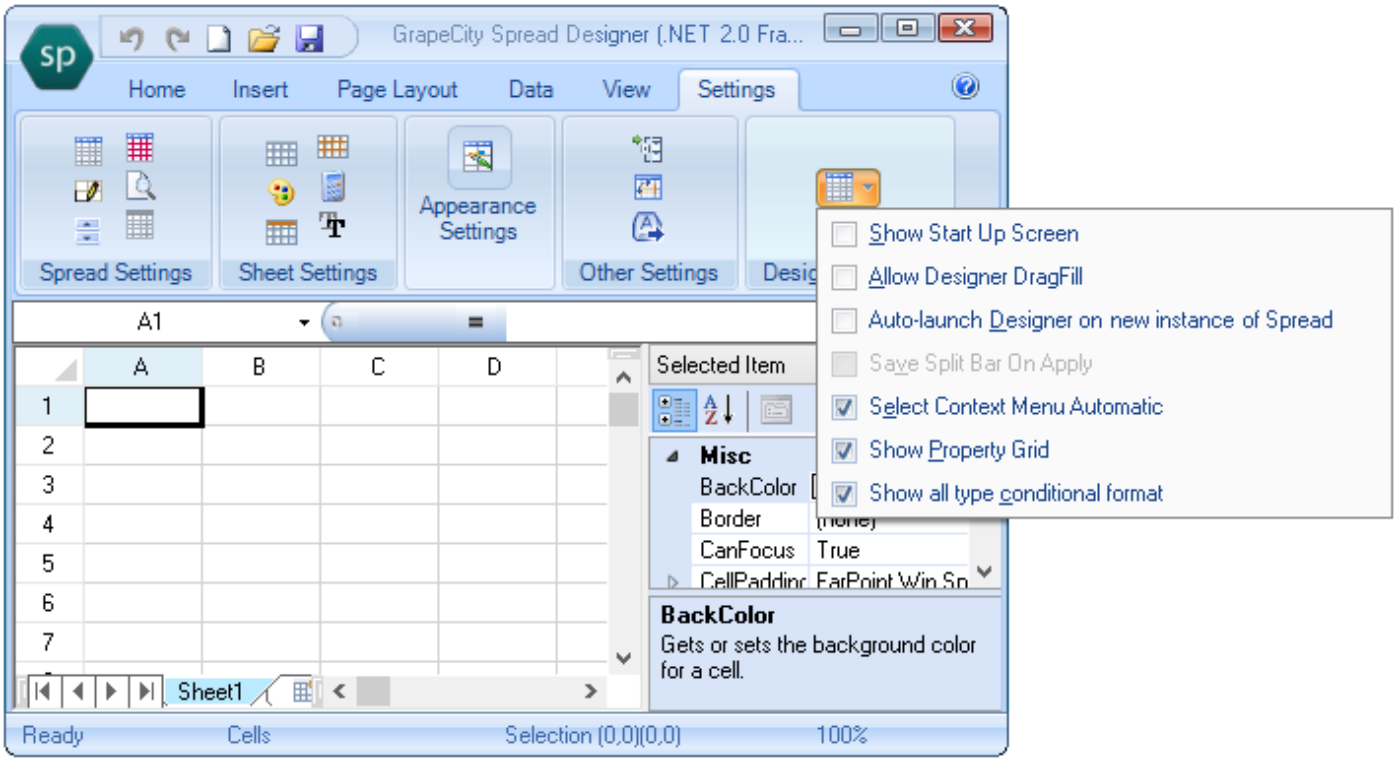
You can run Spread Designer as a stand-alone application independent of Visual Studio. For many developers who want to create and share designs, this is a quick way to design FpSpread-based applications and save them off as either XML or Excel-compatible files. Practically all of the functionality you expect from the Spread Designer is available in this stand-alone application except those features that involve applying to and reverting from the form in Visual Studio.

To run the Spread Designer as a stand-alone application, simply run the Spread Designer executable installed in the bin directory.

You can create a shortcut to the EXE file or work with the Spread Designer application as you would any other application in Windows.

You can also show the Spread Designer at run time. Add the FpSpreadDesigner component to the form at design time and use the **Show ('Show Method' in the on-line documentation)** method in the FpSpreadDesigner class to display the component at run time.

The items that are not available in the Spread Designer when run as a stand-alone application are grayed out or not selectable, as shown in this figure.



If you wish to save your work, be sure to save the design as a file using the **Save** or **Save As** option from the **File** menu icon.

For more information about Spread Designer, return to the **Introduction to Spread Designer**.

Understanding the Built-in Shapes

The FpSpread component provides the following built-in shapes that provide a basis for much of the shape customization that is possible with the component. These shapes are available from the Insert menu in the Spread Designer as well as from separate classes in code.

The shapes are summarized in this table (with arbitrarily colored examples of the shapes).

- **Basic Shapes**
- **Arrow Shapes**
- **Balloon Shapes**
- **Special Shapes**
- **Star Shapes**

To add a shape, you can use code or you can use the Spread Designer. For more information about creating shapes in the Spread Designer, refer to the **Insert Menu**. For more information about the shapes classes, refer to the **FarPoint.Win.Spread.DrawingSpace ('FarPoint.Win.Spread.DrawingSpace Namespace' in the on-line documentation)** namespace.

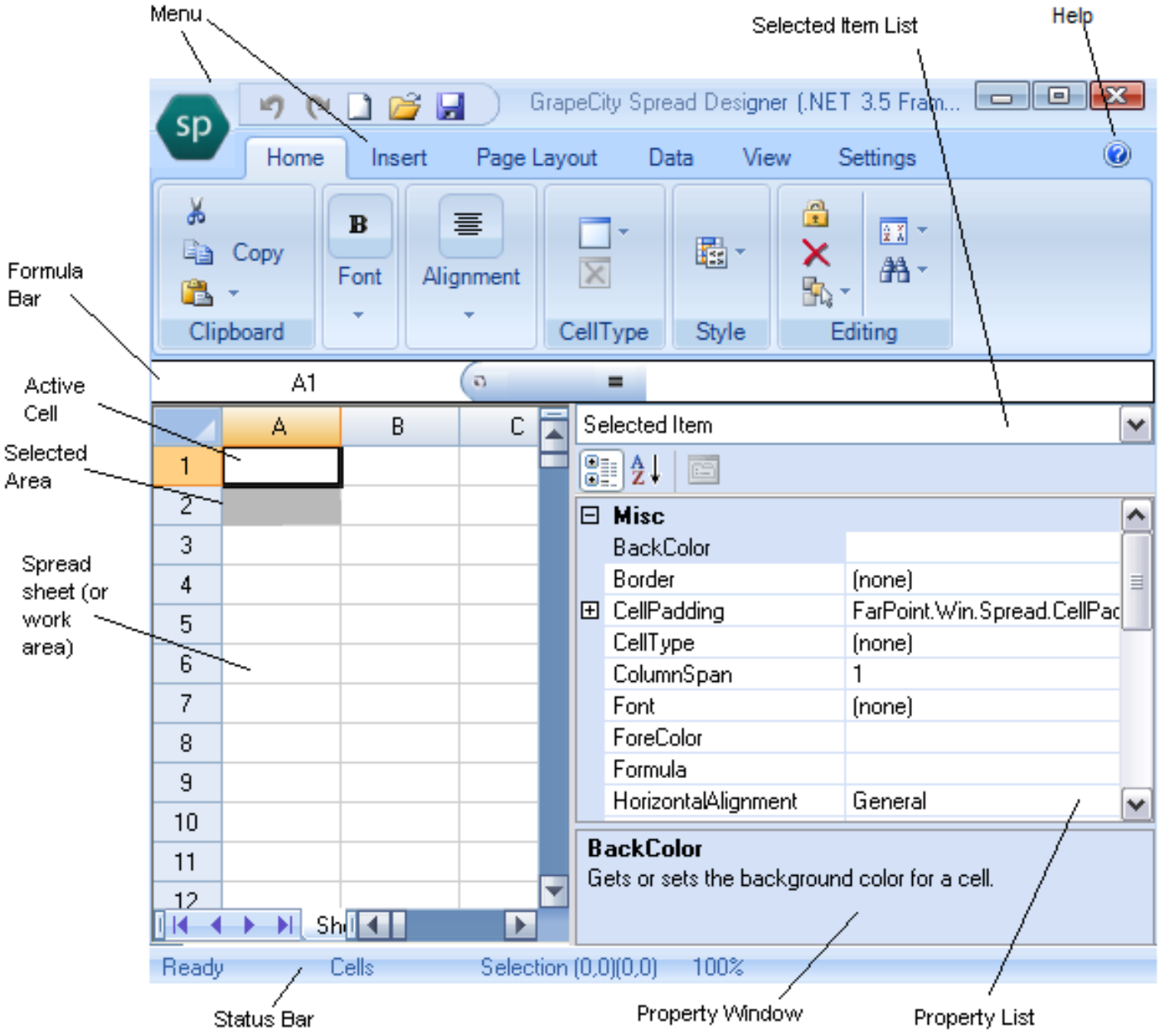
Each shape can be rotated and resized, and their ability to be rotated and resized by the end

user can be constrained. Colors, shadows, and transparency can be adjusted.

Spread Designer User Interface

While not a comprehensive summary of every part of the Spread Designer user interface (UI), this brief overview points out a few of the main parts of the interface and shows you the basic layout of the Spread Designer. There is more than one way of doing many of the design actions. The goal of the interface is to allow you to quickly and easily set the appearance of the spreadsheet and customize the interaction that the user has with the spreadsheet.

The Spread Designer provides the following interface for designing your component.



The following topics describe some of the parts of the Spread Designer UI.

- **Spread Designer Menus**

- **Spread Designer Toolbars** (including the **Formula Bar**)
- **Spread Designer Data Area**
- **Spread Designer Property Window**
- **Spread Designer Status Bar**

For information about the dialog boxes and editors, refer to **Spread Designer Dialogs** and **Spread Designer Editors**.

You can obtain help for using Spread Designer by selecting Help from the Help menu icon, or by clicking the Help button in some dialogs.

If you are using the **Properties** list, you can press F1 to obtain the help topic for whichever property is selected in the list. You can also press F1 while an object is selected, such as a cell, to obtain the help for that object. For example, if a cell is selected and you press F1, the help displays the Cell class help topic.

Remember that the **Properties** list refers to the properties of the overall component, sheet, row or column, or even individual cell, depending on what is selected. Properties of shapes are edited in separate dialogs. For more information about shapes, refer to **Designing Shapes**.

Spread Designer Menus

The Spread Designer provides menus for accessing and saving files, working with properties of the sheet, and for setting properties for the FpSpread component. Several of the things you can do from the properties window can also be done from several of the Editors that can be called from the menus.

- **File Menu**
- **Home Menu**
- **Insert Menu**
- **Page Layout Menu**
- **Data Menu**
- **View Menu**
- **Settings Menu**
- **Help Menu**
- **Sheet Context Menu**
- **Table Context Menu**

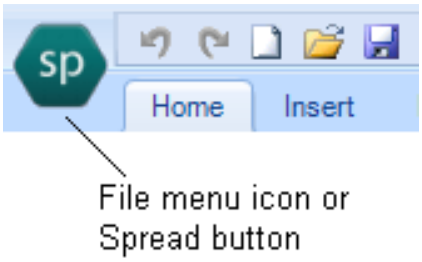
For information on context menus that are available when items in the data area are selected, refer to **Setting Properties in Spread Designer**.

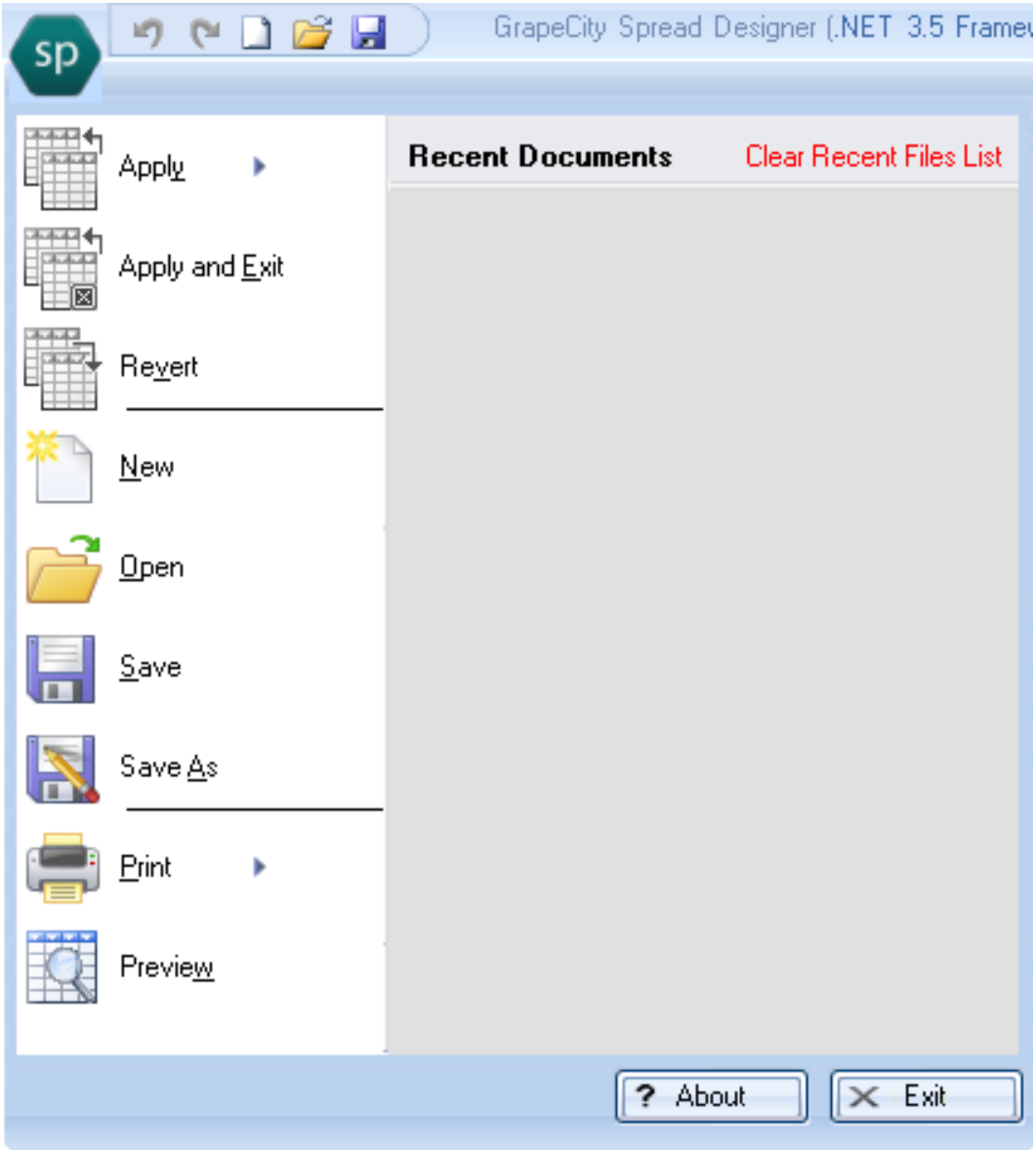
File Menu

The **File** or **Spread Button** menu (click on the file menu icon) generally has operations, such as opening or saving a file, and printing. You can also reset the spreadsheet to default settings

and preview the spreadsheet from this menu. From here, you can apply changes to the spreadsheet or revert to the settings when it was originally loaded. (For information on reverting to previous settings, refer to **Resetting and Clearing Design Work**.) If you select a text file, an additional dialog appears, the **Custom File Options Dialog**. (For information on printing, refer to **Printing a Sheet from Spread Designer**.)

The following image shows the icon for the **File** menu.





The menu options are explained in the table below.

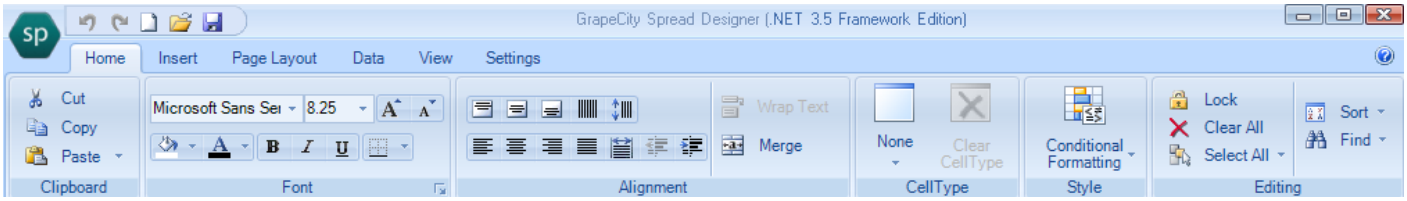
Menu Option	Description
Open	This offers a dialog box for browsing to a file to open. Only XML and XLS files are valid.
Open Recent	This dialog to the right of the Open option offers a drop-down of recently opened files that can be opened.
Save	This saves the file. If the file was previously specified and saved, this simply saves to that file. If the design has never been saved, the Designer offers a

	dialog box for saving the file with an option for specifying the file type.
Save As	This offers a dialog box for saving the file with a new name, or for saving the file to a new file type.
Apply Apply and Exit	This applies the changes done in the Spread Designer to the FpSpread component on the Form in the development environment. If Spread Designer is run stand-alone, apart from the development environment, these choices are not available.
New	This resets all values to their default values and clears the data area of any data.
Revert	This reverts the FpSpread component back to the values in the FpSpread component on the on the Form in the development environment. If Spread Designer is run stand-alone, apart from the development environment, these choices are not available.
Preview	This opens a separate window with a preview of the FpSpread component. The data area of the Spread Designer is grayed out and the preview window has focus.
Print With Setup (see Page Layout menu)	This opens a printer setup dialog to allow you to change any of the options on the default printer before printing the appearance of the data area of the design.
Print Preview	This opens a separate window to allow you to see the design according to how it prints when sent to the printer.
Print	This does not display a dialog and simply sends the design to the default printer.
Print PDF	This prints (saves) the file to PDF.
Clear Recent Files List (History File List)	With this preference selected, the list of recent files is cleared and the File menu adjusts accordingly, removing the Open Recent from its list of choices.
Exit	Click on the Exit button to exit the designer and return to the spreadsheet.

Home Menu

The **Home** (or edit) menu allows you to perform standard Clipboard operations (such as cut, copy, and paste) and various selecting and navigation functions. You can also set the font information and cell borders.

The **Clipboard** section of the **Home** menu contains the clipboard operations and undo/redo. The **Font** section contains the font options as well as the cell border options. The **Alignment** section contains the text alignment options and merge options. The **CellType** section is for creating or clearing cell types. The **Style** section is for conditional formatting and the **Editing** section is for locking, selecting, sorting, or searching cells.

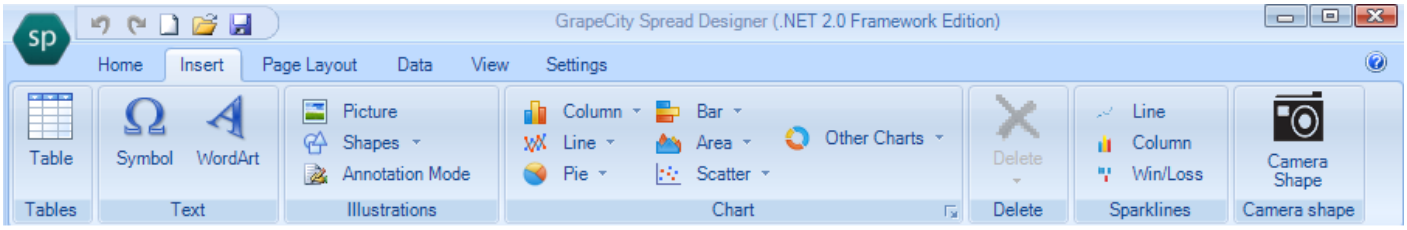


The options are explained in the table below.

Option	Description
Clipboard Section (Cut, copy, and Paste)	These are the Clipboard operations that allow you to cut, copy, and paste data from one selected range of cells to another. If multiple cells are selected that are discontiguous, then only the data in the last cell is cut or copied to the Clipboard.
Clear	This clears the celltype.
Go To	This allows you to specify a cell by cell reference in A1 notation (such as G12) and brings that cell into view.
Alignment Section	This allows you to set the center the text, merge, etc...
CellType Section	This allows you to specify or clear the cell type.
Style Section	This allows you to set conditonal formatting.
Editing Section	This allows you to lock cells, select, sort, or find text.
Editing Section (Find)	This allows you to search for text in the contents of cells in the sheet. This option brings up the Find dialog. For more information on the Find dialog and searching, refer to **Allowing the User to Perform a Standard Search (on-line documentation)**.
Editing Section (Select All)	This allows you to select the entire sheet, all the cells in the data area, or only the cells with data.

Insert Menu

The **Insert** menu can be used to add special characters, shapes, sparklines, tables, camera shapes, or charts. The **Text** section contains **Symbol** and **WordArt** options. Symbol is used to add special characters such as copyright symbols, unicode characters, and so on to a cell. WordArt is for creating a shape that has text. The chart section is for adding a chart control to the Spread control.



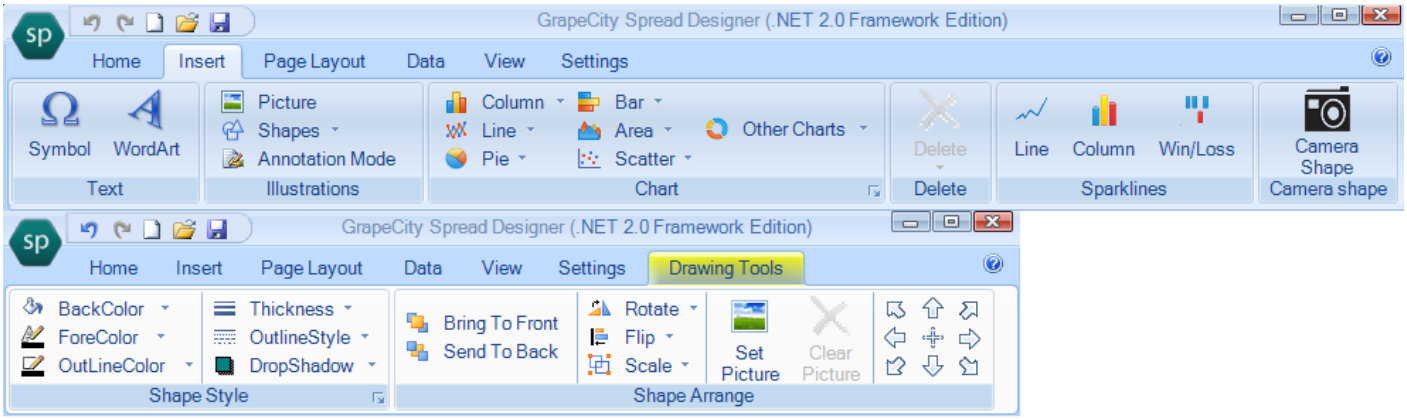
Inserting Shapes and Camera Shapes

The easiest way to design shapes on top of the spreadsheet is to use the Spread Designer **Insert** menu. The **Drawing Tools** menu is displayed after you create a shape using the **Insert** menu option. The **Insert** menu option is used to create various types of shapes and can be used to save, load, or delete a shape. The **Insert** menu provides a quick way to draw shapes on the spreadsheet using the drawing space. The **Drawing Tools** menu contains several drawing-related icons for setting the color, line thickness, location, scale, and orientation.

Select a block of cells and then select the Camera Shape icon to create a camera shape. The camera shape can include other shapes. Use the **Drawing Tools** menu to customize the image. The **BackColor** and **ForeColor** options under the **DrawingTools** menu do not apply to the camera shape. In general, properties that apply to the interior of the shape, do not apply to the camera shape.

For more information on shapes in general and the drawing space, refer to **Designing Shapes**.

The following figure identifies the items in the **Insert** and **Drawing Tools** menus:



The **Shapes** option in the **Insert** menu allows you to select one of the built-in shapes. The **Shape Style** section of the **Drawing Tools** menu allows you to set colors, outlines, and shadows.

The **Symbol** option in the **Insert** menu allows you to put special characters in a cell (such as unicode characters).

The **Drawing Tools** and **Insert** menus provide additonal functions summarized in the table below.

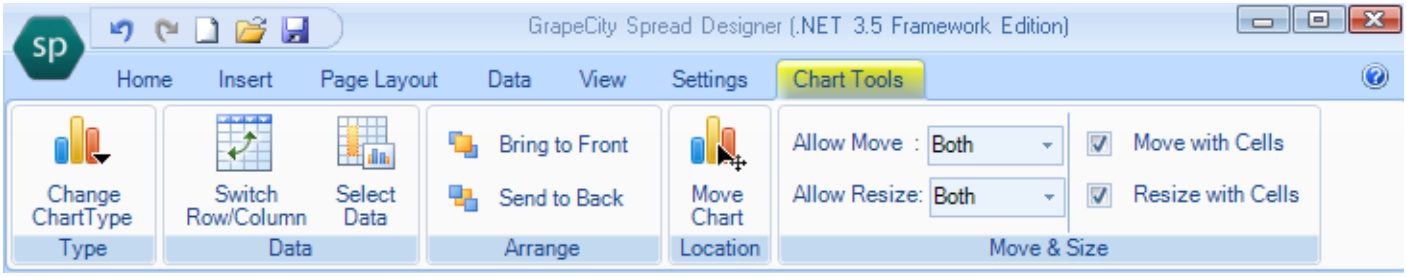
Item	Description
Shapes	This allows you to select from a list of built-in (automatic) shapes. For a description of the built-in shapes, refer to **Designing Shapes**.
Bring To Front or Send To Back	This allows you to customize the order of shapes which can be on top of each other. Move shapes to the front or back of other shapes.
Nudge	The arrows to the right side of the Drawing Tools menu allow you to move the shape.
Rotate	This allows you to select typical amounts of rotation for a shape.
Flip	This allows you to flip a shape either horizontally or vertically.
Scale	This allows you to resize a shape proportionally by selecting a scaling factor.

Picture	This allows you to select an image and the image properties.
Load, Save, or Delete	This allows you to load or save a shape to a file or delete a shape or shapes.
Word Art	This allows you to create a text based shape.

You can right-click on a shape and select **Properties** from the menu to bring up the **Shape Properties** dialog.

Inserting Charts

The **Insert** menu is also used to create chart controls. Select a chart from the chart section of the **Insert** menu. This brings up the **Chart Tools** toolbar. You can change the chart type, select data, switch rows and columns, move the chart, or allow the user to move or resize the chart.

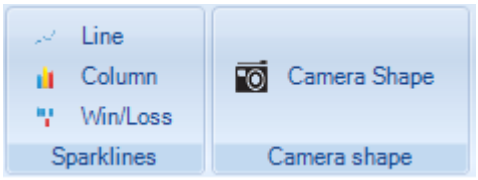


The change chart type changes from the 2D to the 3D view.

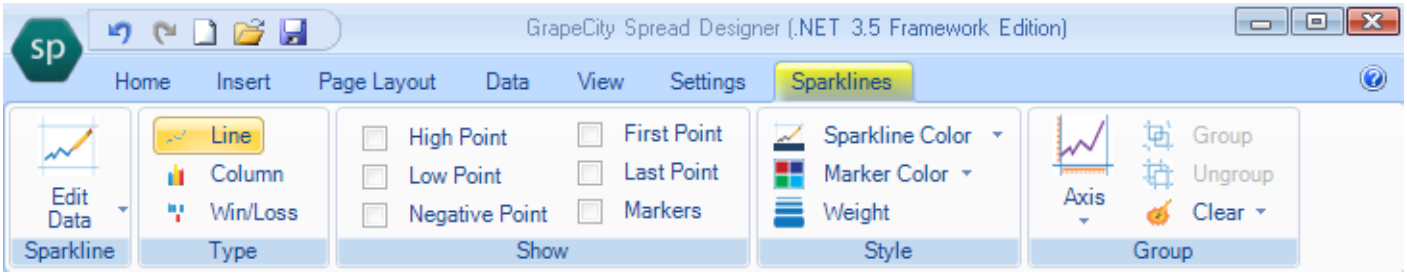
The **Move with Cells** option will move the chart so that it stays with the original location (anchor) when you add or insert columns or rows in front of the chart control. The **Resize with Cells** option will resize the chart control if you resize columns or rows under the chart.

Inserting Sparklines

The **Insert** menu also has options for creating sparklines in cells.

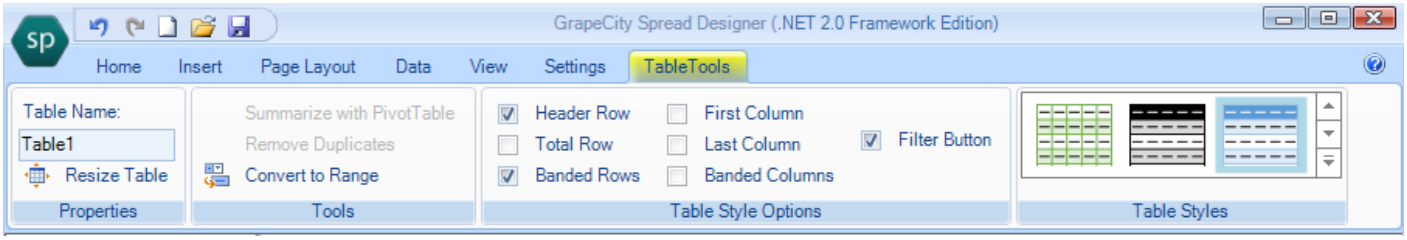


The **Sparkline** menu is displayed after you choose a sparkline type in the **Insert** menu. You can use the **Sparkline** menu to set options such as marker colors and axis settings for the sparkline.



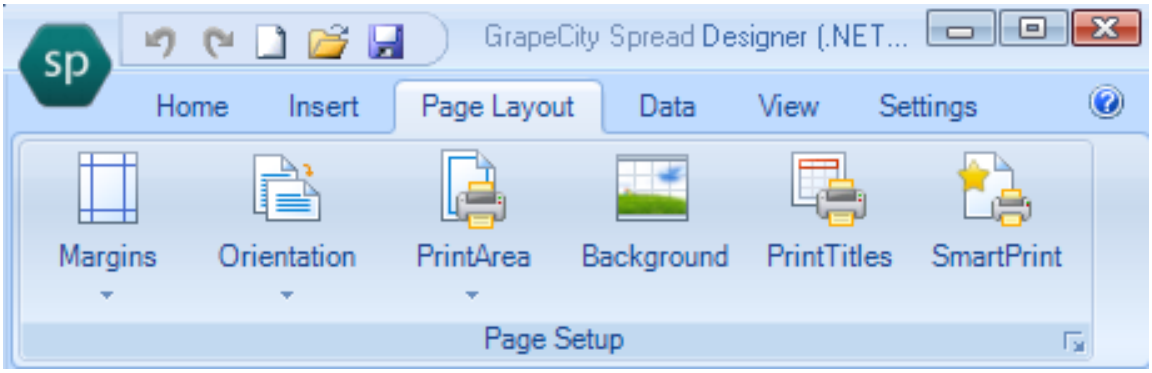
Inserting Tables

You can use the **Insert** menu to add tables. Select data in the data area and then select **Table** from the **Tables** section. The **TableTools** menu is displayed and allows you to set options for the table such as name, size, and style.



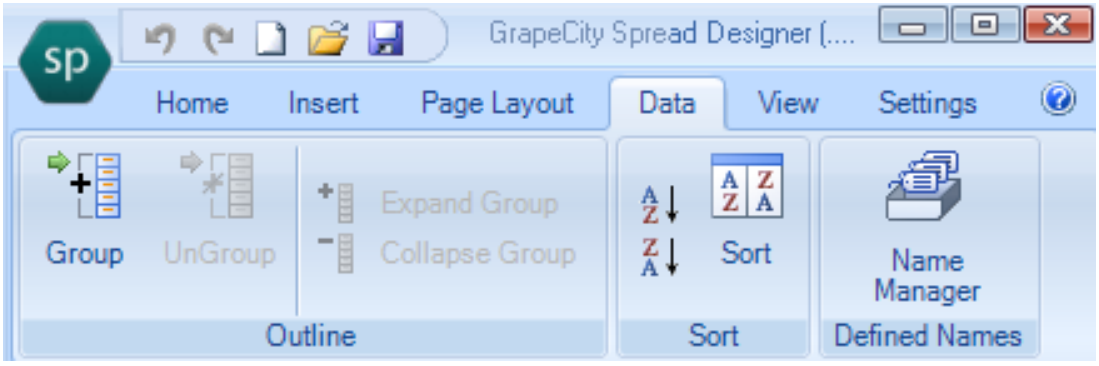
Page Layout Menu

The **Page Layout** menu can be used to set print options. You can specify margins, page orientation, paper size, the print area, headers and footers (print title), and smart print options. The **Print Titles** and **Smart Print** options bring up the **Print Sheet Settings** dialog.



Data Menu

Starting with version 5, the **Format** menu of the designer has been replaced by the **Data and Settings** menus. The **Data** menu appears as follows:



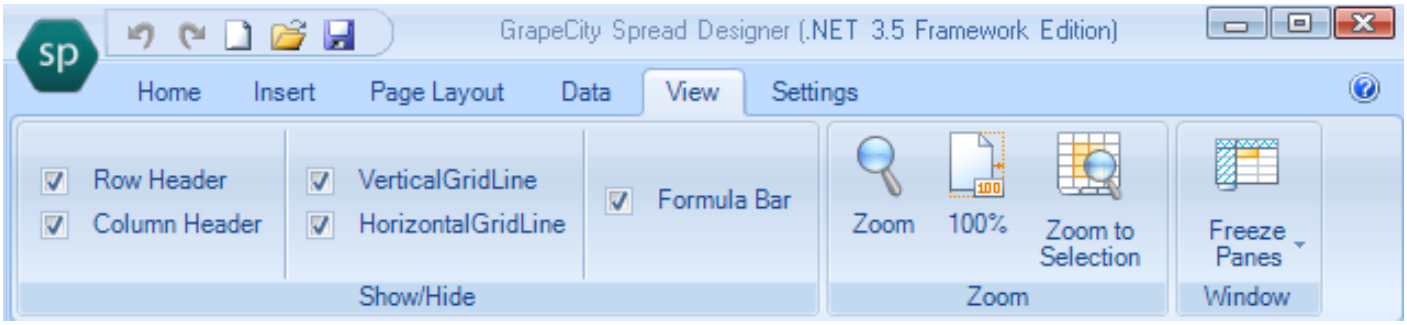
The **Data** menu allows you to create groups (outline grouping) or sort data.

Menu Option	Description

Sort	This allows you to sort rows or columns based on criteria you select. For more information, refer to the **Sort Dialog**.
Group	This allows you to create a range group.
Name Manager	This allows you to create, edit, or delete custom names.

View Menu

The **View** menu lets you determine whether headers, grid lines, or the formula bar is visible and the scaling factor to zoom in to display the spreadsheet. You can also set frozen columns and rows. The toolbars are described in more detail in **Spread Designer Toolbars**. The status bar is described in more detail in **Spread Designer Status Bar**.



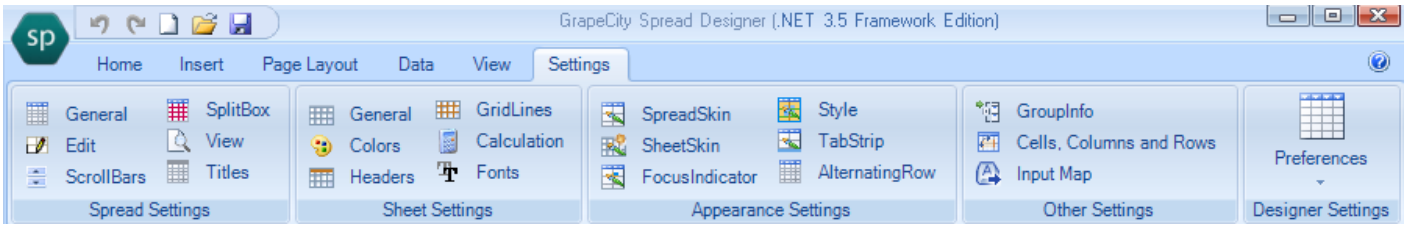
To freeze a row above the selected row, or to freeze a column to the left of the selected column, you can select the **Freeze Panes** option. For more information, refer to setting up rows and columns in the **Developer's Guide (on-line documentation)**.

The **Zoom** options allows you to scale the display. This affects the size applied to the component or when saved, on the display of the spreadsheet.

Settings Menu

Starting with version 5, the **Format** menu of the designer has been replaced by the **Data and Settings** menus.

The **Settings** menu gives you the ability to set properties of an entire spreadsheet, or rows or columns if either is selected, or individual cells or a range of cells. From here you can launch the settings dialog boxes or change the height of rows or width of columns. For information on the dialog boxes, refer to **Spread Designer Dialogs**.



The **Data** menu allows you to create groups (outline grouping) or sort data.

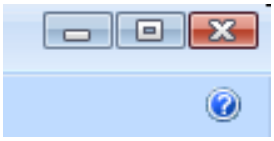
The **Settings** menu options are grouped under **Spread Settings**, **Sheet Settings**, **Appearance Settings**, **Other Settings**, and **Designer Settings**. The options are explained in the table below.

Settings Options	Description
Spread Settings	
Spread Settings	When an entire Spread is selected, this allows you to customize properties of the FpSpread component. For more information, refer to **Getting Started Designing** and **Spread Settings Dialog**.
Sheet Settings	
Sheet	When a sheet is selected, this allows you to customize properties of the active sheet. For more information, refer to **Adding and Customizing Sheets** and **Sheet Settings Dialog**.
Appearance Settings	
TabStrip Editor	This allows you to customize the tab strip. For more information, refer to the **TabStrip Editor**
Focus Indicator Editor	This allows you to customize the appearance of the focus indicator. For more information, refer to the **Focus Indicator Editor**
Style Editor	This allows you to customize the style. For more information, refer to the **Named Style Editor**
Spread Skin Editor	This allows you to create a skin for the Spread control. For more information, refer to the **SpreadSkin Editor**
Sheet Skin Editor	This allows you to create a skin for the sheet. For more information, refer to the **SheetSkin Editor**
Alternating Row Editor	This allows you to set properties for alternating rows (such as backcolor). For more information, refer to the **Alternating Row Collection Editor**
Other Settings	
Cells	When a cell or range of cells is selected, this allows you to customize properties of the selected cell or cells. For more information, refer to **Setting Cell Properties in Spread Designer**.
Columns	When a column or range of columns is selected, this allows you to customize properties of the selected column or columns. For more information, refer to **Setting Column Properties in Spread Designer**.
Rows	When a row or range of rows is selected, this allows you to customize properties of the selected row or row. For more information, refer to **Setting Row Properties in Spread Designer**.
GroupInfo	This allows you to create basic formatting for groups.
Input Map	This allows you to create an input map for the keyboard keys.
Designer Settings	
Save Split Bars on Apply	With this preference checked, Spread Designer applies the split bars and viewports to the spreadsheet; otherwise, the split bars would just be used while in the Spread Designer and lost upon applying.

Auto-Launch Designer on New Instance of Spread	With this preference selected, the Spread Designer is automatically launched when a new instance of the Spread component is placed on a Windows Form.
Allow Designer DragFill	With this preference selected, drag fill works in the designer.
Show Start-Up Screen	With this preference selected, the start-up screen in Spread Designer is displayed each time Spread Designer is launched. With this option toggled, the Spread Designer does not display that initial screen when launched.
Select Context Menu Automatic	With this preference selected, focus moves to the Drawing Tools or Chart Tools tab automatically if you insert a shape or a chart.
Show Property Grid	If this preference is not selected, the property grid is not visible. Unchecking this option makes the designer faster.
Show All Conditional Formatting Options	This option shows the conditional formatting with rules and the previous cell conditional formatting options when a designer file that contains the previous cell conditional formatting is loaded.

Help Menu

The **Help** menu icon located on the upper right side of the designer allows you to open the help that is available for the Spread Designer.



Sheet Context Menu

The sheet context menu allows you to cut, copy, delete, and paste sheets in the designer. Right-click on a sheet icon at the bottom of the designer to bring up this menu and then select an option.

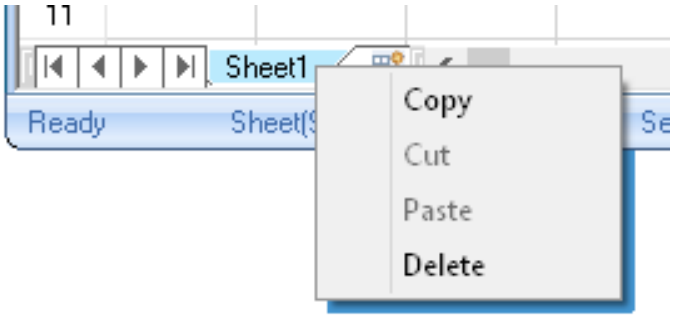
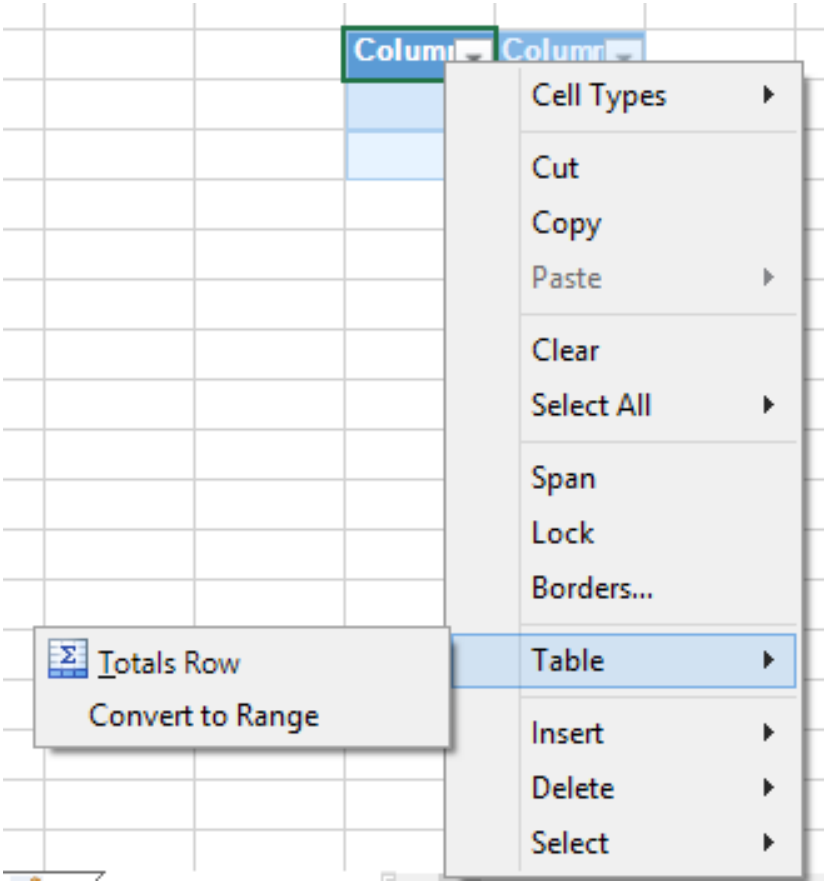
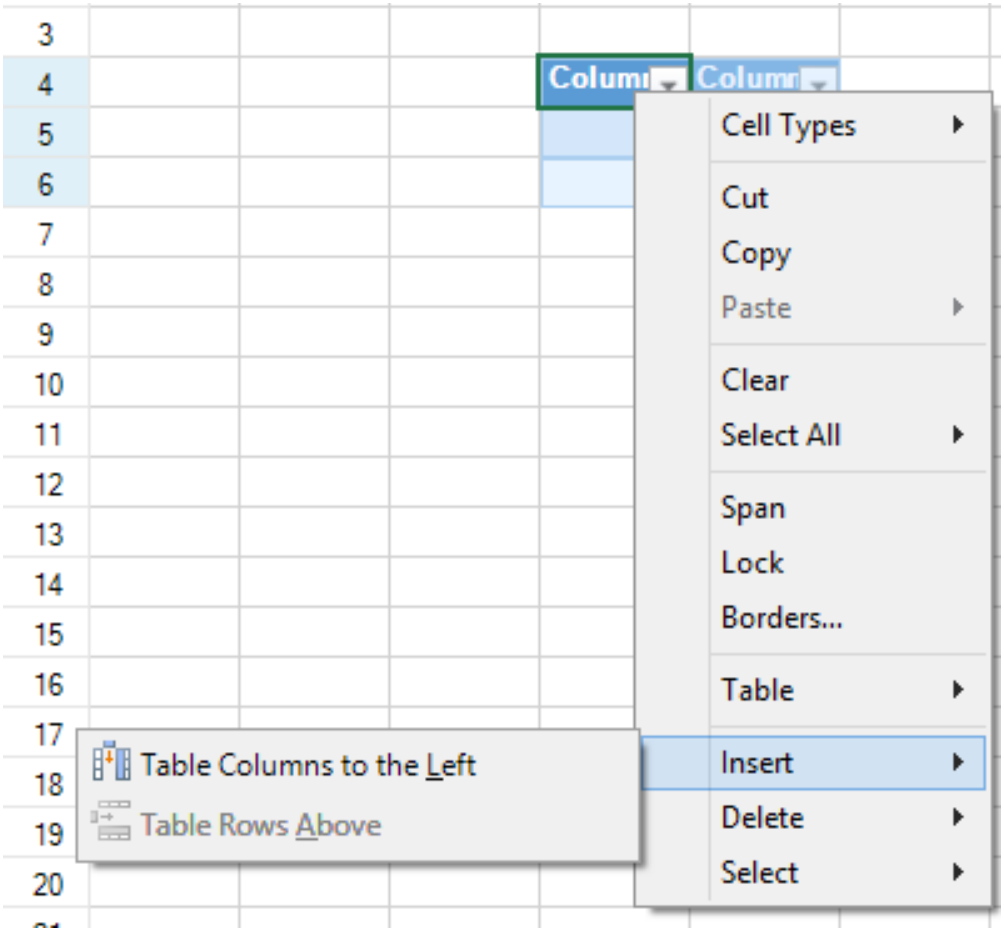
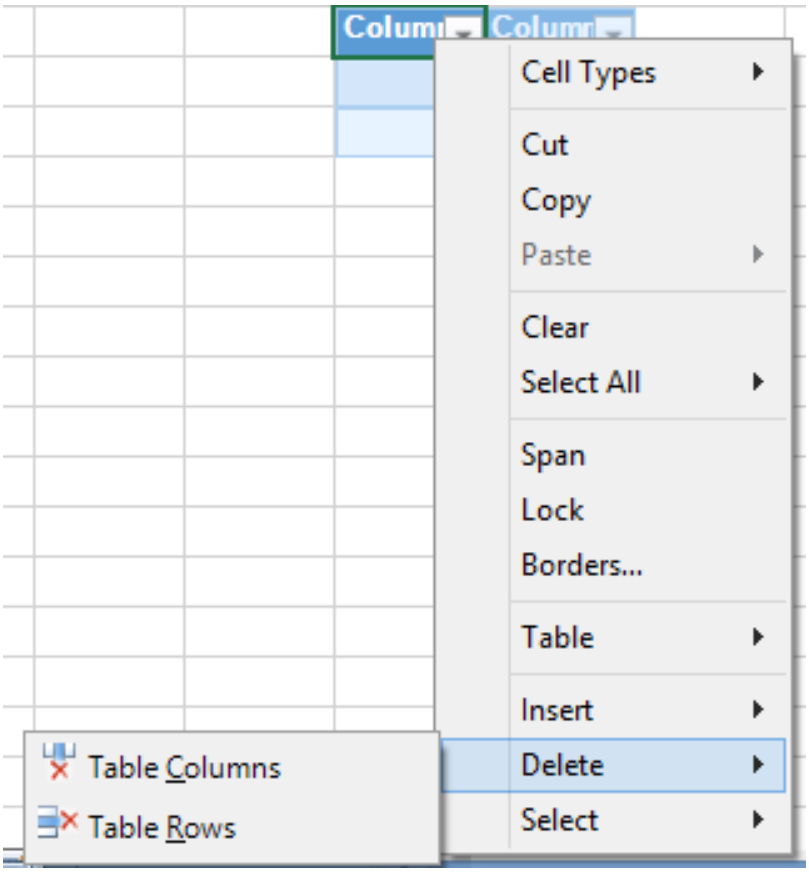


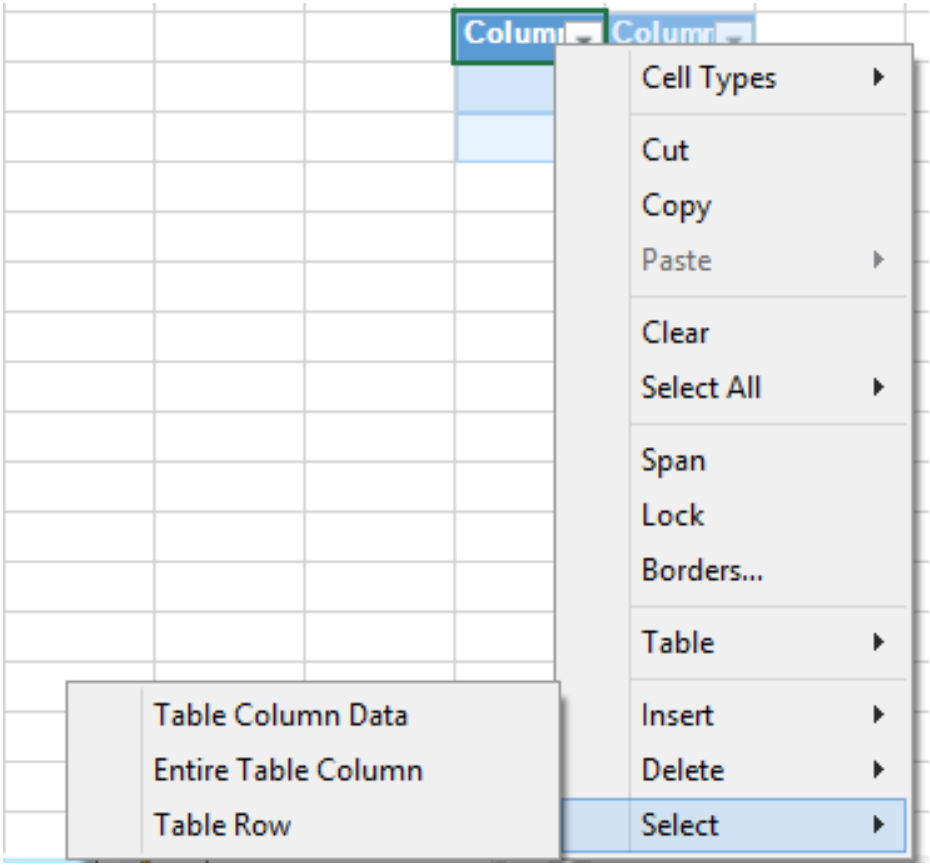
Table Context Menu

The table context menu allows you to add a totals row, convert the table to a data range, add columns or rows, delete columns or rows, and select table items. Right click on a table in the designer to display the table menu options.









Spread Designer Toolbars

The toolbars provide easy access to some features of the Spread Designer. Several of the toolbars are now part of the menu options (starting with version 5 of the control).

Click a button in the toolbar to perform the associated task.

For more information on drawing shapes, refer to the **Insert Menu**, and to **Designing Shapes**. For more information on adding formulas to cells, refer to the **Formula Bar**, and to the Formula Reference.

General Toolbar

The **General** toolbar has been replaced by the **Home** menu. The **Home** menu option contains general file and editing operations, such as cut, paste, and print.

Cell Types Toolbar

The **Cell Types** toolbar has been replaced by the **Home** menu option. The **Home** menu option lets you quickly set the cell type for a cell or range of cells.

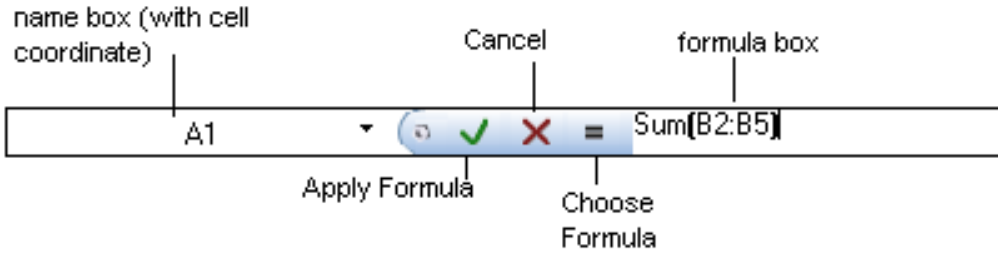
Formatting Toolbar

The **Formatting** toolbar has been replaced by the **Home** and **Settings Menu** options. These options allow you to easily format text in a cell or range of cells. This includes spanning, locking, and setting borders around cells.

Formula Bar

The formula bar of the Spread Designer provides a quick way to enter a formula for a cell or group of cells.

The following figure identifies each item in the formula bar:



The name box may contain the cell name or the cell reference of the active cell. If more than one cell is selected, only the first or active cell name is shown. Click **Equals** or type equals to begin the formula. This launches the **Formula Editor**. You may either use the **Formula Editor** or type directly into the formula box.

The name box also displays custom names.

For more information on using the **Formula Editor** and entering a formula, refer to **Entering a Formula in Spread Designer**. For more information on formulas and functions, refer to the Formula Reference.

To display or hide the formula bar, from the **View** menu, select **Formula Bar**.

Drawing Toolbar

The Drawing Toolbar has been replaced by the Insert and Drawing Tools menus.

Spread Designer Data Area

When working in the data area of the Spread Designer, you can click on individual cells or a selection of a row, column, or ranges of cells. Depending on what is selected, different options are available for the cells in the selected item. For more information on selecting, refer to

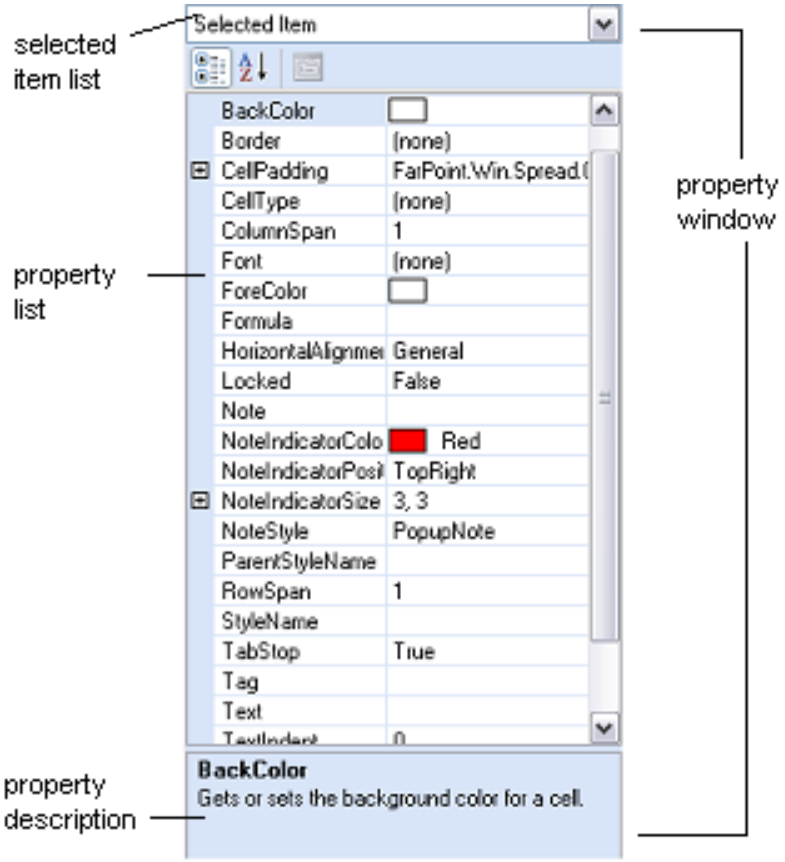
Selecting an Item in the Spread Designer.

Changes that you make in the data area, both content and formatted, can be saved or applied to the Spread on the form.

All cell types (check box, button, etc.) do not react to the first click on cell selection. This allows Spread Designer to set the selected cell(s) into the property window for property access. You must double-click a cell for a change to occur; simply single clicking does not change the state of the button.

Spread Designer Property Window

The property window provides a list of the properties for the currently selected object. The following figure identifies the property window with its list of properties and associated item list and description area:



Use the item list to select the object, or click on a sheet, column, row, or cell in the displayed spreadsheet to select an object. Then set properties for that object using the property list.

To assist you with using Spread Designer, in design mode Spread Designer does not always change settings for what is displayed on the screen. For example, if you set the sheet not to display column headers, the column headers remain visible to help you with designing the sheet. The following property settings are ignored at design time to assist you with your design:

- ColumnHeaderVisible
- EditModePermanent
- HorizontalScrollBarPolicy
- RowHeaderVisible
- TabStripPolicy
- VerticalScrollBarPolicy

If you want to see the sheet with these settings applied, from the **File** menu icon choose **Preview**. A preview of the run-time version of the FpSpread component is displayed.

If you set the tab strip ratio by dragging the tab strip bar, the new setting for the ratio is not saved unless you make another change in Spread Designer or click the **Properties** list.

To set your preferences for the Spread Designer, from the **Settings** menu select **Preferences**, and select the **Save Split Bars on Apply** if you want to save the split bar positions and viewports you have created in Spread Designer when you apply your changes to the FpSpread component.

You can also hide the **Property** window. Select **Preferences** under the **Settings** menu and remove the check mark next to the **Show Property Grid** option.

Spread Designer Status Bar

The status bar of the Spread Designer provides information about the current component and the object in the FpSpread component with which you are working.

In the following figure, the status bar shows that we are working with a Cells item and that a selection of cells, from B3 (index 2,1) to D6 (index 5,3). The zoom factor is 100%.

If you selected cell B4 in the top, right viewport for a sheet displaying four viewports, the selection would read "Selection (3,1),(3,1)".

This table summarizes the possible selected items and their status notation:

Selected Item	Selection Notation
Cells	The range of cells that are selected is indicated by the two sets of coordinates, the first set of coordinates being the starting cell and the second set of coordinates being the ending cell. If only one cell is selected, both beginning and ending cell coordinates are the same. If you select all the cells in a sheet by selecting the sheet corner cell, the coordinates (-1,-1)(-1,-1) indicate all the cells have been selected in all rows and all columns.
Column	The range of columns that are selected is indicated by the two sets of coordinates, the first set of coordinates being the starting column and the second set of coordinates being the ending column. The -1 indicates all the rows in that column. If only one column is

	selected, both beginning and ending column coordinates are the same.
Row	The range of rows that are selected is indicated by the two sets of coordinates, the first set of coordinates being the starting row and the second set of coordinates being the ending row. The -1 indicates all the columns in that row. If only one row is selected, both beginning and ending row coordinates are the same.
Sheet	The name of the sheet indicates which sheet is selected. (You cannot select more than one sheet in the Spread Designer.) If you select all the cells in a sheet by selecting the sheet corner cell, the coordinates (-1,-1)(-1,-1) indicate all the cells have been selected in all rows and all columns.
Spread	Simply the word "Spread" indicating the entire Spread component.

For more information about selecting items, refer to **Selecting an Item in the Spread Designer**

Spread Designer Dialogs

The dialog boxes of the Spread Designer provide a quick way of setting properties and customizing your Spread component. There are settings dialogs that are available from the menus and design properties.

For more information on the individual dialog boxes, refer to the detailed description of each.

- **Cell Type Dialog**
- **Conditional Formatting Dialog**
- **Custom File Options Dialog**
- **Go To Cell Dialog**
- **Name Manager Dialog**
- **Row Height or Column Width Dialog**
- **Row or Column Insert or Delete Dialogs**
- **Shape Properties Dialog**
- **Shape Shadow Properties Dialog**
- **Sheet Settings Dialog**
- **Sheet Print Settings Dialog**
- **Sort Dialog**
- **Spread Settings Dialog**
- **Unhide Specific Row or Column Dialogs**
- **Zoom Dialog**

For a list of editor dialogs, see the **Spread Designer Editors**.

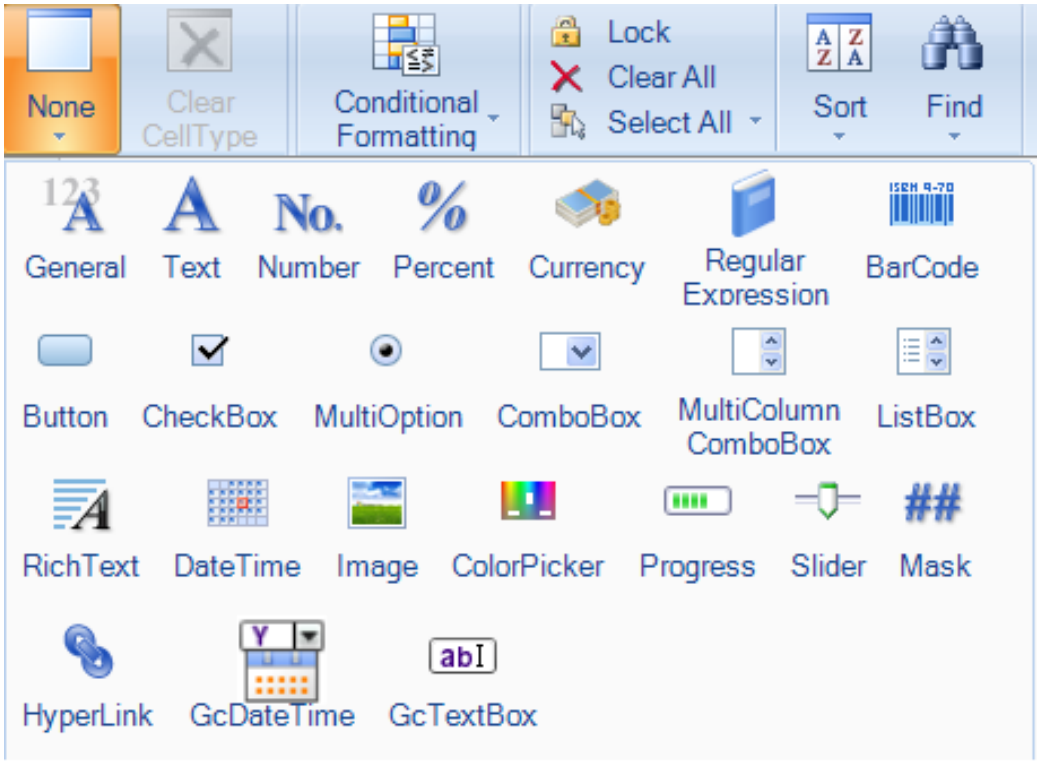
Cell Type Dialog

You can customize the settings of the cell type using the **Cell Type** dialog of the Spread Designer. Each cell type has a separate tab in this dialog with its own group of settings particular to that cell type. To change the settings, simply click in the edit fields or select the choices. To select another cell type, simply select that cell type from the drop-down list at the top of the dialog.

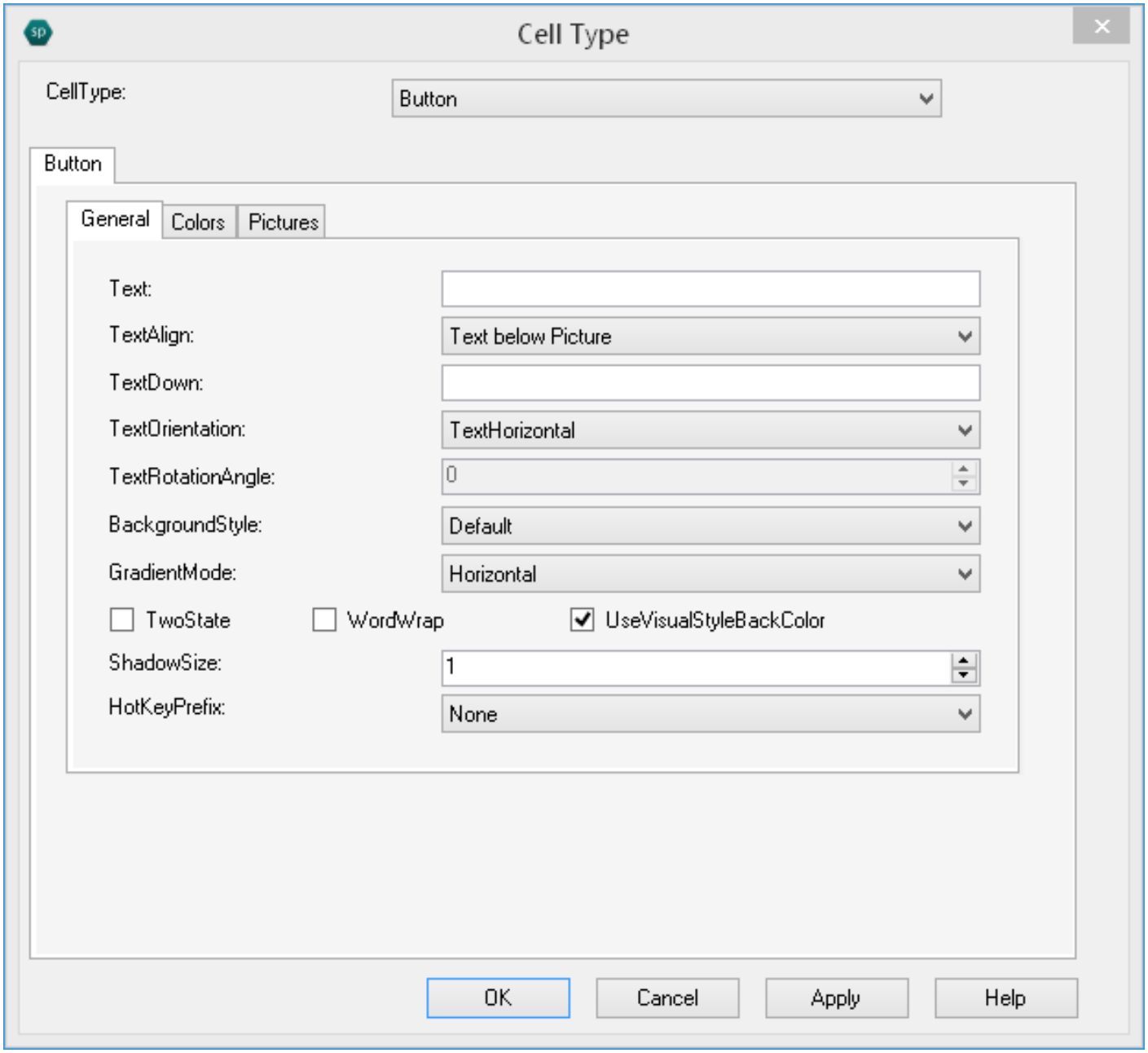
If you have more than one cell selected, the dialog box shows only settings that are common to all the cells selected. So if you have one parameter set for one cell but another setting for other cells, then the setting does not appear in the dialog.

To open this dialog in the Spread Designer, click on a particular cell type icon in the **Cell Types** option in the **Home** menu, or select cells in the data area of the spreadsheet, right click, and select **Cell Type** from the context menu.

This image displays the **Cell Type** dialog from the **Home** menu.



This image displays the **Cell Type** dialog from the context menu.



For more information on the individual settings, refer to **Customizing Interaction with Cell Types (on-line documentation)**. For more information on how to set properties of cell types in code, refer to the **FarPoint.Win.Spread.CellType ('FarPoint.Win.Spread.CellType Namespace' in the on-line documentation)** namespace.

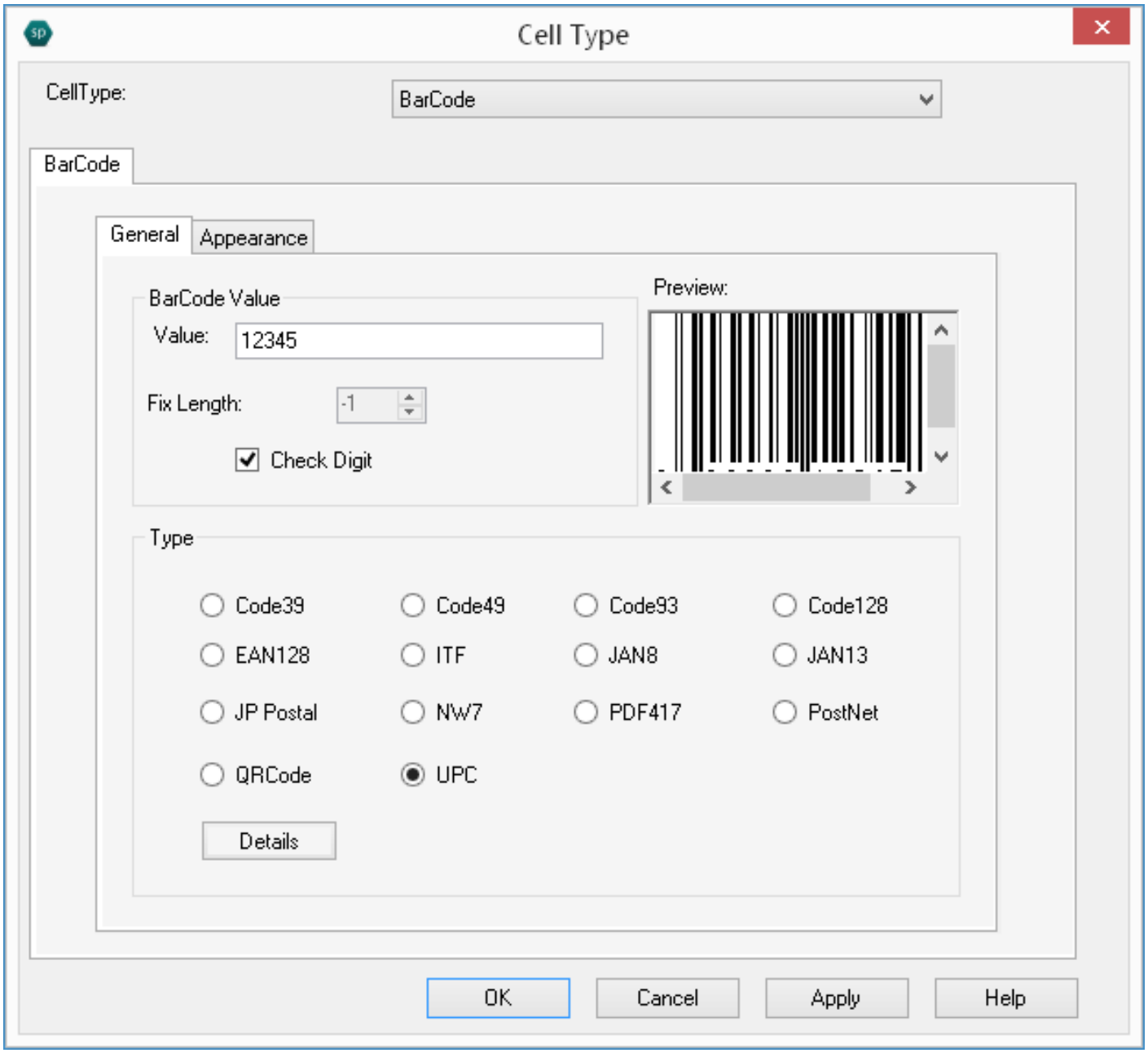
If you have a question about a particular cell type, refer to the topic about that tab. This dialog has the following tabs corresponding to the available cell types:

- **BarCode Tab**
- **Button Tab**
- **Check Box Tab**
- **Color Picker Tab**

- **Combo Box Tab**
- **Currency Tab**
- **Date-Time Tab**
- **General Tab**
- **Background Tab**
- **GcDateTime Tab**
- **GcTextBox Tab**
- **Hyperlink Tab**
- **Image Tab**
- **Label Tab**
- **ListBox Tab**
- **Mask Tab**
- **MultiColumnComboBox Tab**
- **MultiOption Tab**
- **Number Tab**
- **Percent Tab**
- **Progress Tab**
- **Regular Expression Tab**
- **Rich Text Tab**
- **Slider Tab**
- **Text Tab**

BarCode Tab

The **Barcode** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the bar code cell type that can be applied to cells. These are organized on the **General** and **Appearance** sub-tabs.

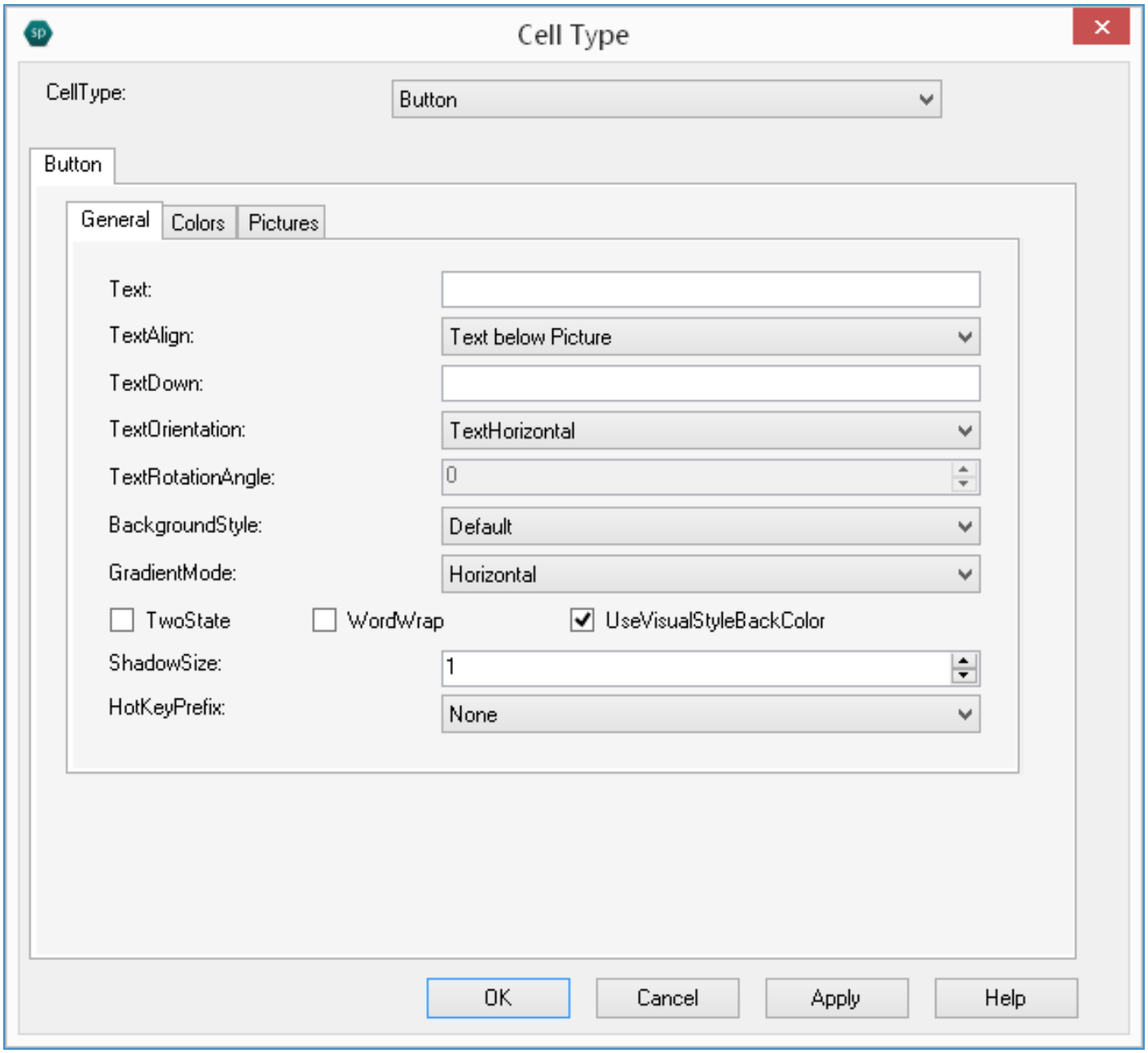


For information on the individual properties, refer to the **BarCodeCellType ('BarCodeCellType Class' in the on-line documentation)** class in the Assembly Reference.

For more information on the button cell type, refer to **Setting a Barcode Cell (on-line documentation)** in the Developer's Guide.

Button Tab

The **Button** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the button cell type that can be applied to cells. These are organized onto the **General**, **Color**, and **Picture** sub-tabs of the **Button** tab.

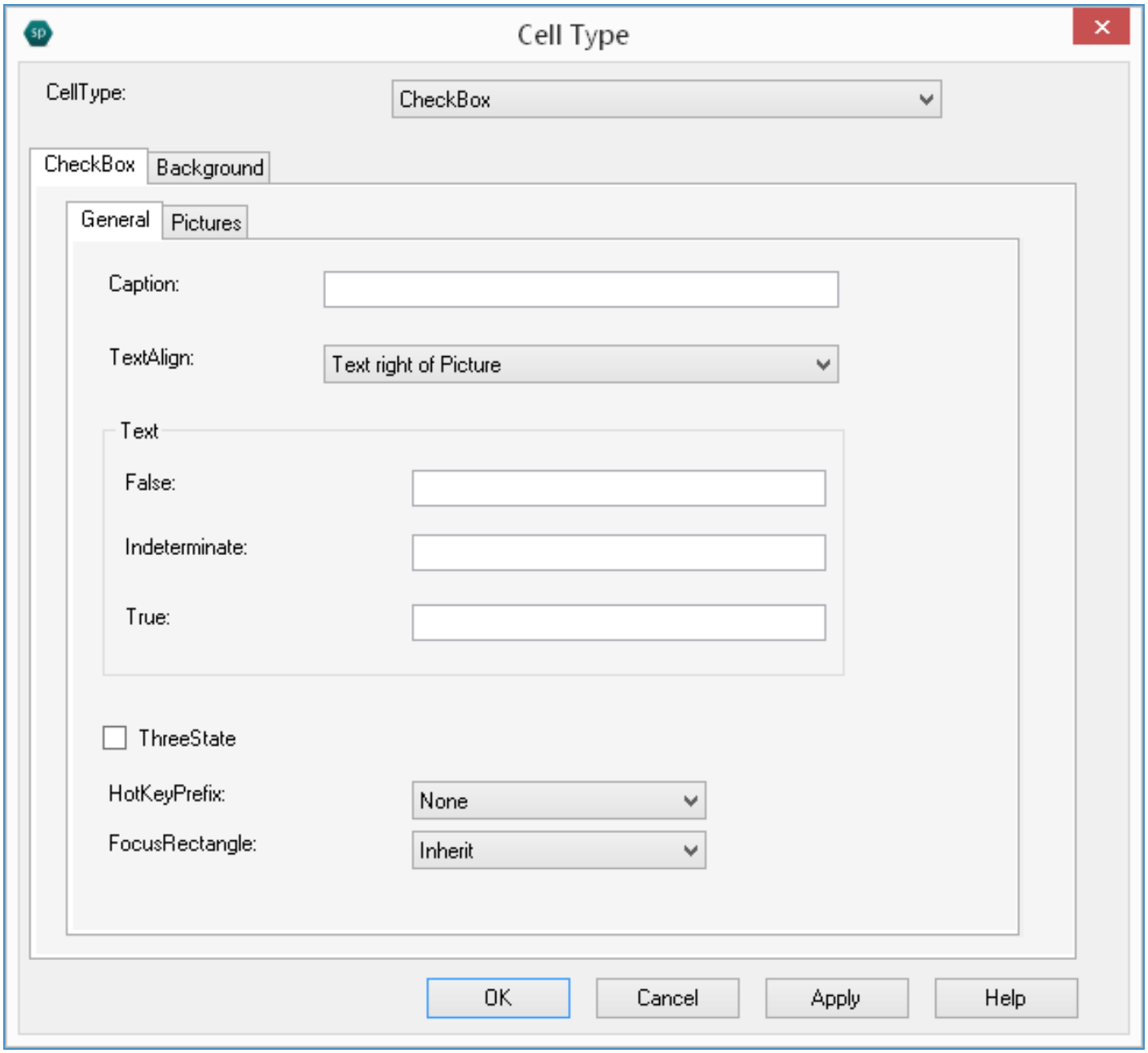


For information on the individual properties, refer to the **ButtonCellType ('ButtonCellType Class' in the on-line documentation)** class in the Assembly Reference.

For more information on the button cell type, refer to **Setting a Button Cell (on-line documentation)** in the Developer's Guide.

Check Box Tab

The **Check Box** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the check box cell type that can be applied to cells.



For information on the individual properties, refer to the **CheckBoxCellType ('CheckBoxCellType Class' in the on-line documentation)** class in the Assembly Reference.

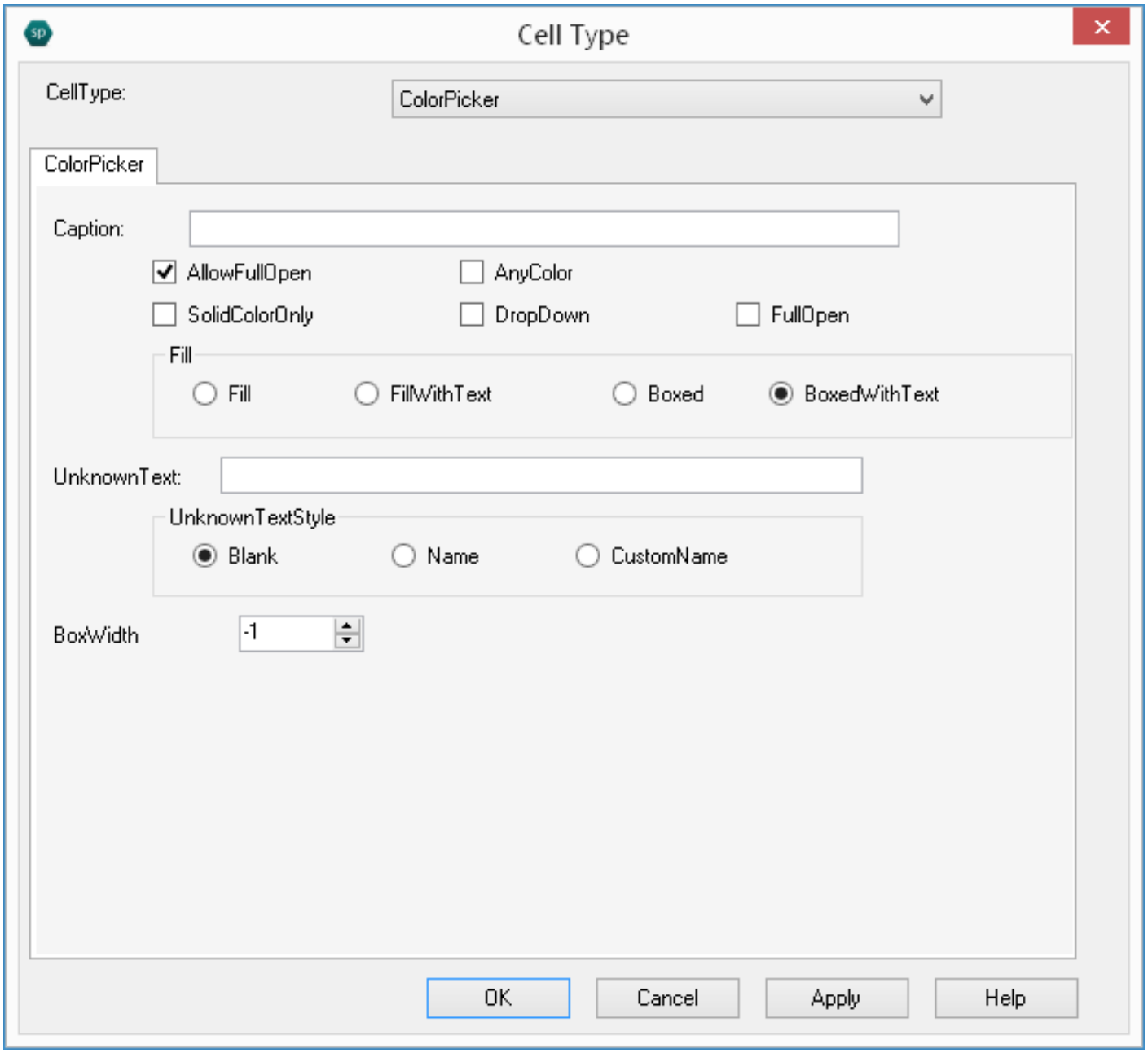
For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the check box cell type, refer to **Setting a Check Box Cell (on-line documentation)** in the Developer's Guide.

Color Picker Tab

The **Color Picker** tab of the **Cell Type** dialog in the Spread Designer contains the settings for

customizing the color picker cell type that can be applied to cells.

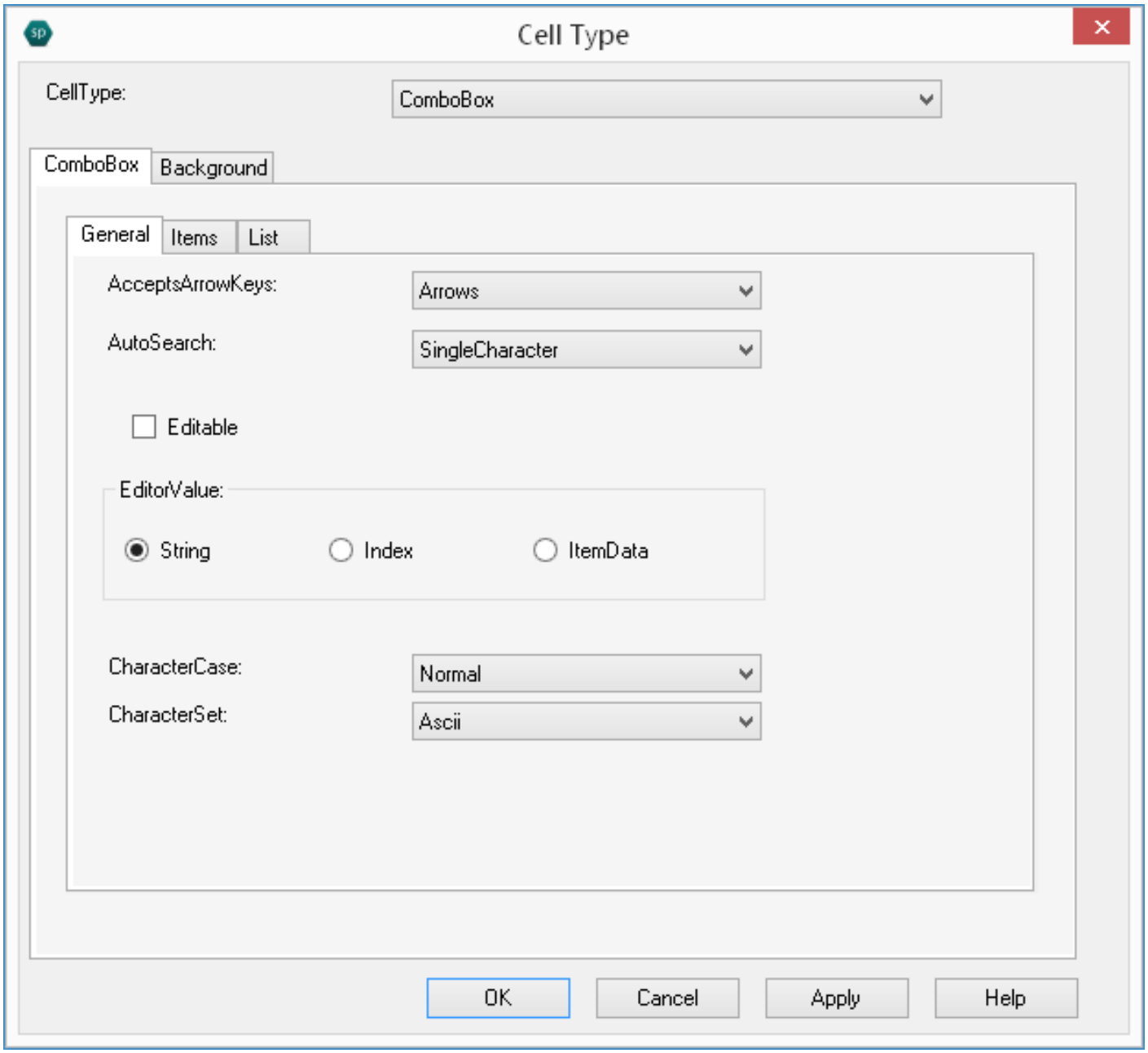


For information on the individual properties, refer to the **ColorPickerCellType ('ColorPickerCellType Class' in the on-line documentation)** class in the Assembly Reference.

For more information on the check box cell type, refer to **Setting a Color Picker Cell (on-line documentation)** in the Developer's Guide.

Combo Box Tab

The **Combo Box** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the button cell type that can be applied to cells.



For information on the individual properties, refer to the **ComboBoxCellType ('ComboBoxCellType Class' in the on-line documentation)** class in the Assembly Reference.

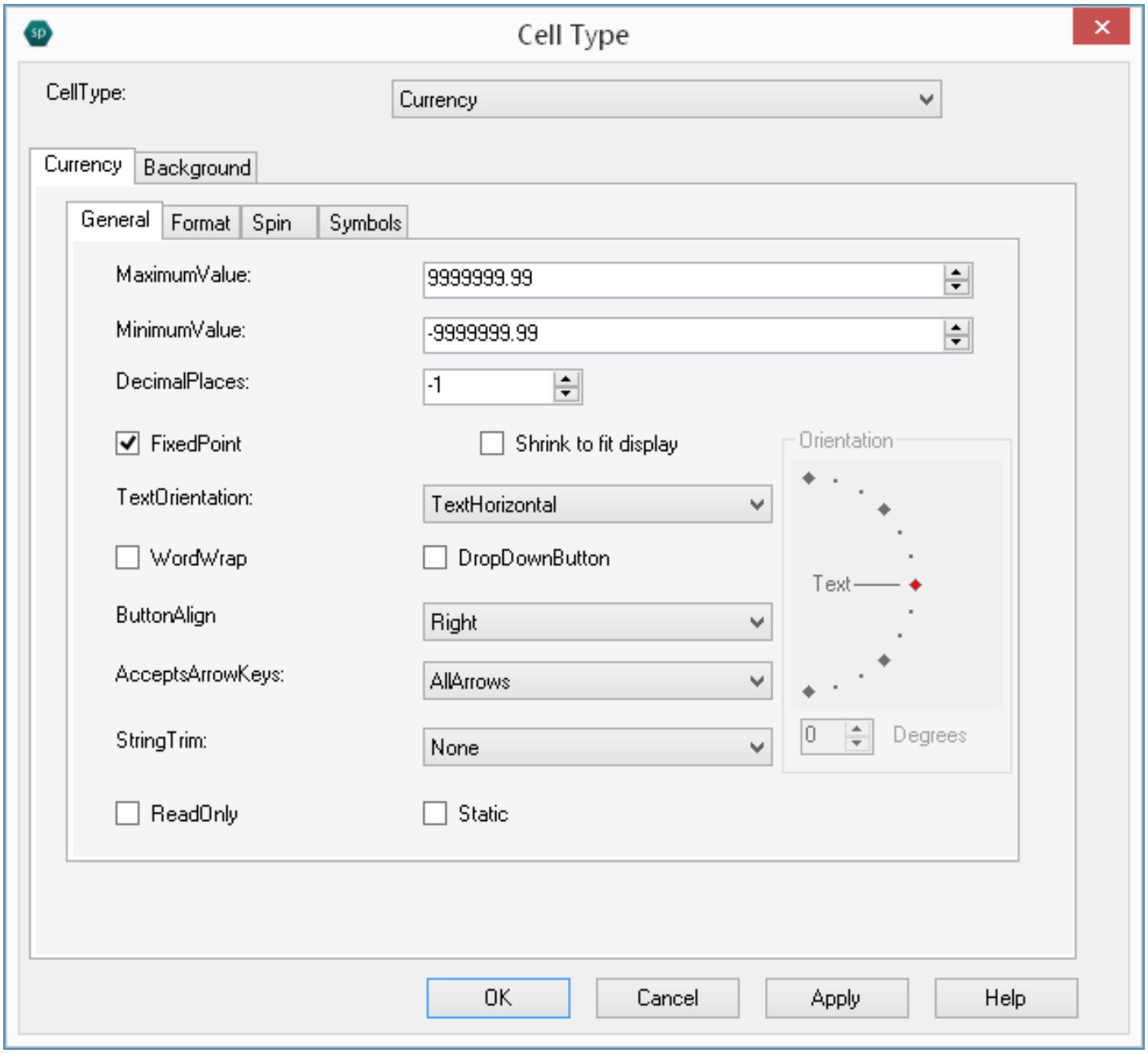
For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the combo cell type, refer to **Setting a Combo Box Cell (on-line documentation)** in the Developer's Guide.

Currency Tab

The **Currency** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing

the currency cell type that can be applied to cells.

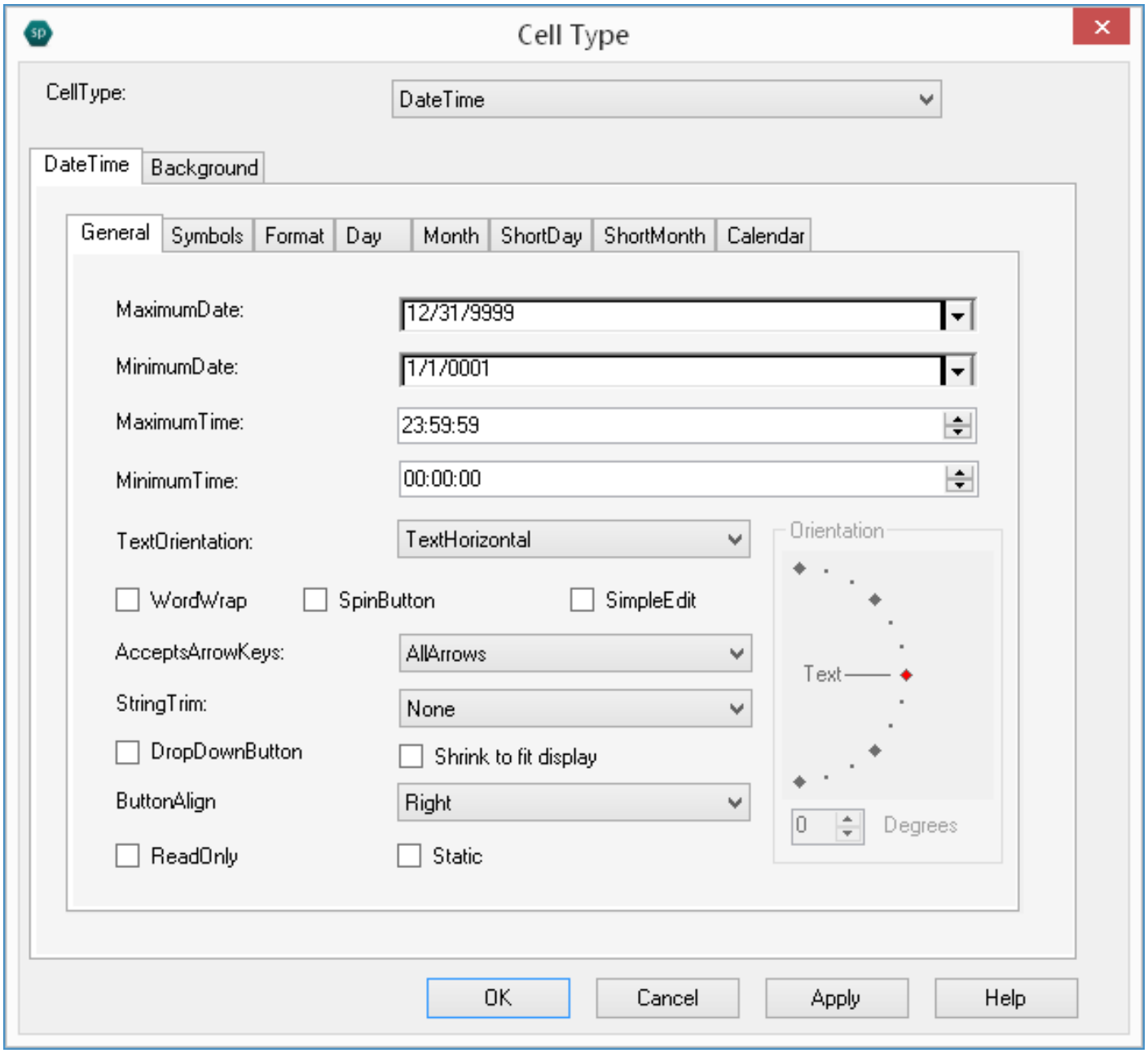


For information on the individual properties, refer to the **CurrencyCellType ('CurrencyCellType Class' in the on-line documentation)** class in the Assembly Reference.

For more information on the currency cell type, refer to **Setting a Currency Cell (on-line documentation)** in the Developer's Guide.

Date-Time Tab

The **DateTime** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the date-time cell type that can be applied to cells.



For information on the individual properties, refer to the **DateTimeCellType ('DateTimeCellType Class' in the on-line documentation)** class in the Assembly Reference.

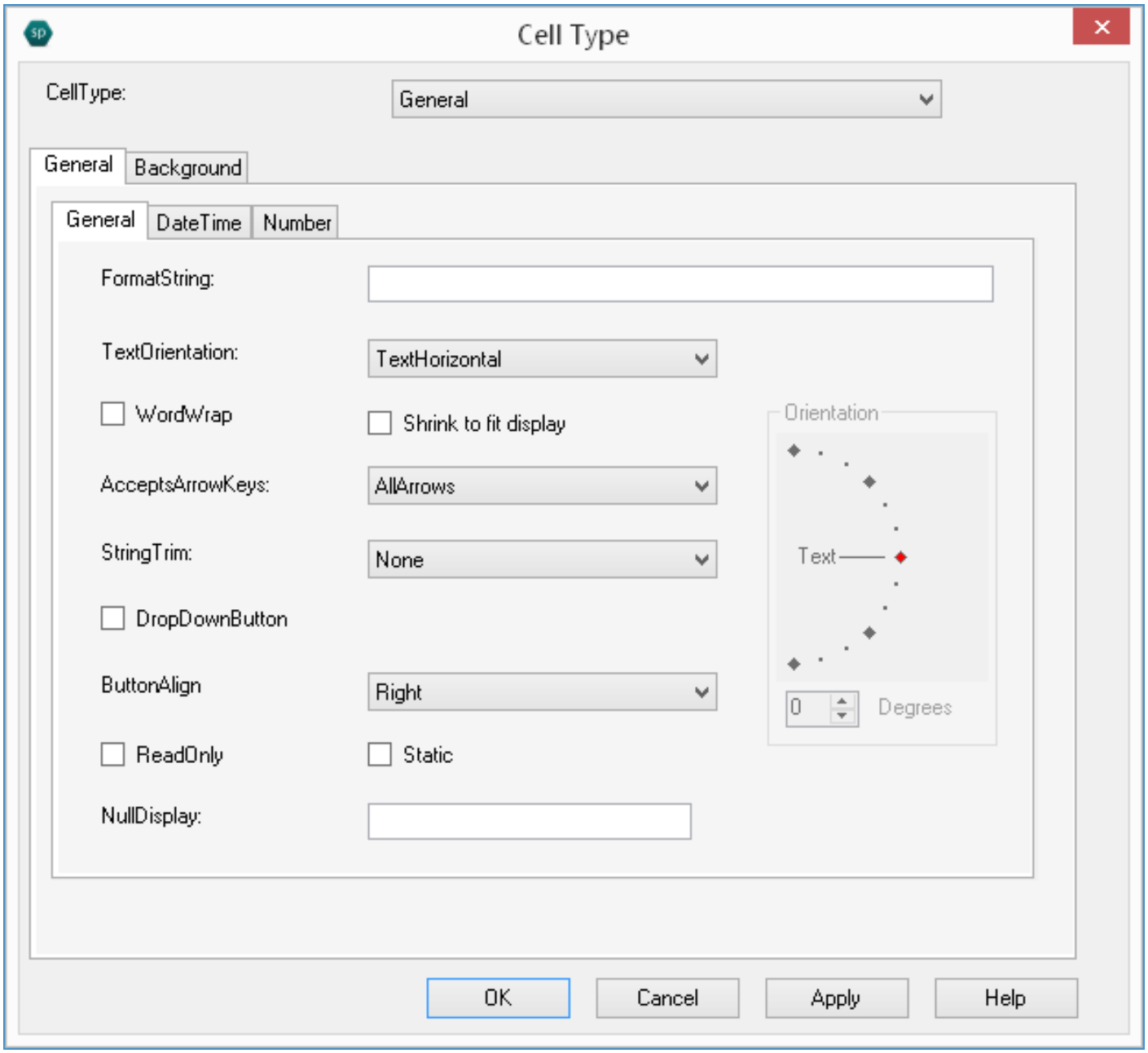
For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the date-time cell type, refer to **Setting a Date-Time Cell (on-line documentation)** in the Developer's Guide.

General Tab

The **General** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the

general (or generic) cell type that can be applied to cells.



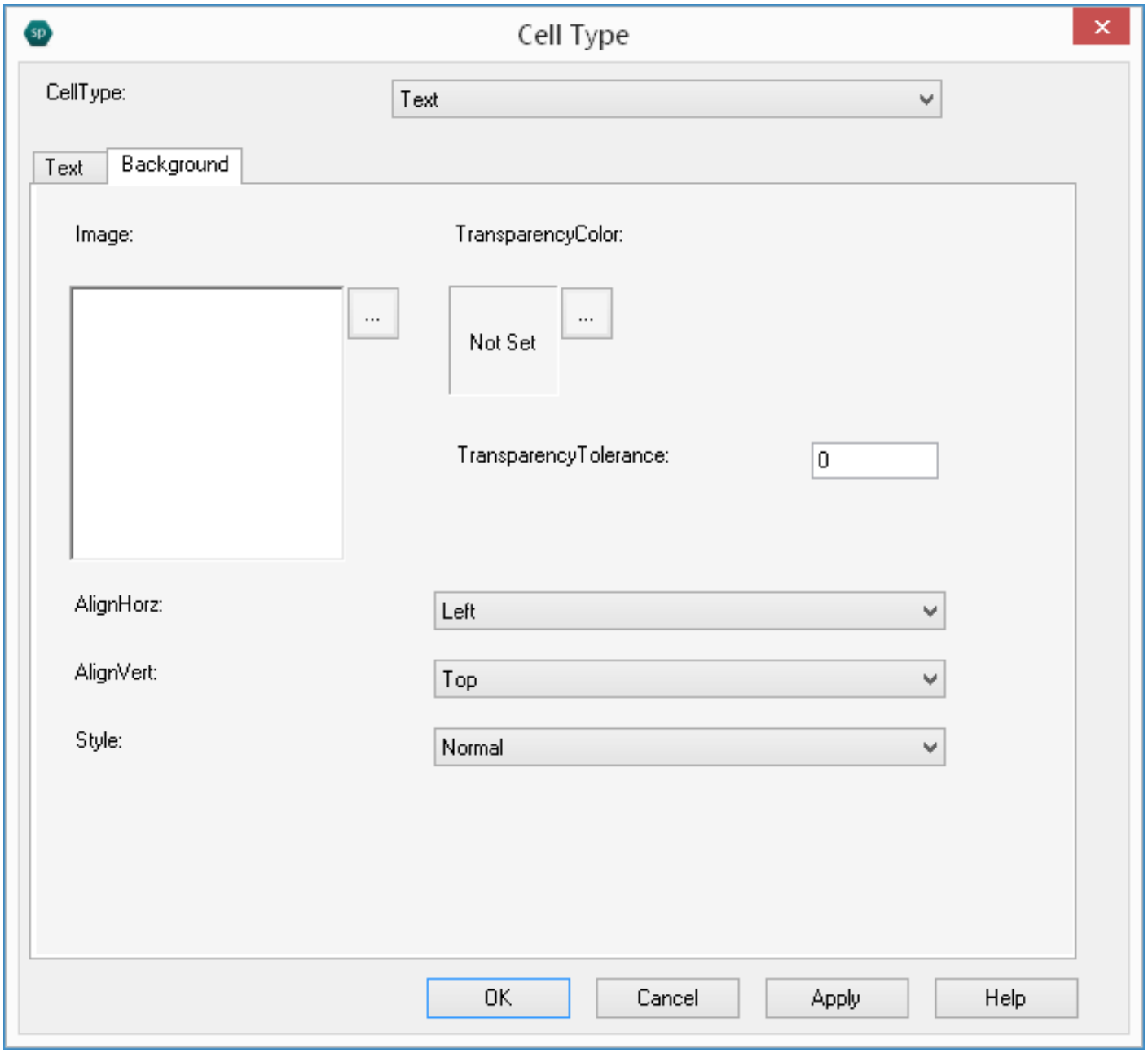
For information on the individual properties, refer to the **GeneralCellType ('GeneralCellType Class' in the on-line documentation)** class in the Assembly Reference.

For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the general cell type, refer to **Setting a General Cell (on-line documentation)** in the Developer's Guide.

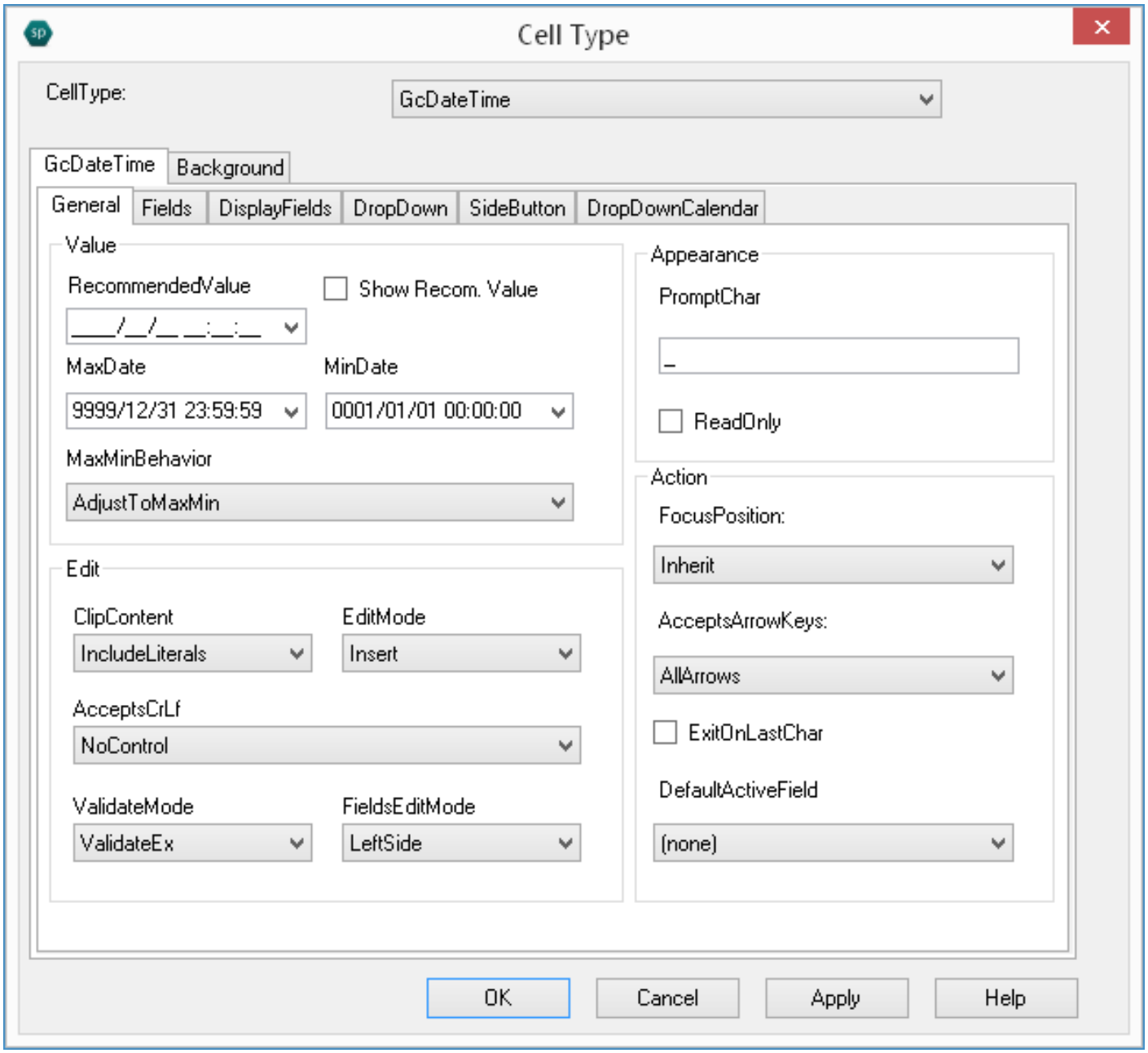
Background Tab

The **Background** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the background that can be applied to cells.



GcDateTime Tab

The **GcDateTime** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the GcDateTime cell type that can be applied to cells.

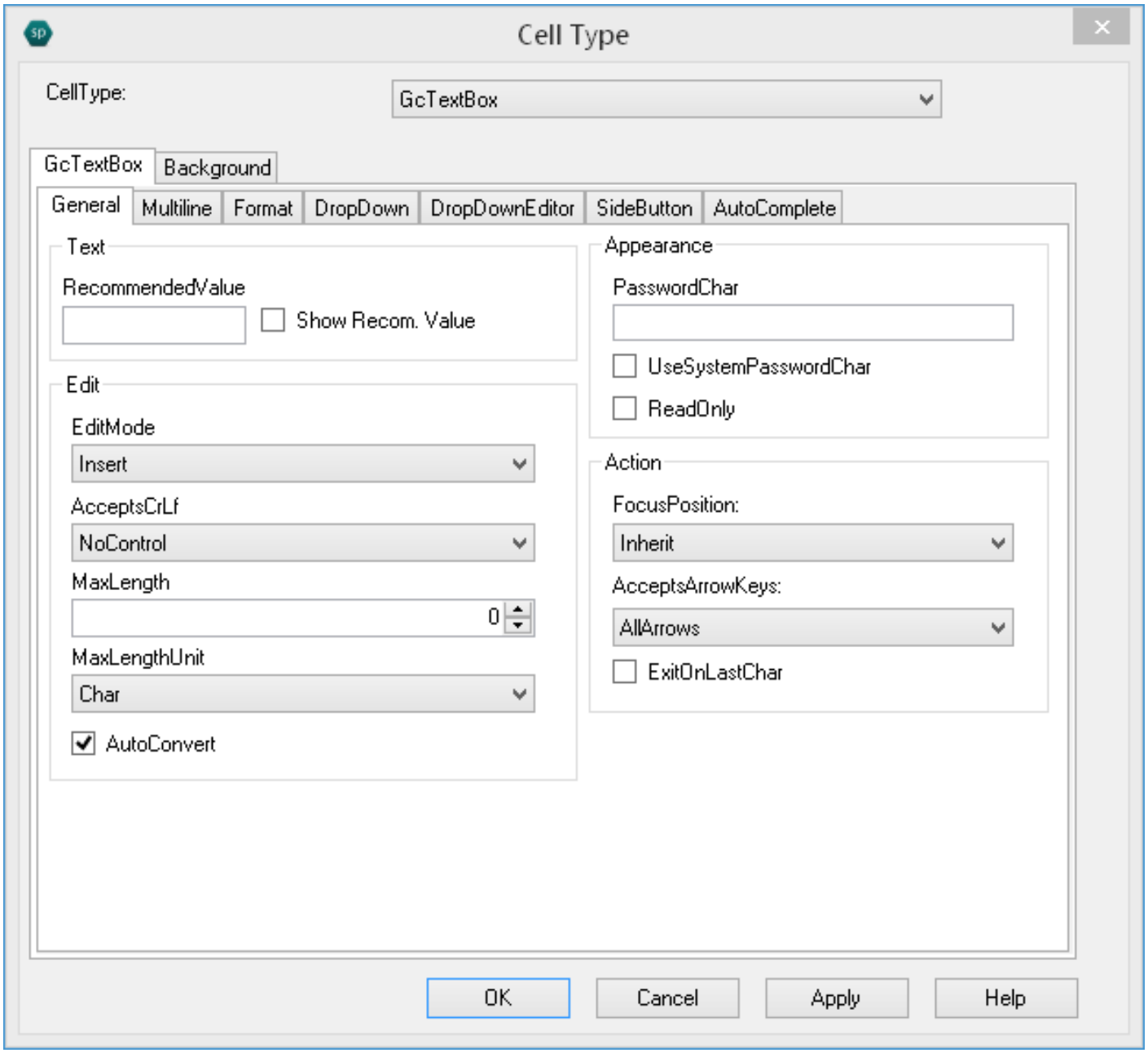


For information on the individual properties, refer to the **GcDateTimeCellType ('GcDateTimeCellType Class' in the on-line documentation)** class in the Assembly Reference.

For more information on the GcDateTime cell type, refer to **Setting a GcDateTime Cell (on-line documentation)** in the Developer's Guide.

GcTextBox Tab

The **GcTextBox** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the GcTextBox cell type that can be applied to cells.

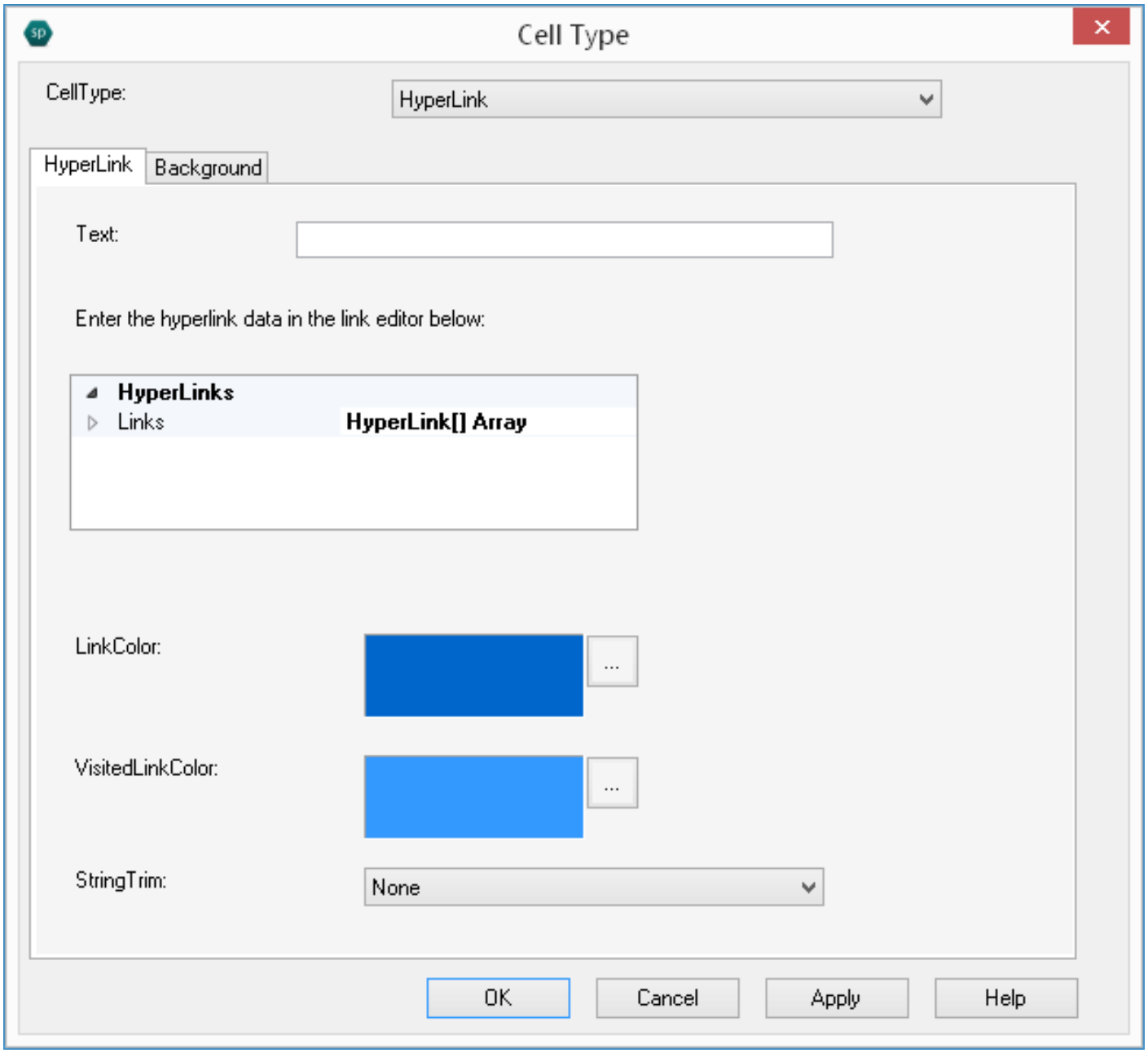


For information on the individual properties, refer to the **GcTextBoxCellType ('GcTextBoxCellType Class' in the on-line documentation)** class in the Assembly Reference.

For more information on the GcTextBox cell type, refer to **Setting a GcTextBox Cell (on-line documentation)** in the Developer's Guide.

Hyperlink Tab

The **Hyperlink** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the hyperlink cell type that can be applied to cells.



For information on the individual properties, refer to the **HyperLinkCellType ('HyperLinkCellType Class' in the on-line documentation)** class in the Assembly Reference.

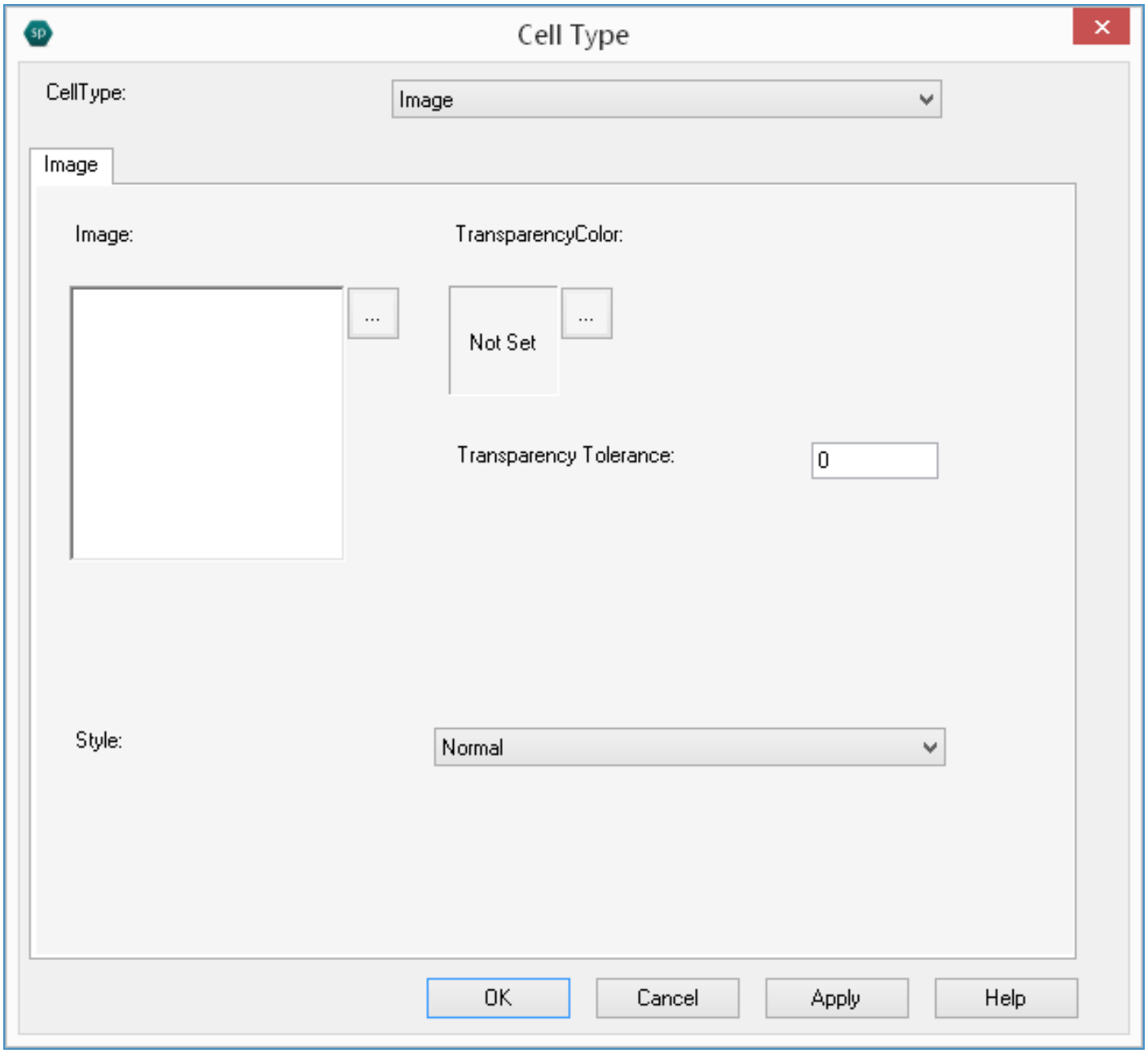
For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the hyperlink cell type, refer to **Setting a Hyperlink Cell (on-line documentation)** in the Developer's Guide.

Image Tab

The **Image** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the

image cell type that can be applied to cells

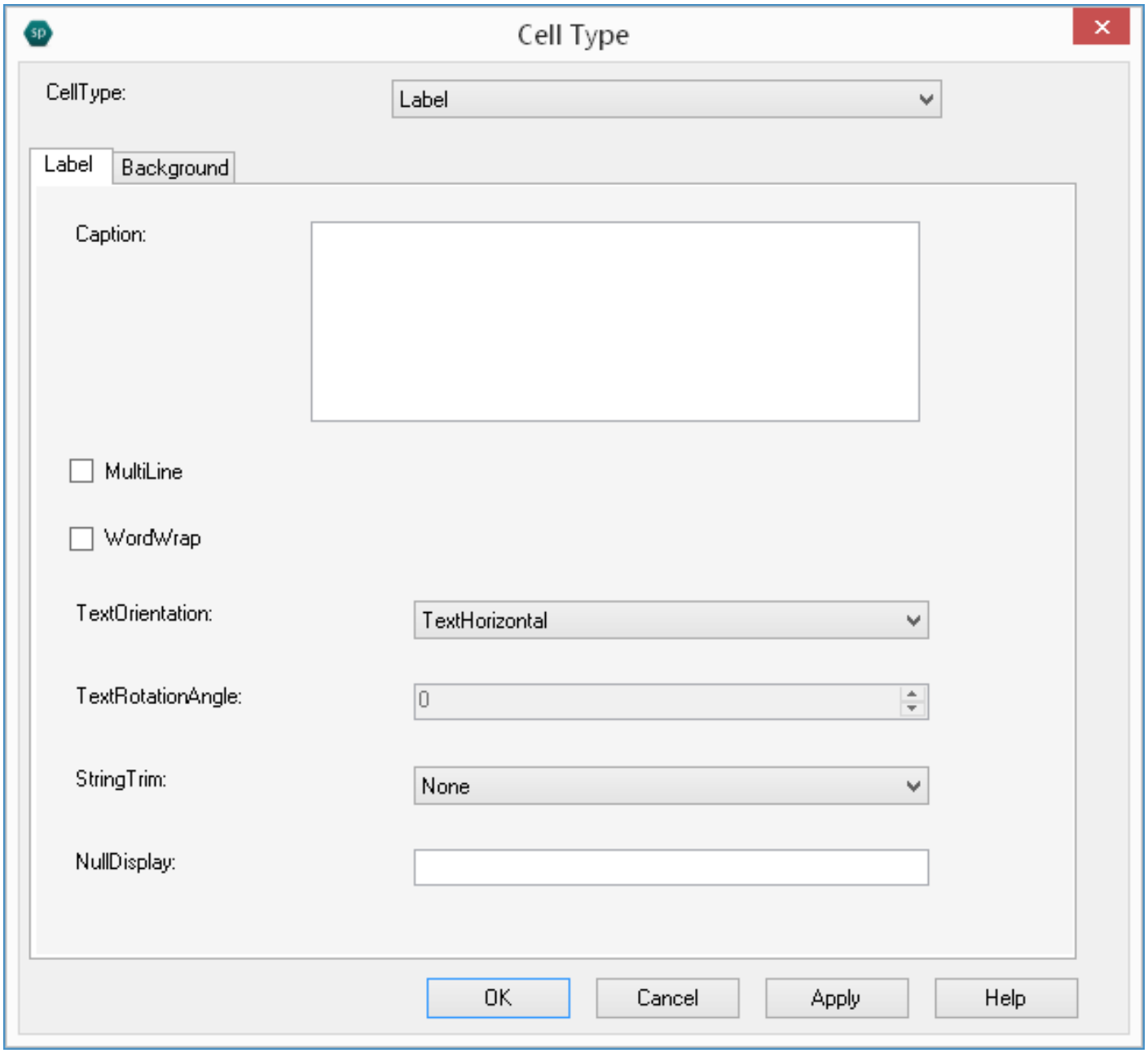


For information on the individual properties, refer to the **ImageCellType ('ImageCellType Class' in the on-line documentation)** class in the Assembly Reference.

For more information on the image cell type, refer to **Setting an Image Cell (on-line documentation)** in the Developer's Guide.

Label Tab

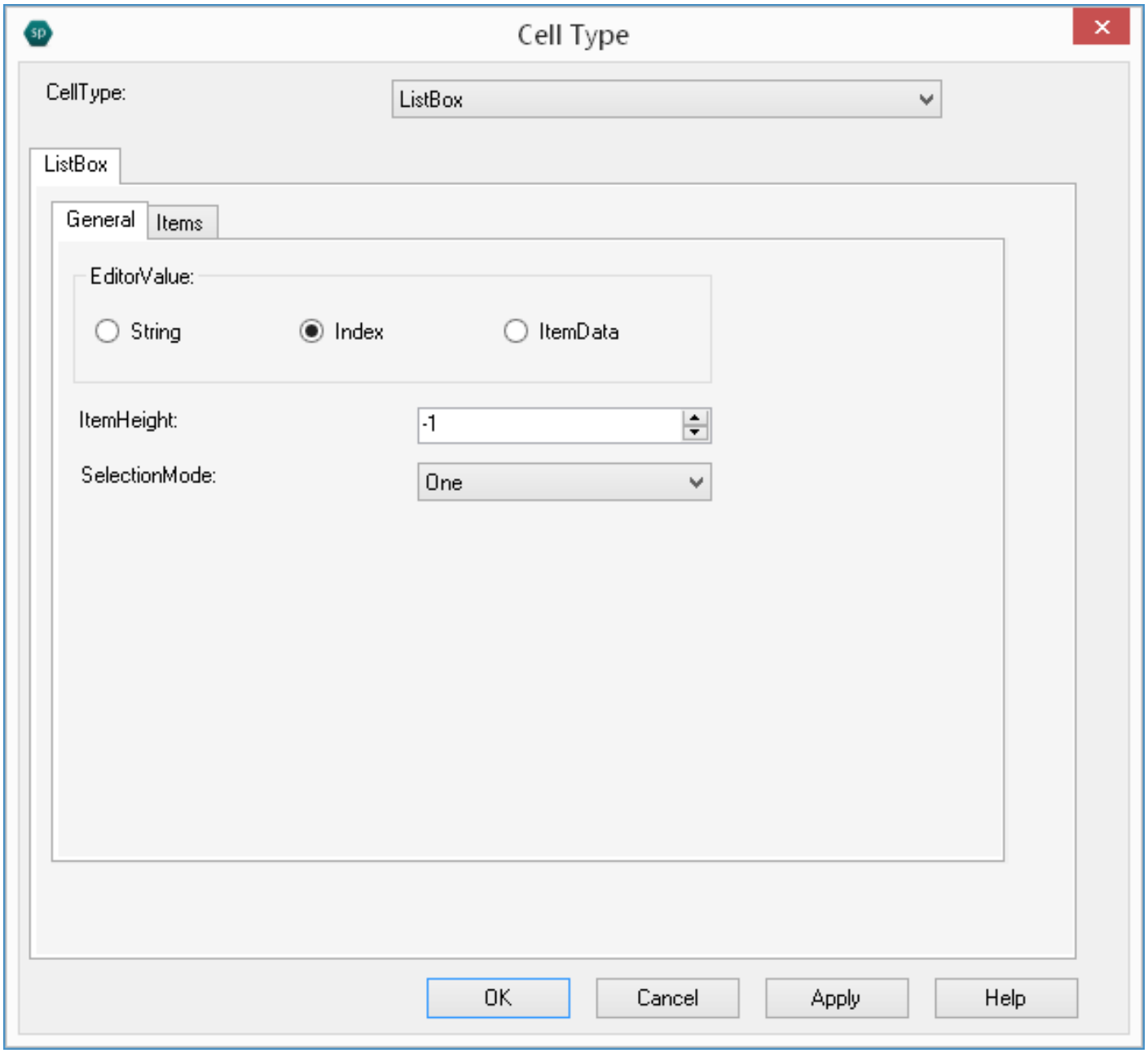
The **Label** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing an un-editable label cell type that can be applied to cells.



For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

ListBox Tab

The **ListBox** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the list box cell type that can be applied to cells.



For information on the individual properties, refer to the **ListBoxCellType Class (on-line documentation)** class in the Assembly Reference.

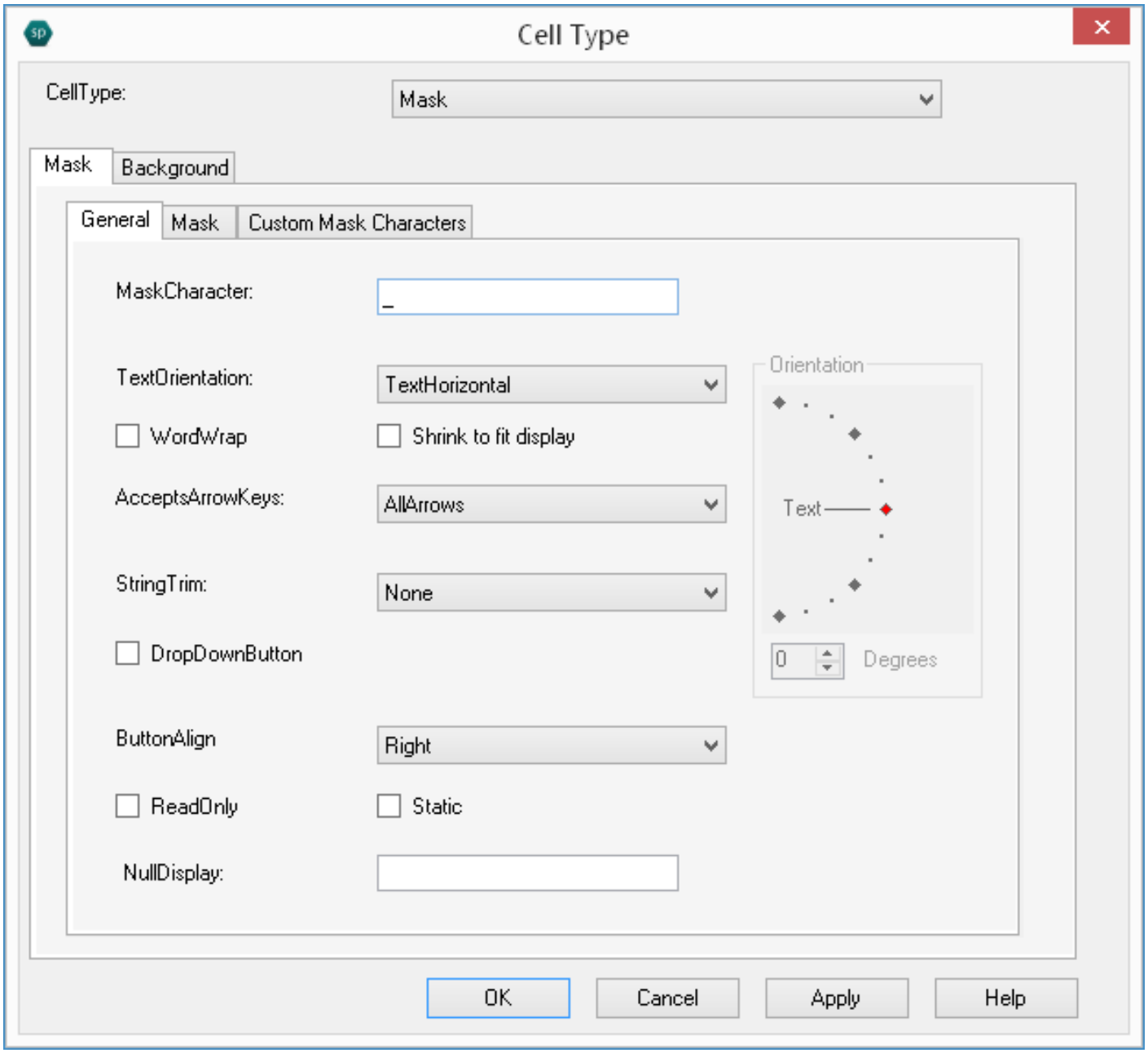
For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the list box cell type, refer to **Setting a List Box Cell (on-line documentation)** in the Developer's Guide.

Mask Tab

The **Mask** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the

mask cell type that can be applied to cells.



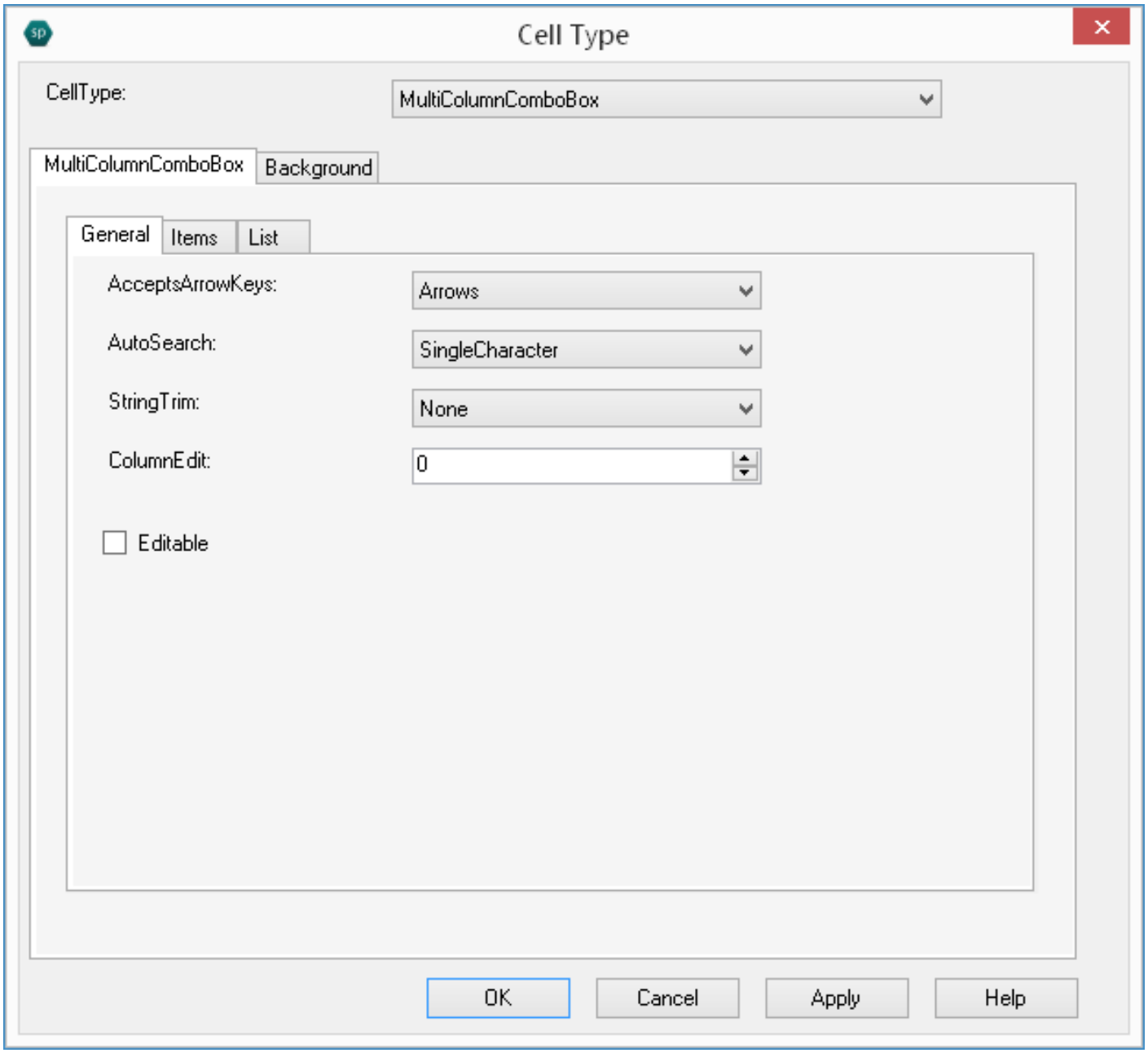
For information on the individual properties, refer to the **MaskCellType ('MaskCellType Class' in the on-line documentation)** class in the Assembly Reference.

For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the mask cell type, refer to **Setting a Mask Cell (on-line documentation)** in the Developer's Guide.

MultiColumnComboBox Tab

The **MultiColumnComboBox** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the multiple-column combo box cell type that can be applied to cells.



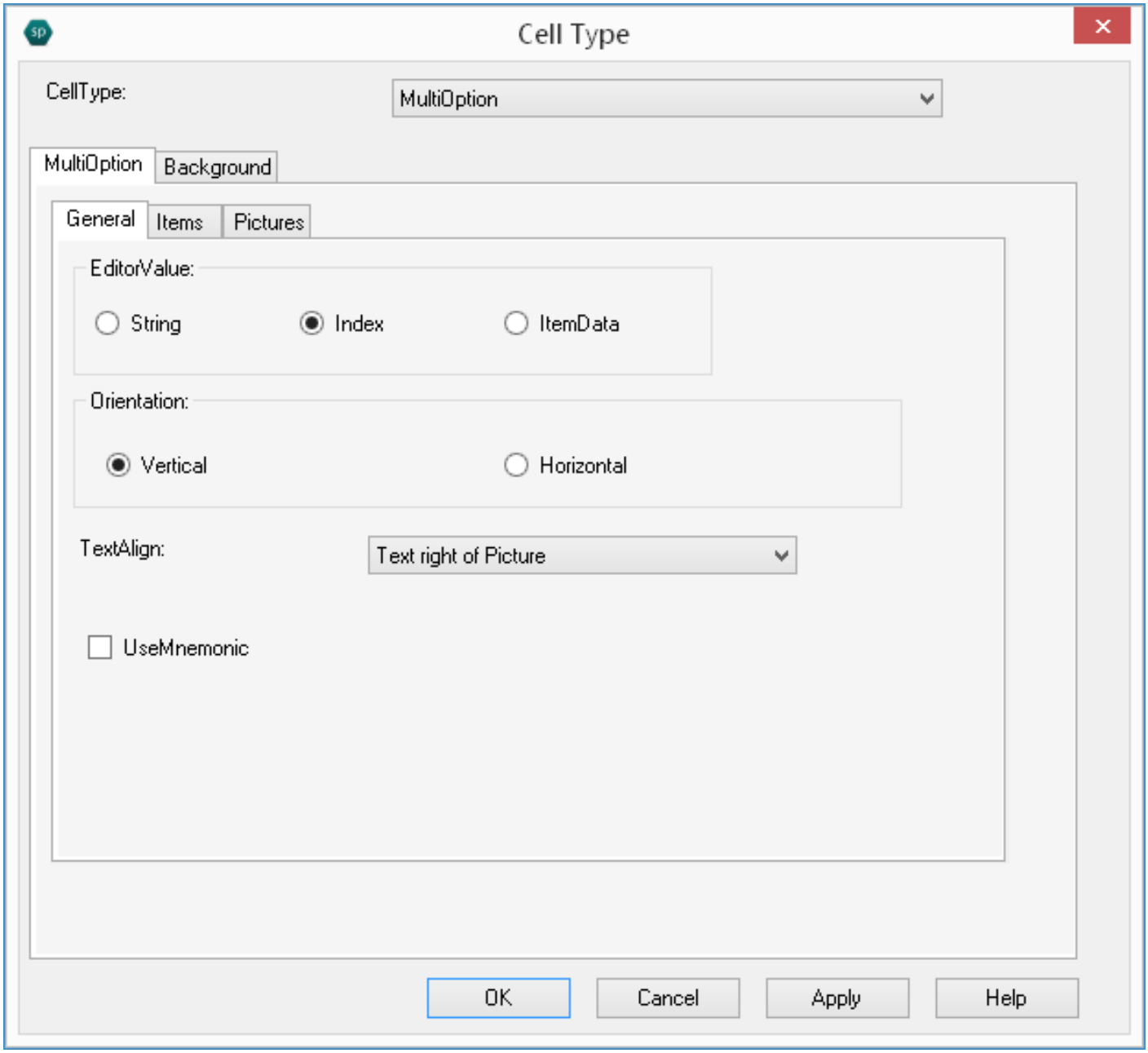
For information on the individual properties, refer to the **MultiColumnComboBoxCellType ('MultiColumnComboBoxCellType Class' in the on-line documentation)** class in the Assembly Reference.

For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the multi-column combo cell type, refer to **Setting a Multiple-Column Combo Box Cell (on-line documentation)** in the Developer's Guide.

MultiOption Tab

The **MultiOption** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the multiple option cell type that can be applied to cells.



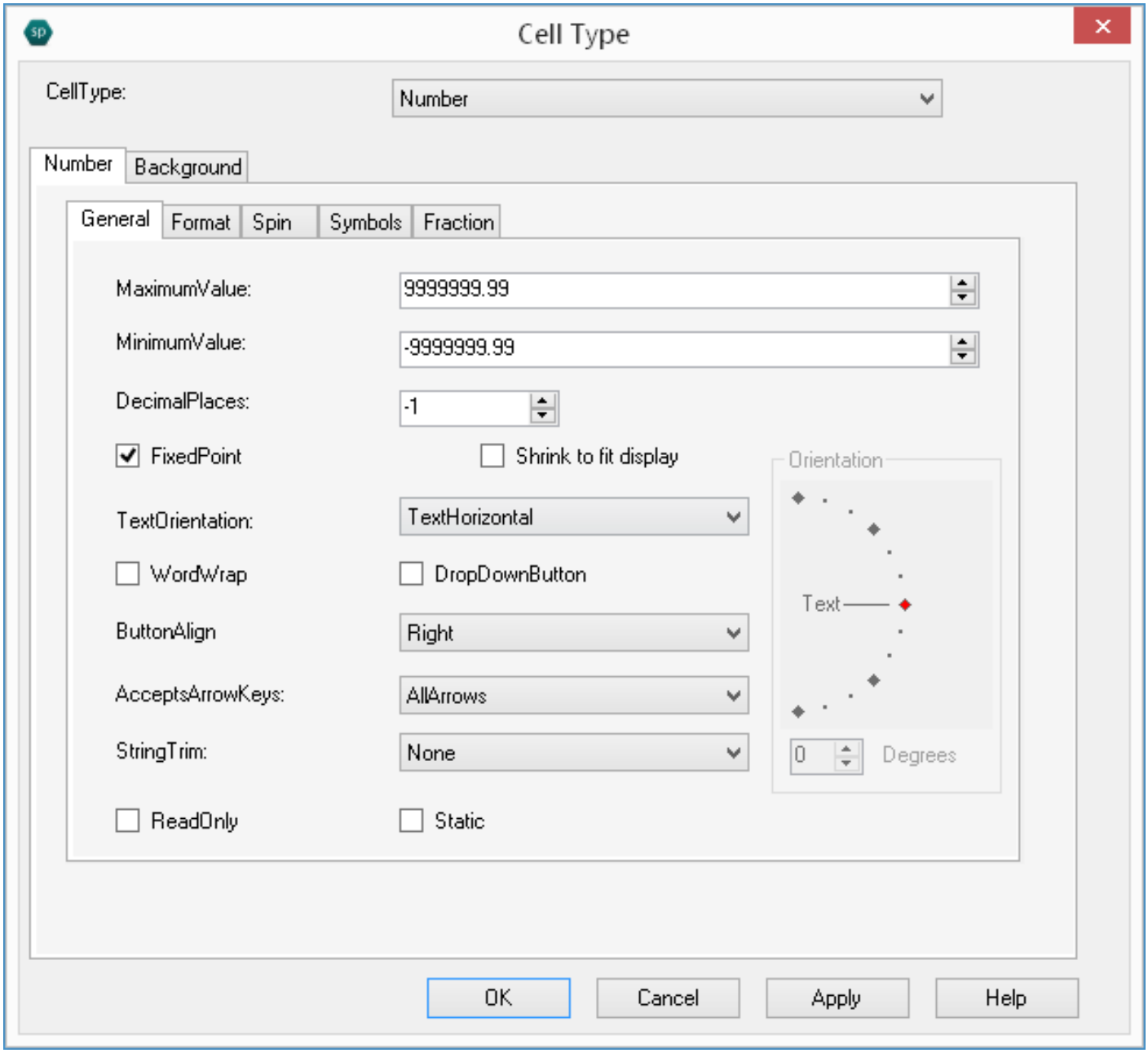
For information on the individual properties, refer to the **MultiOptionCellType ('MultiOptionCellType Class' in the on-line documentation)** class in the Assembly Reference.

For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the multiple option cell type, refer to **Setting a Multiple Option Cell (on-line documentation)** in the Developer's Guide.

Number Tab

The **Number** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the number cell type that can be applied to cells.

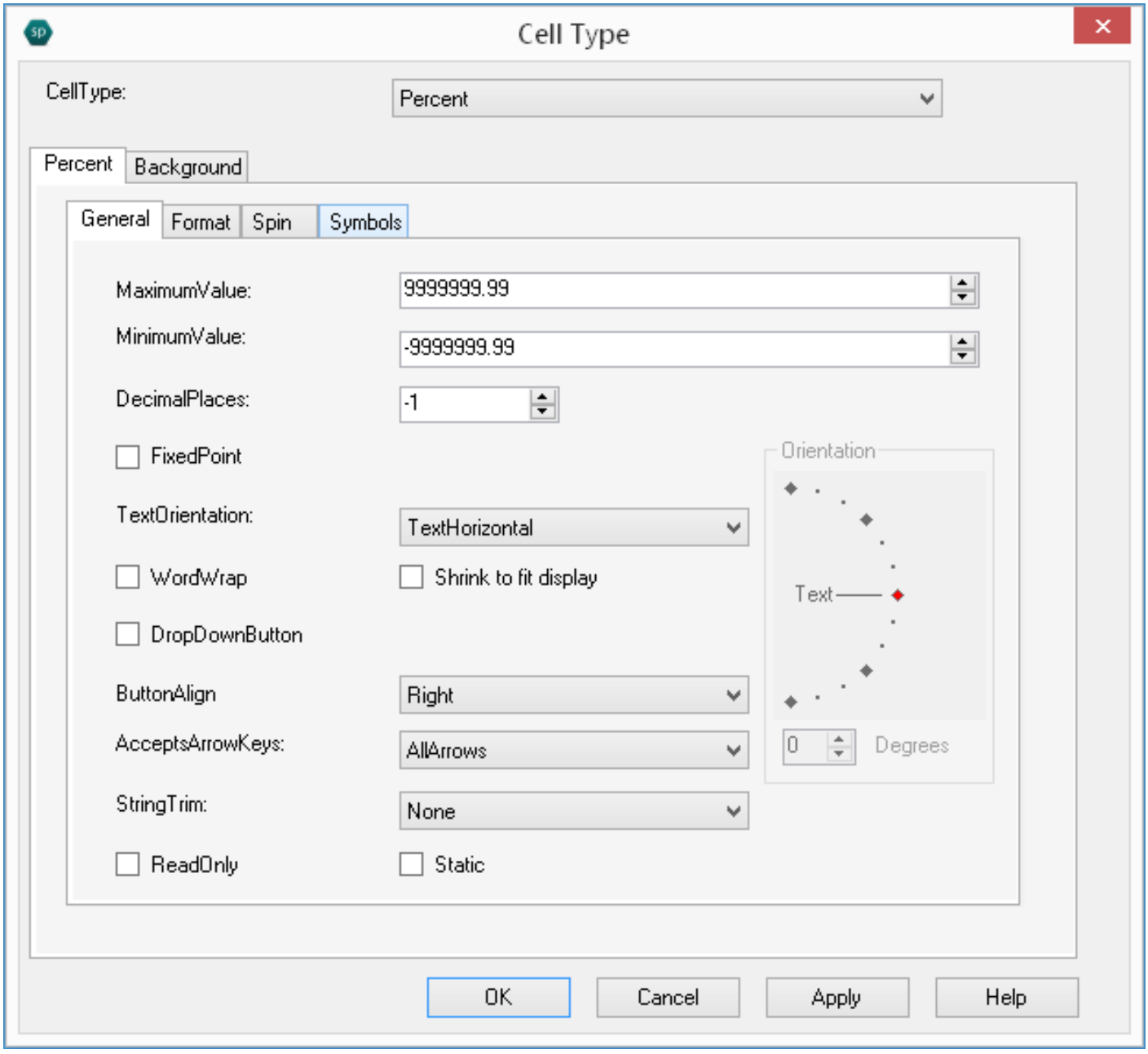


For information on the individual properties, refer to the **NumberCellType ('NumberCellType Class' in the on-line documentation)** class in the Assembly Reference.

For more information on the number cell type, refer to **Setting a Number Cell (on-line documentation)** in the Developer's Guide.

Percent Tab

The **Percent** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the percent cell type that can be applied to cells.



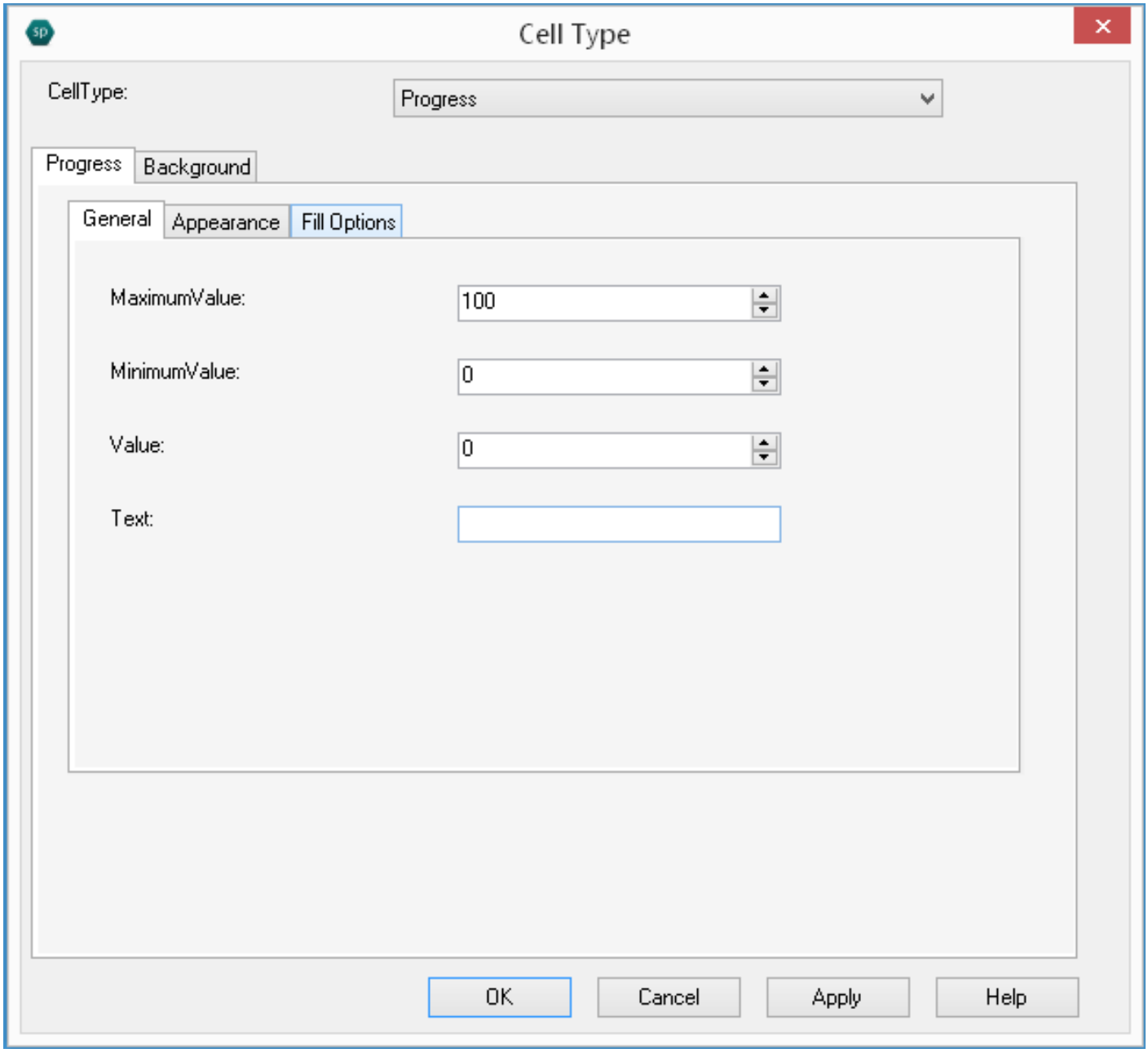
For information on the individual properties, refer to the **PercentCellType ('PercentCellType Class' in the on-line documentation)** class in the Assembly Reference.

For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the percent cell type, refer to **Setting a Percent Cell (on-line documentation)** in the Developer's Guide.

Progress Tab

The **Progress** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the progress indicator cell type that can be applied to cells.



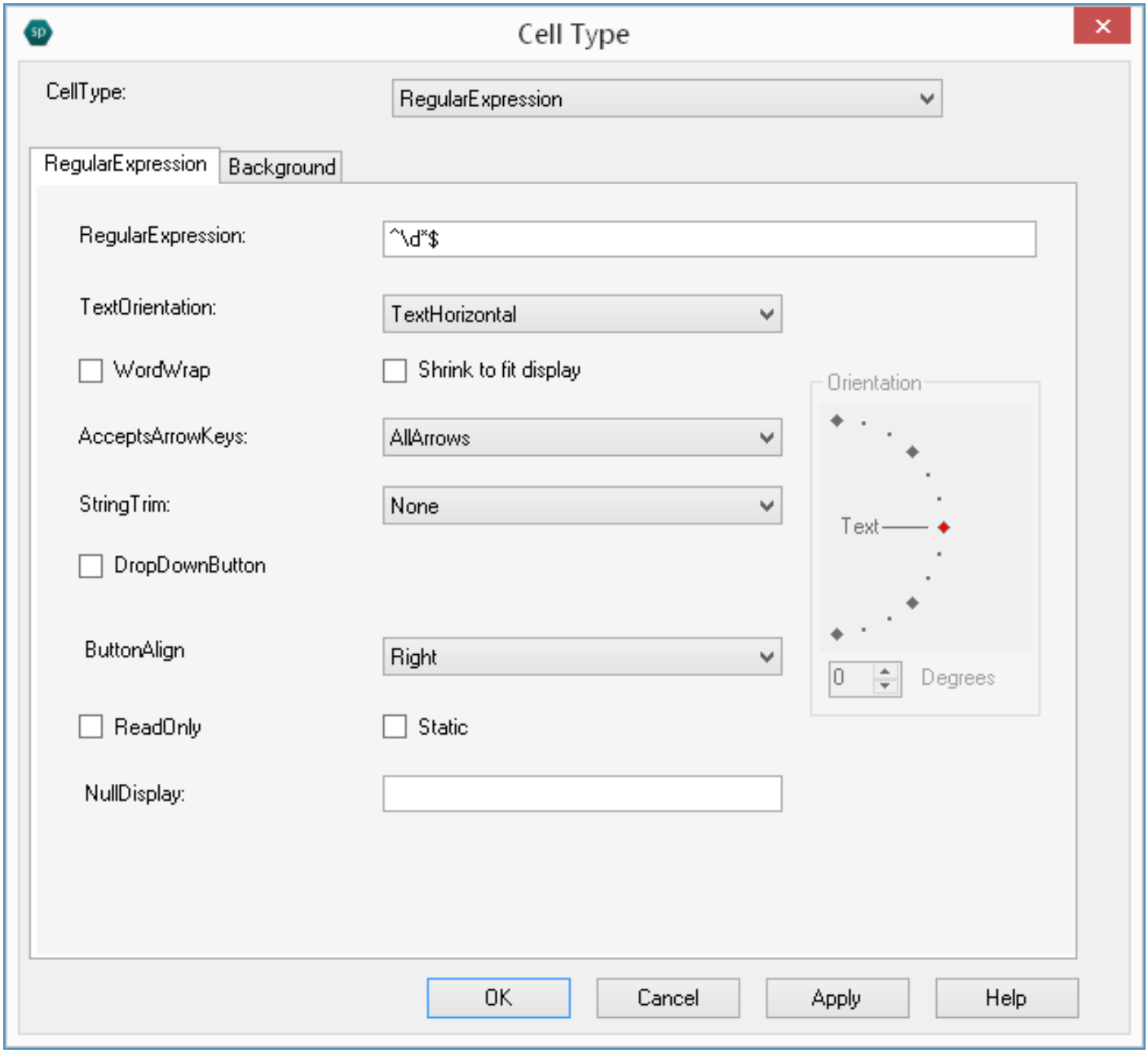
For information on the individual properties, refer to the **ProgressCellType ('ProgressCellType Class' in the on-line documentation)** class in the Assembly Reference.

For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the progress cell type, refer to **Setting a Progress Indicator Cell (on-line documentation)** in the Developer's Guide.

Regular Expression Tab

The **RegularExpression** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the regular expression cell type that can be applied to cells.



For information on the individual properties, refer to the **RegularExpressionCellType ('RegularExpressionCellType Class' in the on-line documentation)** class in the Assembly Reference.

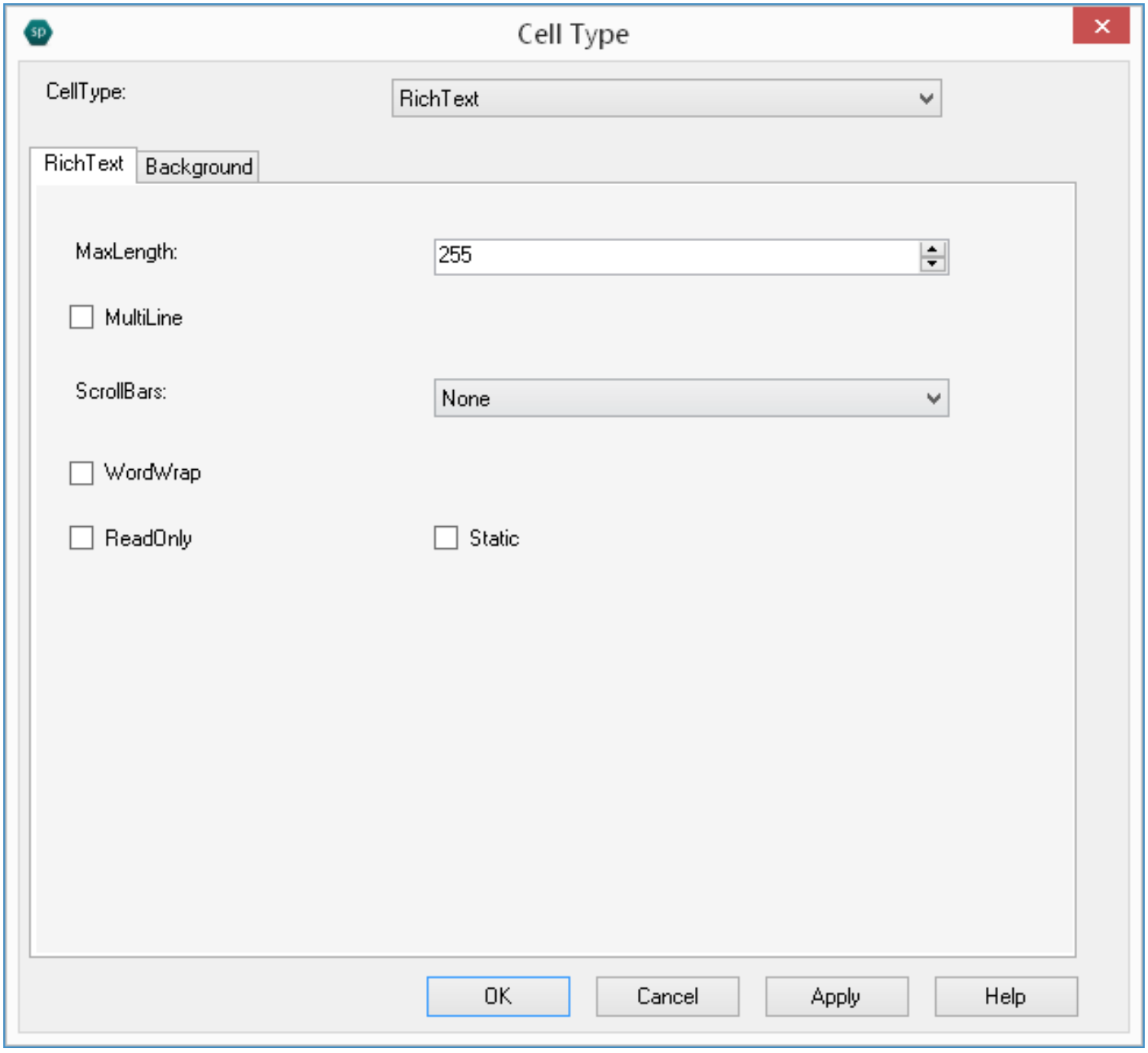
For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the regular expression cell type, refer to **Setting a Regular Expression Cell**

(on-line documentation) in the Developer's Guide.

Rich Text Tab

The **Rich Text** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the rich text cell type that can be applied to cells.



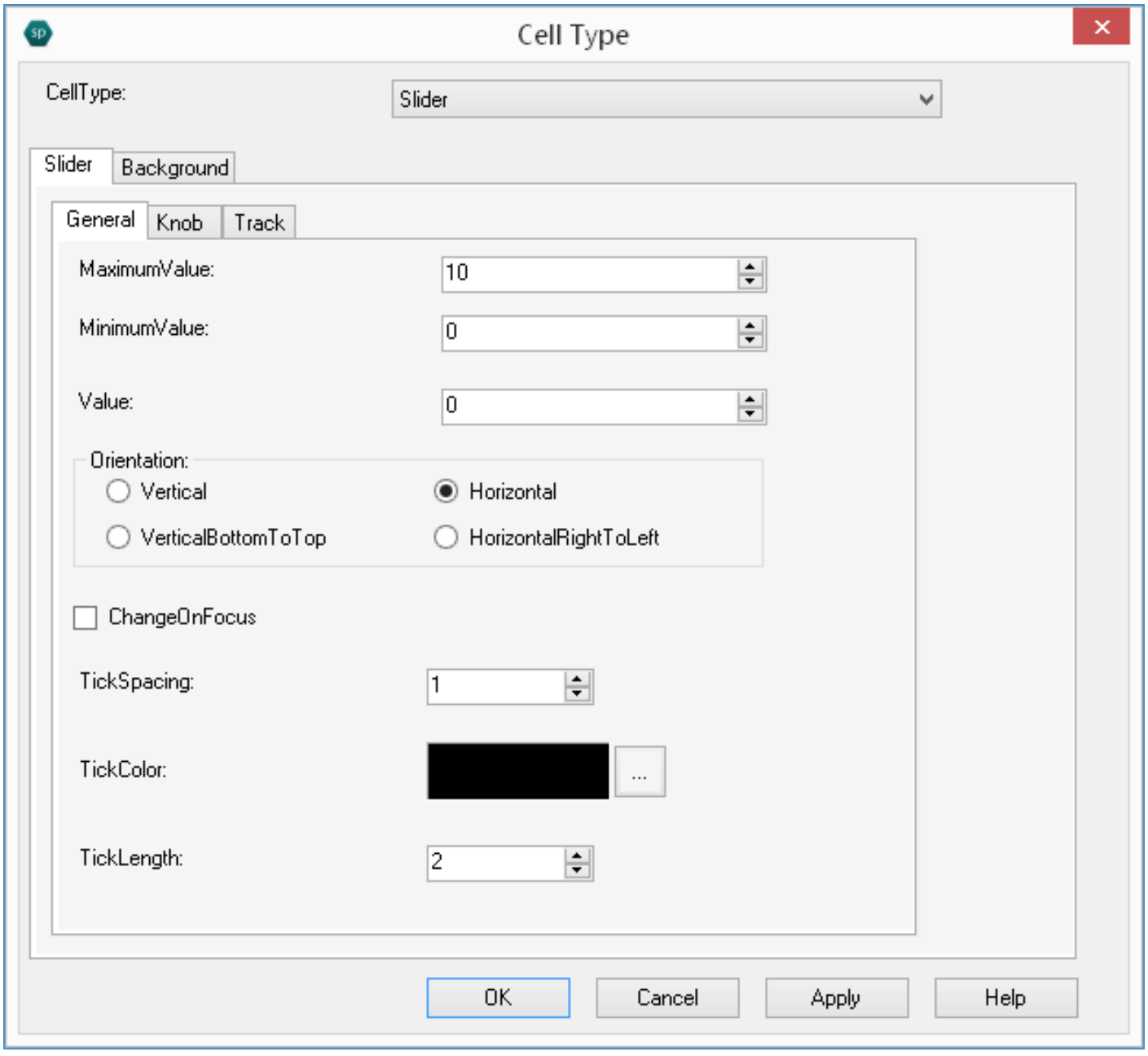
For information on the individual properties, refer to the **RichTextCellType ('RichTextCellType Class' in the on-line documentation)** class in the Assembly Reference.

For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the rich text cell type, refer to **Setting a Rich Text Cell (on-line documentation)** in the Developer's Guide.

Slider Tab

The **Slider** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the slider cell type that can be applied to cells.



For information on the individual properties, refer to the **SliderCellType ('SliderCellType Class' in the on-line documentation)** class in the Assembly Reference.

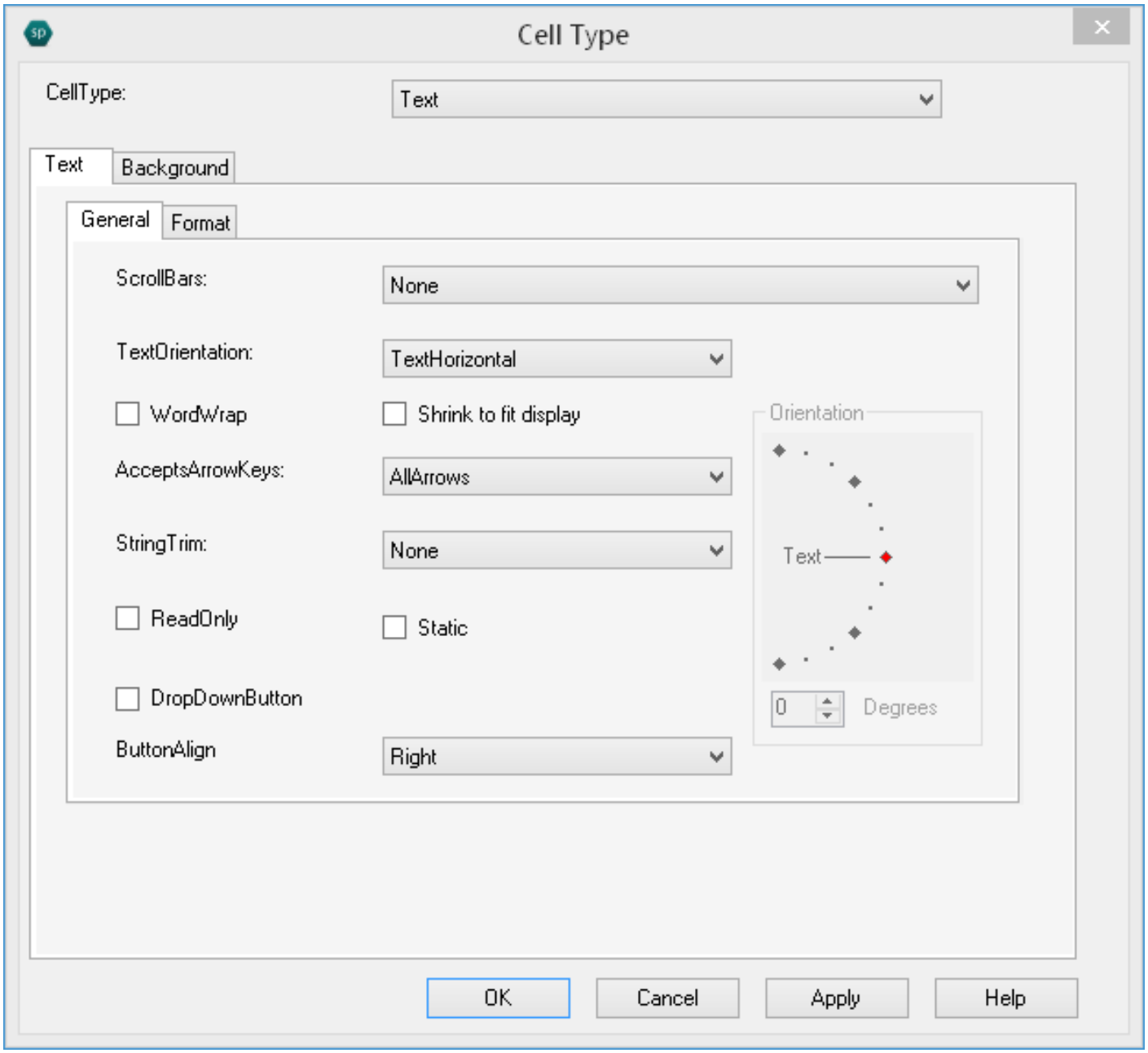
For information on the **Background** tab for customizing the background of this cell type, refer to

Background Tab.

For more information on the slider cell type, refer to **Setting a Slider Cell (on-line documentation)** in the Developer's Guide.

Text Tab

The **Text** tab of the **Cell Type** dialog in the Spread Designer contains the settings for customizing the text cell type that can be applied to cells.



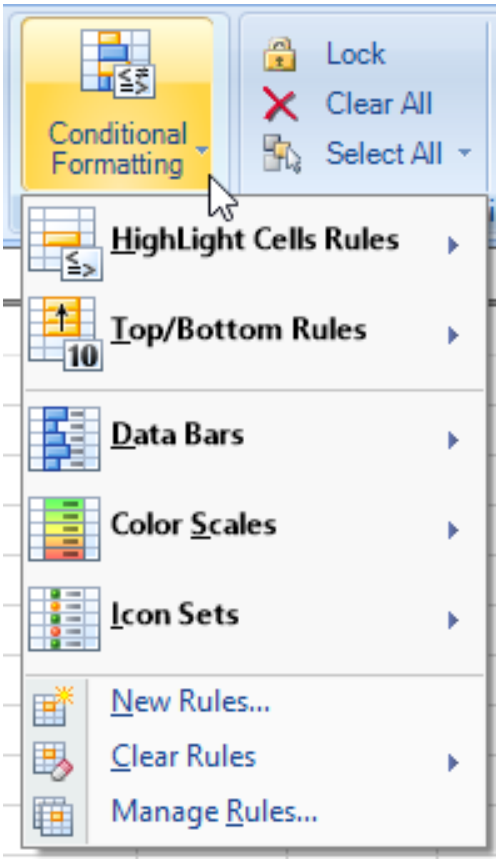
For information on the individual properties, refer to the **TextCellType ('TextCellType Class' in the on-line documentation)** class in the Assembly Reference.

For information on the **Background** tab for customizing the background of this cell type, refer to **Background Tab**.

For more information on the text cell type, refer to **Setting a Text Cell (on-line documentation)** in the Developer's Guide.

Conditional Formatting Dialog

You can create conditional formatting with the **Conditional Formatting** dialog. This dialog is located under the **Home** menu and appears as follows:



This dialog has the following items:

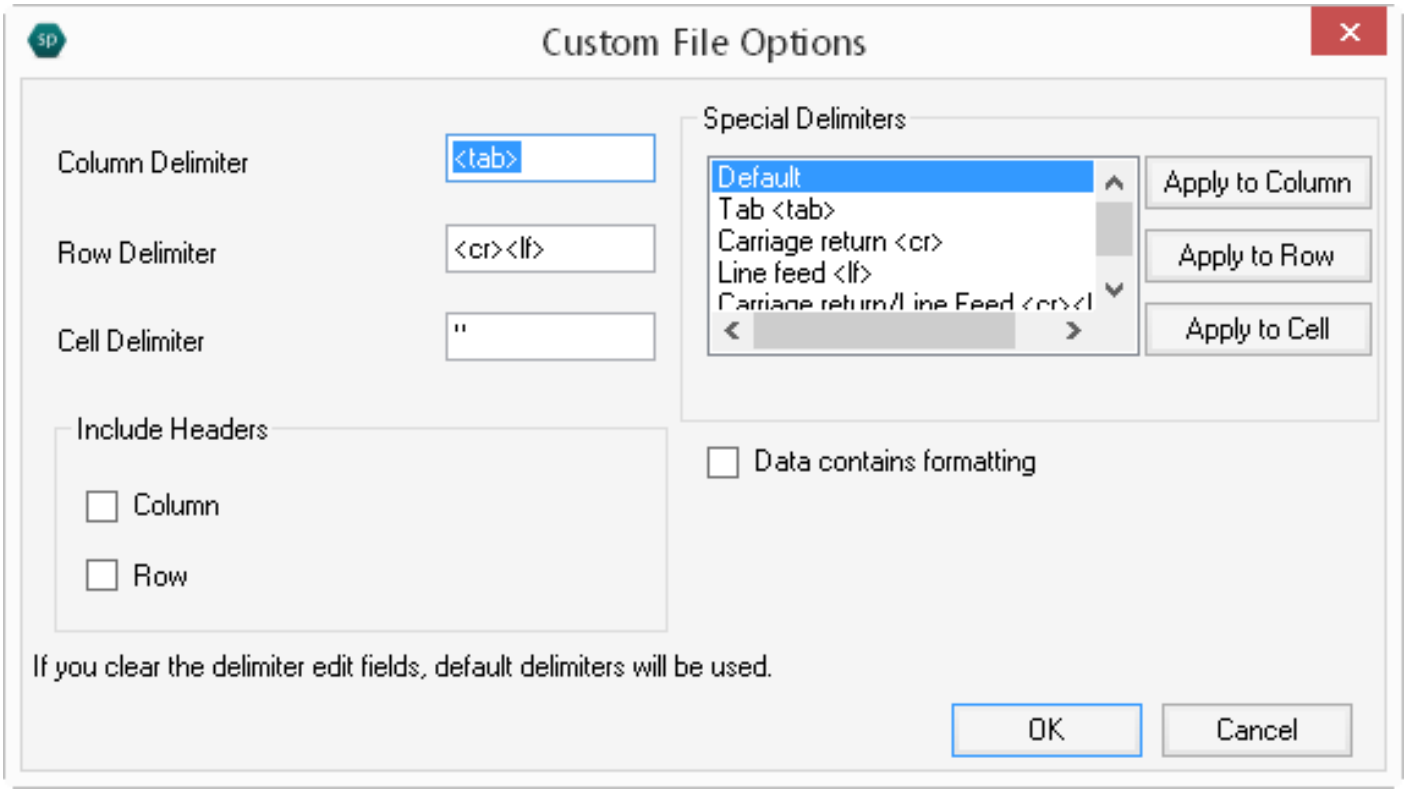
Item	Description
Highlight Cells Rules (on-line documentation)	Rules used to apply formatting options to values that meet specific conditions
Top Bottom Rules (on-line documentation)	Rules used to apply formatting options to top or bottom values
Data Bars (on-line	Rules used to apply color bars to values

documentation)	
Color Scales (on-line documentation)	Rules used to apply color or color gradients to values
Icon Sets (on-line documentation)	Rules used to apply icons to values
New Rules (on-line documentation)	Additional rule options
Clear Rules	Clear all rules or rules for selected cells
Manage Rules (on-line documentation)	Rules manager used to create, edit, or delete rules

For more information about conditional formatting, refer to **Using Conditional Formatting of Cells (on-line documentation)**.

Custom File Options Dialog

You can specify the various delimiters for opening the text file by setting the options in the **Custom File Options** dialog of the Spread Designer. This dialog appears in Spread Designer when you open a text file (**File** Menu icon > **Open**).



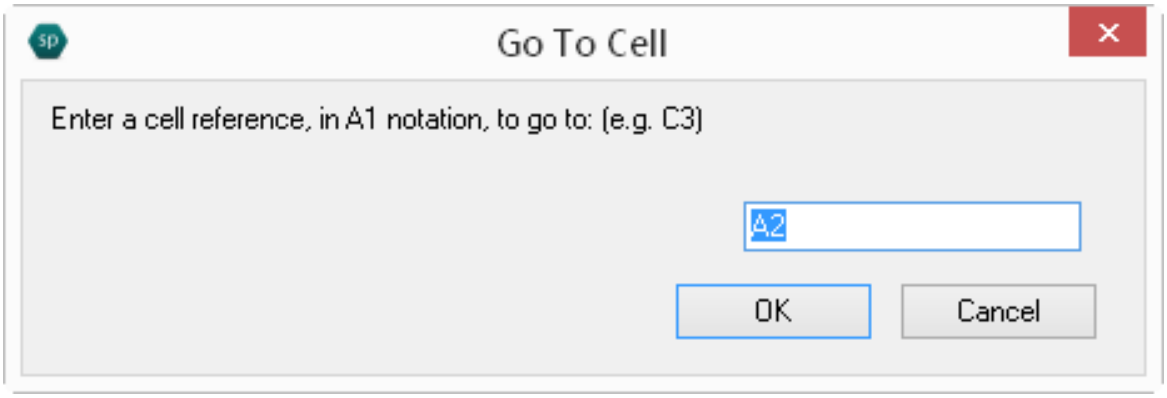
The Custom File Options dialog provides the following items:

Item	Description
Column Delimiter	Set the character or characters that serve as the column delimiter (often a tab, such as in tab-delimited files)
Row Delimiter	Set the character or characters that serve as the row delimiter (often a carriage return or line-feed)
Cell Delimiter	Set the character or characters that serve as the cell delimiter (often double quotes)
Include Headers	Set whether to treat the first column and row of data as headers
Special Delimiters	Insert special characters in the delimiters boxes using the controls in this area
Data contains formatting	Set whether the data includes formatting

For more information on the options for opening a custom text file, refer to **Opening a Custom Text File (on-line documentation)** in the Developer's Guide. For more information on how to do this in code, refer to the **LoadTextFile ('LoadTextFile Method' in the on-line documentation)** methods.

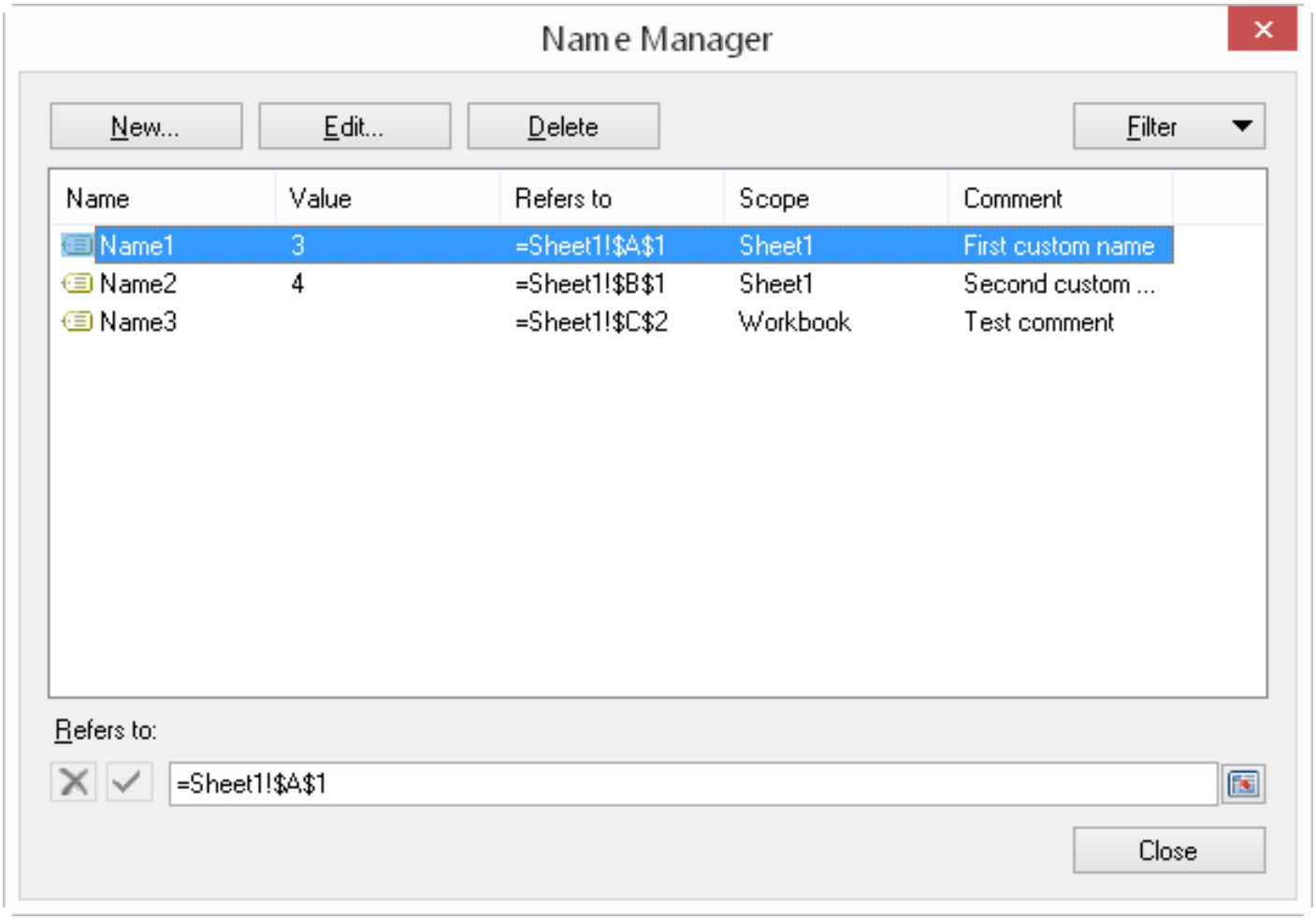
Go To Cell Dialog

You can move the view to include any cell in the sheet and make that cell the active cell, by using the **Go To Cell** dialog of the Spread Designer. This dialog appears in Spread Designer when you use the **Home** > **Find** icon (Editing section) > **Go To** option.



Name Manager Dialog

You can create, edit, or delete custom names in the Spread Designer. You can also filter the list of custom names by scope or error status. The **Name Manager** dialog is located under the **Data** menu in the Spread Designer.



The following buttons allow you to work with custom names.

Button	Description
New ('New Button' in the on-line documentation)	Click the New button to display the New Name dialog box. This allows you to enter a range name and cell location. You can also click the Collapse button which allows you to use the mouse to select the desired cell(s). Press Enter or click Expand to return to the New Name dialog box.
Edit ('Edit Button' in the on-line documentation)	Click an existing range name and then click the Edit button (or double-click the name), to display the Edit Name dialog box. Use this dialog box to change the range name or the cell range location reference.
Delete	Click an existing range name and then click the Delete button. A confirmation message appears to confirm that you wish to delete the range name.

Filter ('Filter Button' in the on-line documentation)	Click the Filter drop-down to create a subset of the custom names based on scope or error status.
Close	Click the Close button to return to the Spread Designer.

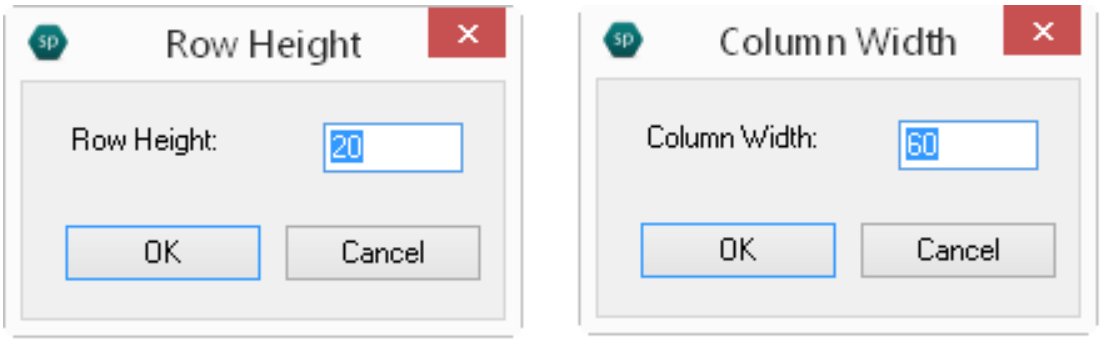
The **Name Manager** dialog has the following columns for the custom names.

Column	Description
Name	The first character of a custom name must be a letter, an underscore character (_), or a backslash (\). Remaining characters in the name can be letters, numbers, periods, and underscore characters. The uppercase and lowercase characters "C", "c", "R", or "r" cannot be used as a defined name, because they are used as shorthand for selecting a row or column for the currently selected cell in a Name or Go To text box. Names cannot be the same as a cell reference. Spaces are not allowed as part of a name. A name can contain up to 255 characters. Spread does not distinguish between uppercase and lowercase characters in names.
Value	The current value of the name, such as the result of a formula, a string constant, a cell range, an error, an array of values, or a placeholder if the formula cannot be evaluated. If the name refers to a cell range, all the values in the range are displayed by row, from top to bottom, and are separated by a ";" character. All values are wrapped with " ". For example, {"a","b";"c","d"}.
Refers to	The current reference for the name. For example, Sheet1!C2.
Scope	The scope of a name is the location within which the name is recognized without qualification. The scope can be a sheet (local Sheetview level) or a workbook (global Spread level). For example, Name1 is only recognized in Sheet1 since the scope is Sheet1. In order to use Name1 in Sheet2, qualify it by preceding it with the sheetview name such as Sheet2!Name1. A name must be unique within its scope; however, you can use the same name in different scopes. The local sheetview level takes precedence over the global spreadview level if there is a name conflict.
Comment	Additional information about the name and can be up to 255 characters.

You can sort the list of names in ascending or descending order by clicking the column header. Double-click the right side of the column header to automatically size the column to fit the largest value in that column.

Row Height or Column Width Dialog

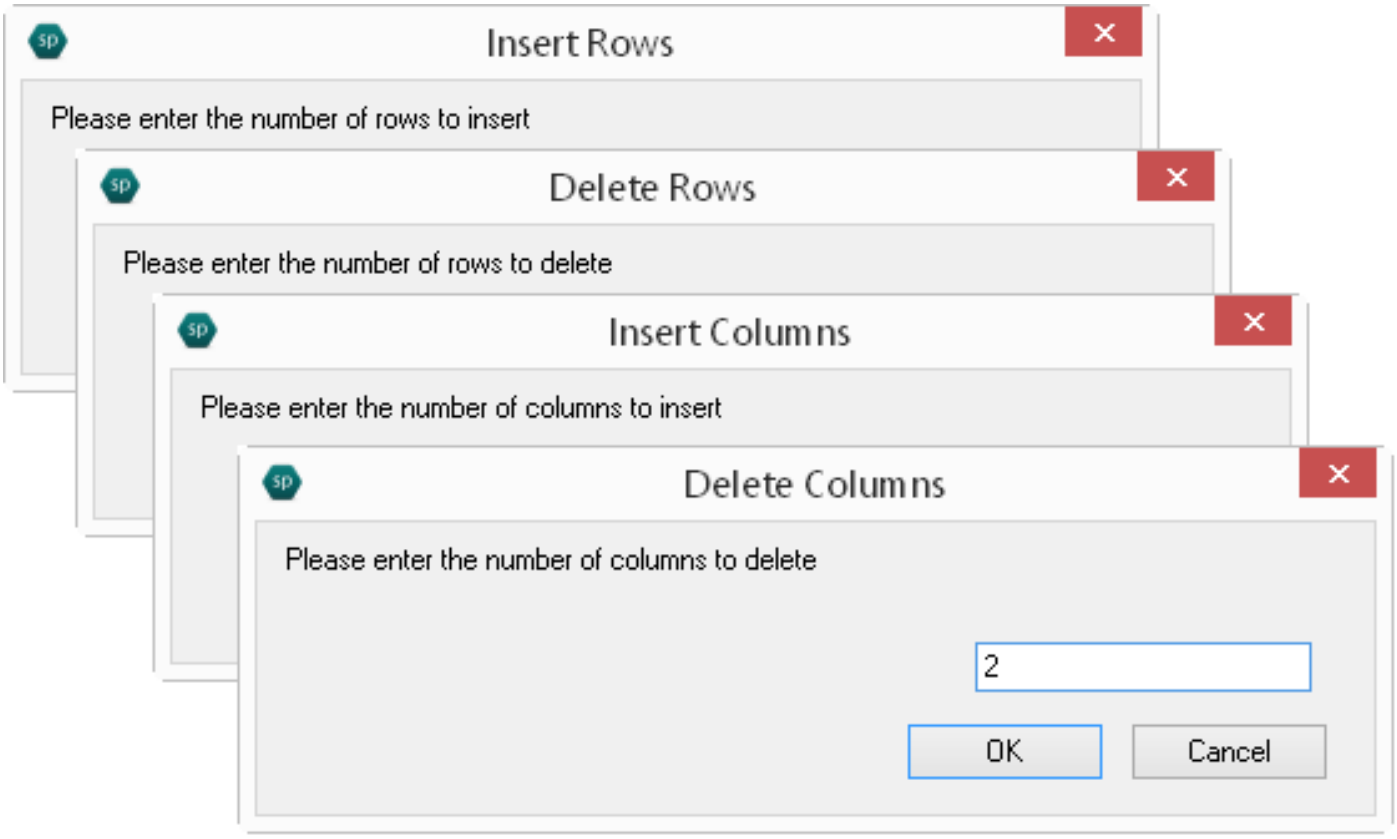
You can set the dimensions of a row or column, or a set of rows or columns in the **Row Height** or the **Column Width** dialog of the Spread Designer. To open the dialog, right-click on the selected row or column and choose the **Row Height** or **Column Width** menu item. The **Row Height** dialog or **Column Width** dialog appears, as shown in the figure. To change the setting, simply type a number and click **OK**.



For more information on the options for row or column size, refer to **Setting the Row Height or Column Width (on-line documentation)** in the Developer's Guide. For more details on how to do this in code, refer to the **Height ('Height Property' in the on-line documentation)** property in the **Row ('Row Class' in the on-line documentation)** class or the **Width ('Width Property' in the on-line documentation)** property in the **Column ('Column Class' in the on-line documentation)** class.

Row or Column Insert or Delete Dialogs

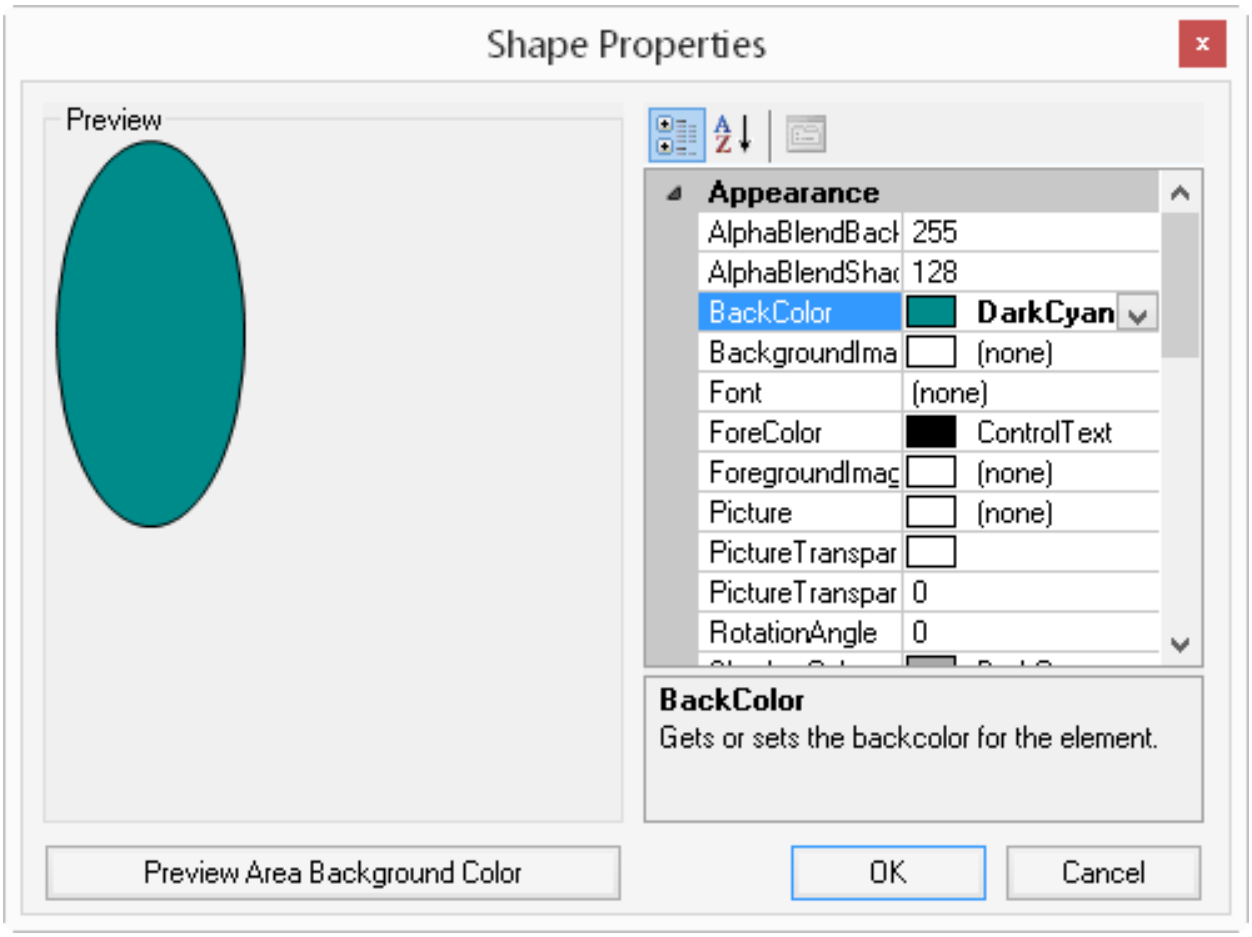
You can add or remove rows and columns from the sheet using the Spread Designer. Select a row or column on the spreadsheet to indicate where to insert the rows or columns, or select the rows and columns to remove. To open this dialog, right-click on the row or column, and select **Insert** to add rows or columns or **Delete** to remove rows or columns. The figure below shows each of the the dialogs that can be brought up. Type in the number to insert and click **OK**.



For more information on the addition or removal of rows or columns, refer to **Adding a Row or Column (on-line documentation)** and **Removing a Row or Column (on-line documentation)** in the Developer's Guide. For more details on how to do this in code, refer to the various methods in the **SheetView ('SheetView Class' in the on-line documentation)** class or the **DefaultSheetDataModel ('DefaultSheetDataModel Class' in the on-line documentation)** class.

Shape Properties Dialog

You can change the properties of a shape using the Spread Designer. You can use the **Insert** and **Drawing Tools** menu options or you can use the **Shape Properties** dialog. To open this dialog, select a shape and then right-click and select **Properties** from the context menu. The **Shape Properties** dialog appears, an example of which is shown here. In the example shown, an ellipse is drawn and the background color is changed to orange.



This list of properties is different from the list of properties for the cell that appears in Spread Designer. When you have a shape selected, do not use the list of properties in the main Spread Designer window. Make sure that you select **Properties** from the context menu with a shape selected.

The **Shape Properties** dialog allows you to further customize the shape once it is inserted in the drawing space. By displaying a preview of the shape and showing the list of properties, the **Shape Properties** dialog adjusts the preview as you change the properties in the list.

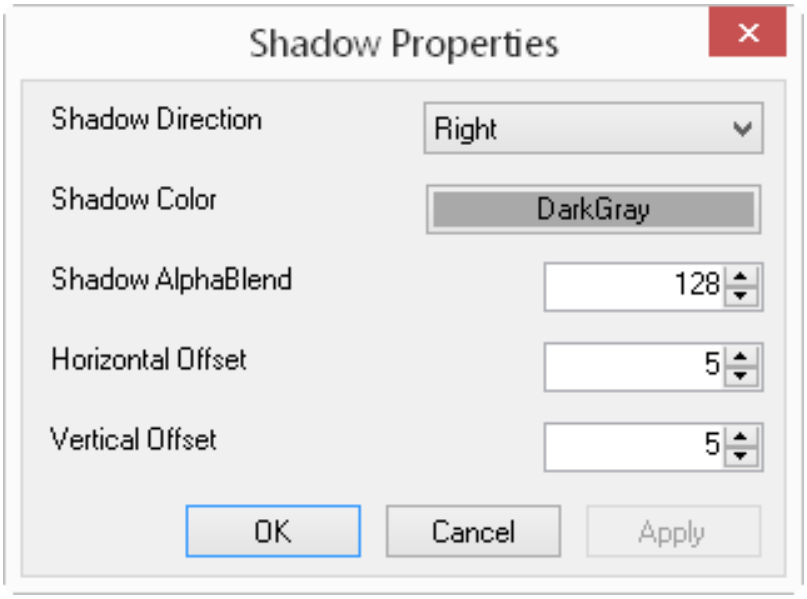
For more information on the menu that allows you to access this dialog, refer to the **Insert Menu**.

For more information on the properties for the TextShape object, refer to **Customizing Text as a Shape**.

Shape Shadow Properties Dialog

You can add a drop shadow to a shape using the Spread Designer. Most of the time, you may simply add a standard shadow using the choices from the **Drop Shadow** option in the **Drawing Tools** menu. To create a custom shadow, you need to change any of the shape properties. To do this, use the **Shadow Properties** dialog. To open the **Shadow Properties**

dialog, from the **Drawing Tools** menu, click the **Drop Shadow** option and select **Custom**. The **Shadow Properties** dialog appears, an example of which is shown here. The table below explains the properties related to drop shadows.



This dialog has the following items:

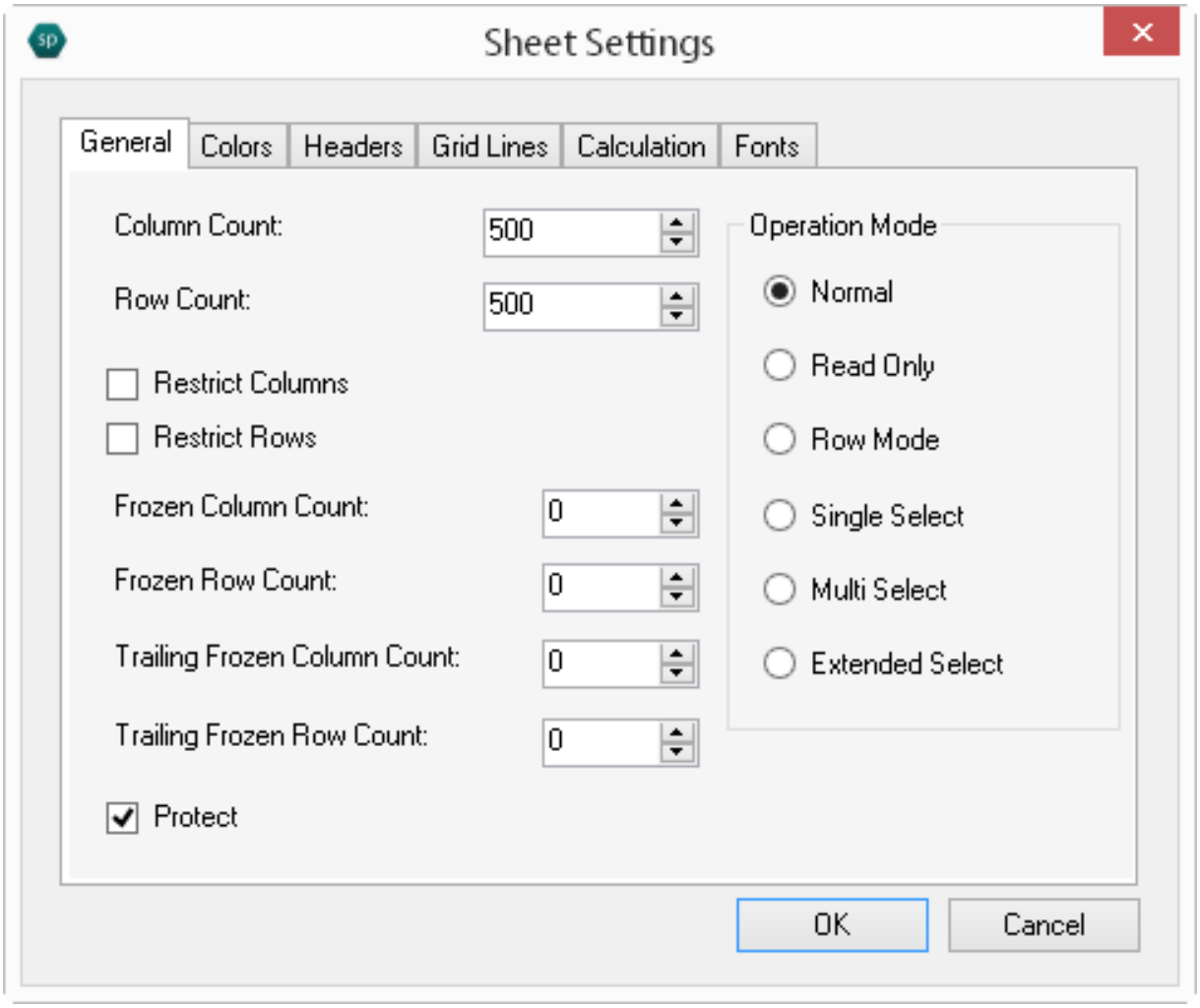
Item	Description
Shadow Direction	Direction of the shadow relative to the selected shape
Shadow Color	Color of the shadow; three numbers are the RGB values
Shadow AlphaBlend	Amount of alpha-blending, from 0 to 256, where 0 is no blending and completely opaque, and 256 is completely transparent
Horizontal Offset	Size of the shadow, the amount of horizontal width of the shadow in pixels
Vertical Offset	Size of the shadow, the amount of vertical width of the shadow in pixels

For more information on adding a shadow to a shape, refer to **Adding a Drop Shadow**.

Sheet Settings Dialog

You can set the sheet (SheetView object) properties using the **Sheet Settings** dialog of the

Spread Designer. To open this dialog, from the **Settings** menu, select an option from the **Sheet Settings** area. Each of the tabs in the dialog has a group of settings. To change the setting, simply click in the edit field or select the choice. For more information on the individual settings, refer to the properties of the **SheetView ('SheetView Class' in the on-line documentation)** class. When finished making changes on all tabs, click **OK**. If you wish to apply the changes from the active tab, click **Apply** and then click on the next tab of settings to review or change.



This dialog has the following tabs:

Tab	Description
General Tab (on-line documentation)	Various row and column counts for the sheet and operation mode
Colors Tab (on-line documentation)	Colors for various parts of the sheet

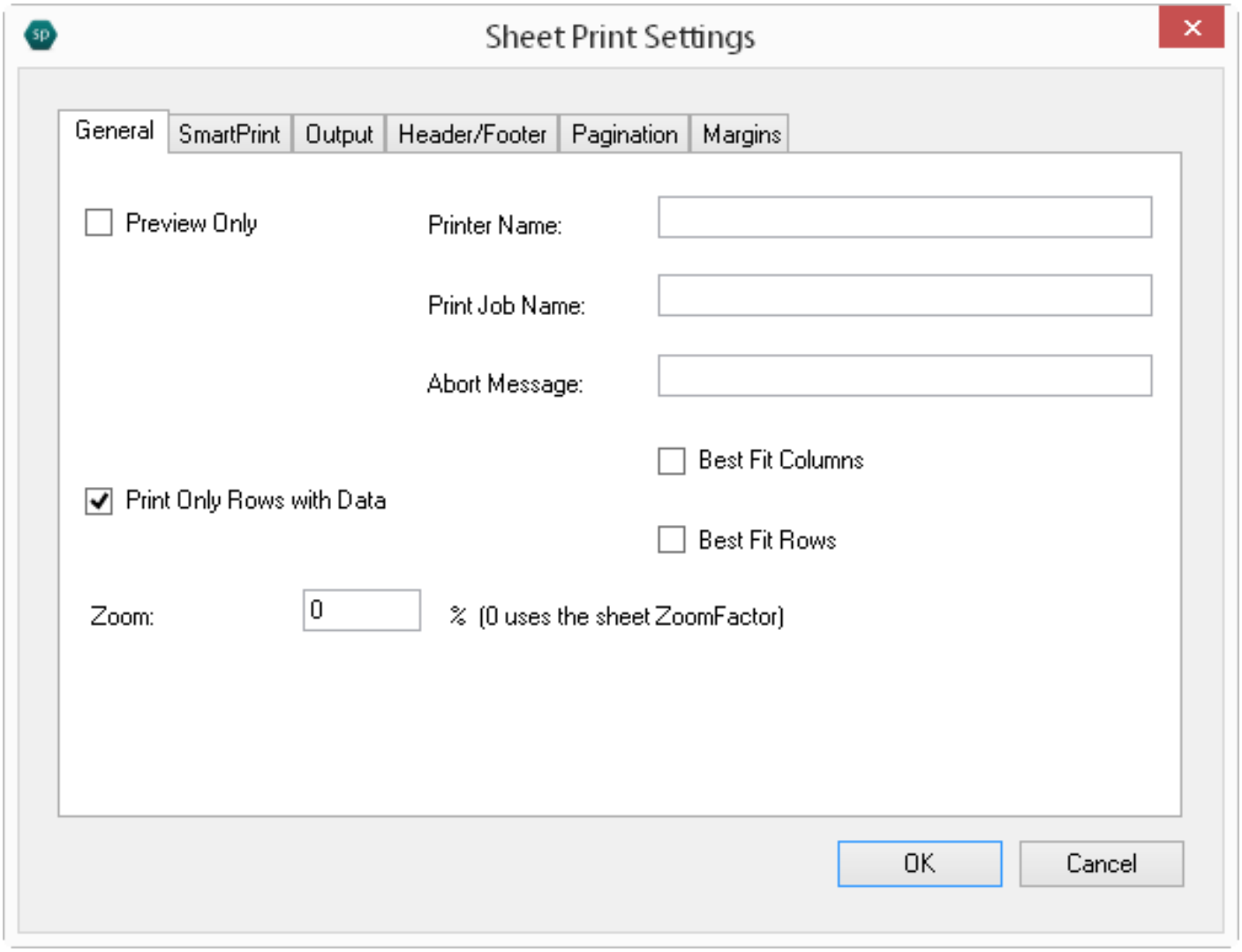
Headers Tab (on-line documentation)	Properties related to the row headers and column headers of the sheet
Grid Lines Tab (on-line documentation)	Properties related to the grid lines on the sheet
Calculations Tab (on-line documentation)	Properties related to the calculation of formulas in the cells on the sheet
Font Tab (on-line documentation)	Fonts for null values or locked or selected cells

For more information on changing properties in code to change the sheet appearance, refer to **Customizing the Individual Sheet Appearance (on-line documentation)** in the Developer's Guide.

For more information on changing properties in code to change the user interaction with a sheet, refer to **Customizing Interaction with a Sheet (on-line documentation)** in the Developer's Guide.

Sheet Print Settings Dialog

You can set the sheet print settings using the **Sheet Print Settings** dialog of the Spread Designer. To open the dialog, from the **Page Layout** menu, select **Print Titles** or **Smart Print**. In the dialog, various settings are organized on individual tabs. For more information on these settings, refer to the members of the **PrintInfo ('PrintInfo Class' in the on-line documentation)** class. When finished making changes, click **OK**.



This dialog has the following tabs:

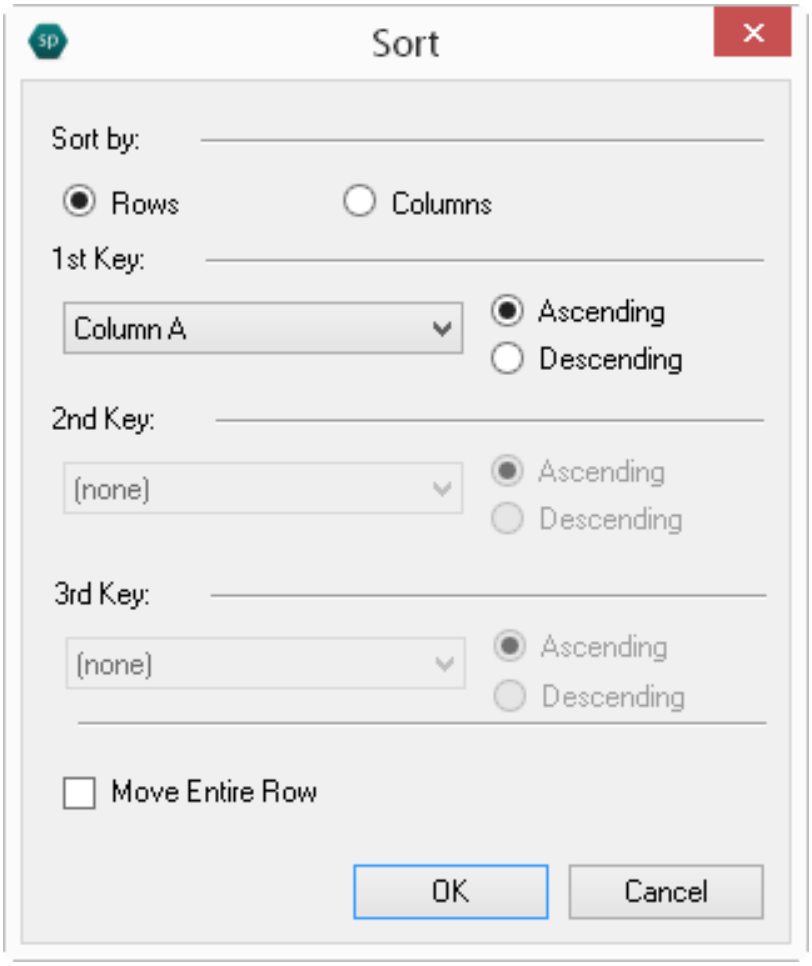
Tab	Description
General Tab (on-line documentation)	General settings for the print job
SmartPrint Tab (on-line documentation)	Settings for letting Spread optimize the printing
Output Tab (on-line documentation)	Output layout settings
Header/Footer Tab (on-line documentation)	Customization of the headers and footers of the printed pages
Pagination Tab (on-line documentation)	Settings relating to the pages of the printed job

Margins Tab (on-line documentation)	Settings relating to the margins of the printed pages

For more information on printing sheets, refer to **Managing Printing (on-line documentation)** in the Developer's Guide.

Sort Dialog

You can sort rows or columns using the **Sort** dialog of the Spread Designer. To open this dialog, from the **Data** menu, select the Sort icon. In the **Sort** dialog, as shown in the figure, select what to sort and the order of sorting. When done, click **OK**.



This dialog has the following items:

Item	Description
Sort by	Set whether to sort by content in rows or columns (Sorting by rows moves rows based on columns as keys; sorting by columns moves columns based on rows as keys)

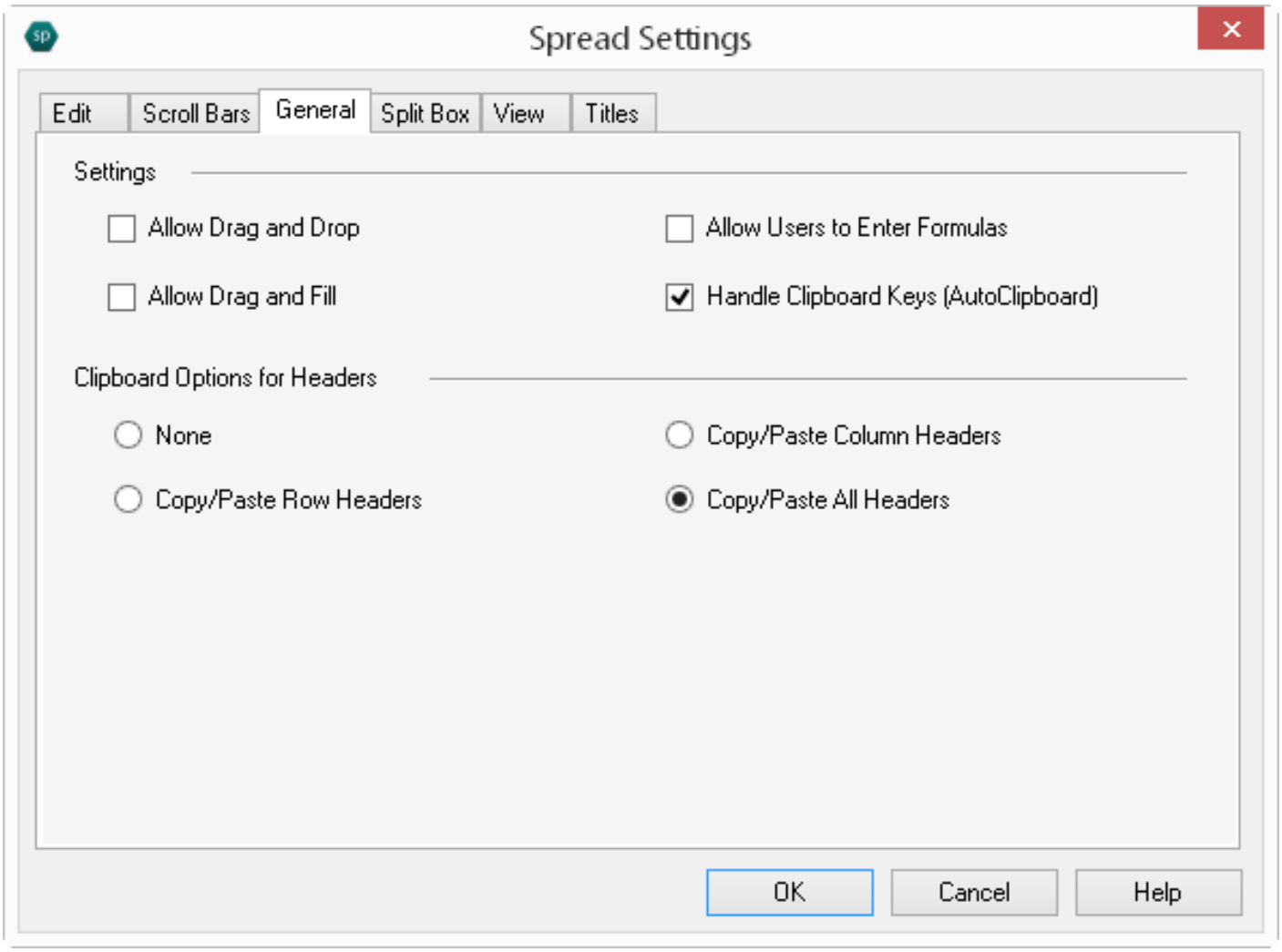
1st Key	Set the first sort key (column or row on which to sort first)
2nd Key	Set the second sort key (column or row on which to sort second)
3rd Key	Set the third sort key (column or row on which to sort third)
Move Entire Rows	Select to move entire rows or columns when sorting instead of moving just the data in the selected rows or columns
Move Entire Columns	

For more information on the sort settings, refer to **Managing Data on a Sheet (on-line documentation)** in the Developer's Guide.

For more information on how to do this in code, refer to the **SortInfo ('SortInfo Class' in the on-line documentation)** class.

Spread Settings Dialog

You can set several properties of the entire spreadsheet component using the **Spread Settings** dialog of the Spread Designer. To open this dialog, from the **Settings** menu, select an option under the **Spread Settings** section. Each of the tabs in the dialog has a group of settings. To change the setting, simply click in the edit field or select the choice. An example of the dialog is shown here.



When finished making changes on all tabs, click **OK**. If you wish to apply the changes from the active tab, click **Apply** and then click on the next tab of settings to review or change.

This dialog has the following tabs:

Tab	Description
Edit Tab (on-line documentation)	Change certain aspects of editing cells. Options to change include: Editing Text Can Overflow, Cells Always in Edit Mode, Editing Replaces Existing Text, and On Focus Set Cell to Pointer.
Scroll Bars Tab (on-line documentation)	Set the alignment and display of scroll bars: Align at Last Row and Column, Scroll Box Reflects Maximum Rows, Horizontal Scroll Bar Display
General Tab (on-line documentation)	Set options for controlling multiple features of the spreadsheet, such as the ability to drag an drop or drag and fill a range of cells.

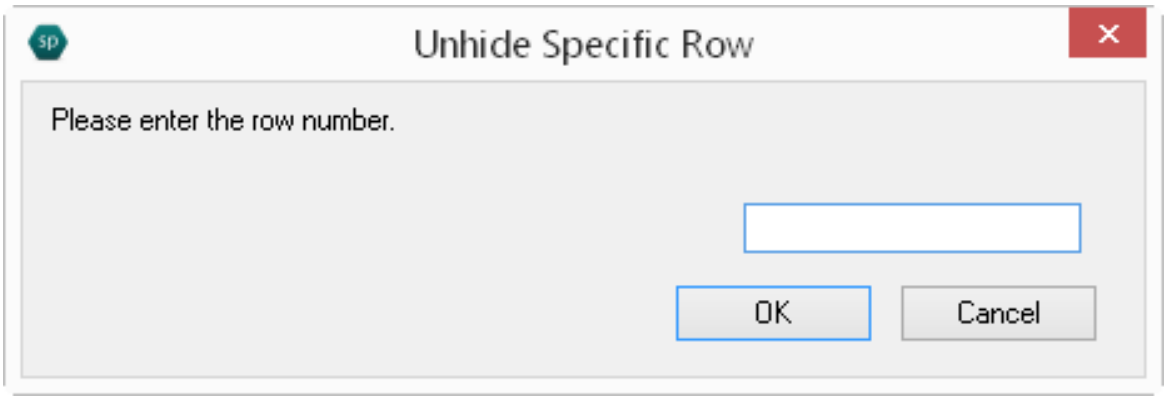
Split Box Tab (on-line documentation)	Set the alignment and display of split boxes: Column Split Box Alignment, Column Split Box Display, Row Split Box Alignment, Row Split Box Display.
View Tab (on-line documentation)	Set various settings relating to the view: Cell Contents Can Overflow, Display Note Indicator, Retain Selected Block, Cell Buttons Display, Block Mode.
Titles Tab (on-line documentation)	Set a Title and SubTitle for the control.

For more information on settings related to user interaction, refer to **Customizing Interaction in the Overall Component (on-line documentation)** in the Developer's Guide. For more information on the appearance settings of the Spread, refer to **Customizing the Overall Component Appearance (on-line documentation)** in the Developer's Guide.

For more details on the individual settings, refer to the properties of the **FpSpread ('FpSpread Class' in the on-line documentation)** class.

Unhide Specific Row or Column Dialogs

You can display previously hidden rows or columns by unhiding them in the Spread Designer. Right-click on a selected row. Select the **Unhide** menu option. Select the **Specific Row** dialog, as shown in the figure. Right-click on a selected column to get the **Unhide** menu for a column.

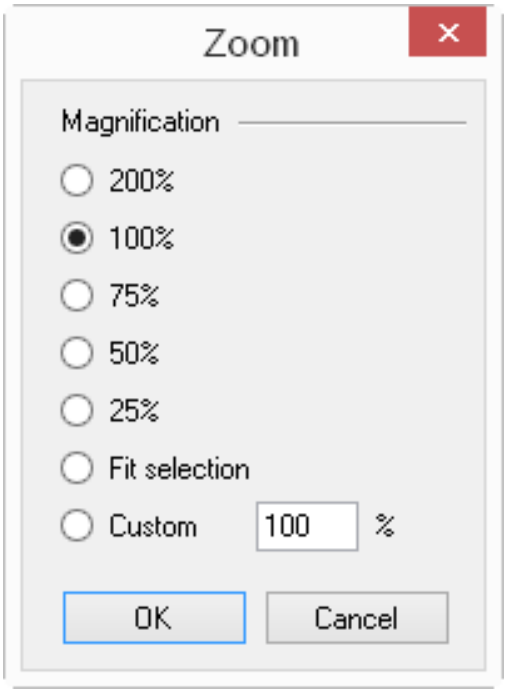


For more details, refer to the **Row ('Row Class' in the on-line documentation)** class **Visible ('Visible Property' in the on-line documentation)** property or the **Column ('Column Class' in the on-line documentation)** class **Visible ('Visible Property' in the on-line documentation)** property.

For more information on hiding parts of the sheet, refer to **Showing or Hiding a Row or Column (on-line documentation)** in the Developer's Guide.

Zoom Dialog

You can determine the scaling of the display of the sheet. This does not effect scaling of the printing of the sheet. To open the **Zoom** dialog in the Spread Designer, from the **View** menu, select **Zoom**. The **Zoom** dialog appears as shown in the figure.



Select the zoom factor for increasing or decreasing the scaling of the display of the sheet. Click **OK** when finished. The **Fit Selection** option will zoom the sheet view out to 400% (fixed) and make the selected cell the upper, left cell.

For more information, refer to the **ZoomFactor ('ZoomFactor Property' in the on-line documentation)** property of the **FpSpread ('FpSpread Class' in the on-line documentation)** class.

To allow the user to set the scaling, refer to **Allowing the User to Zoom the Display of the Component (on-line documentation)** in the Developer's Guide.

Spread Designer Editors

The editors of the Spread Designer provide a quick way of setting properties and customizing specific aspects of your Spread component. There are editors specific to an object, such as a sheet skin editor, a cells editor, a formula editor, and a border editor.

For more information on the individual editors, refer to the detailed description of each.

- **Alternating Row Collection Editor**
- **Border Editor**
- **Cells, Columns, and Rows Editor**
- **DefaultGroupFooter Editor**
- **Formula Editor**
- **Focus Indicator Editor**
- **GroupInfo Collection Editor**
- **Header Editor**
- **InputMap Editor**
- **Named Style Editor**
- **SheetSkin Editor**
- **SheetView Collection Editor**
- **Shortcut Collection Editor**
- **SmartPrintRule Collection Editor**
- **SpreadChart Collection Editor**
- **SpreadSkin Editor**
- **TabStrip Editor**

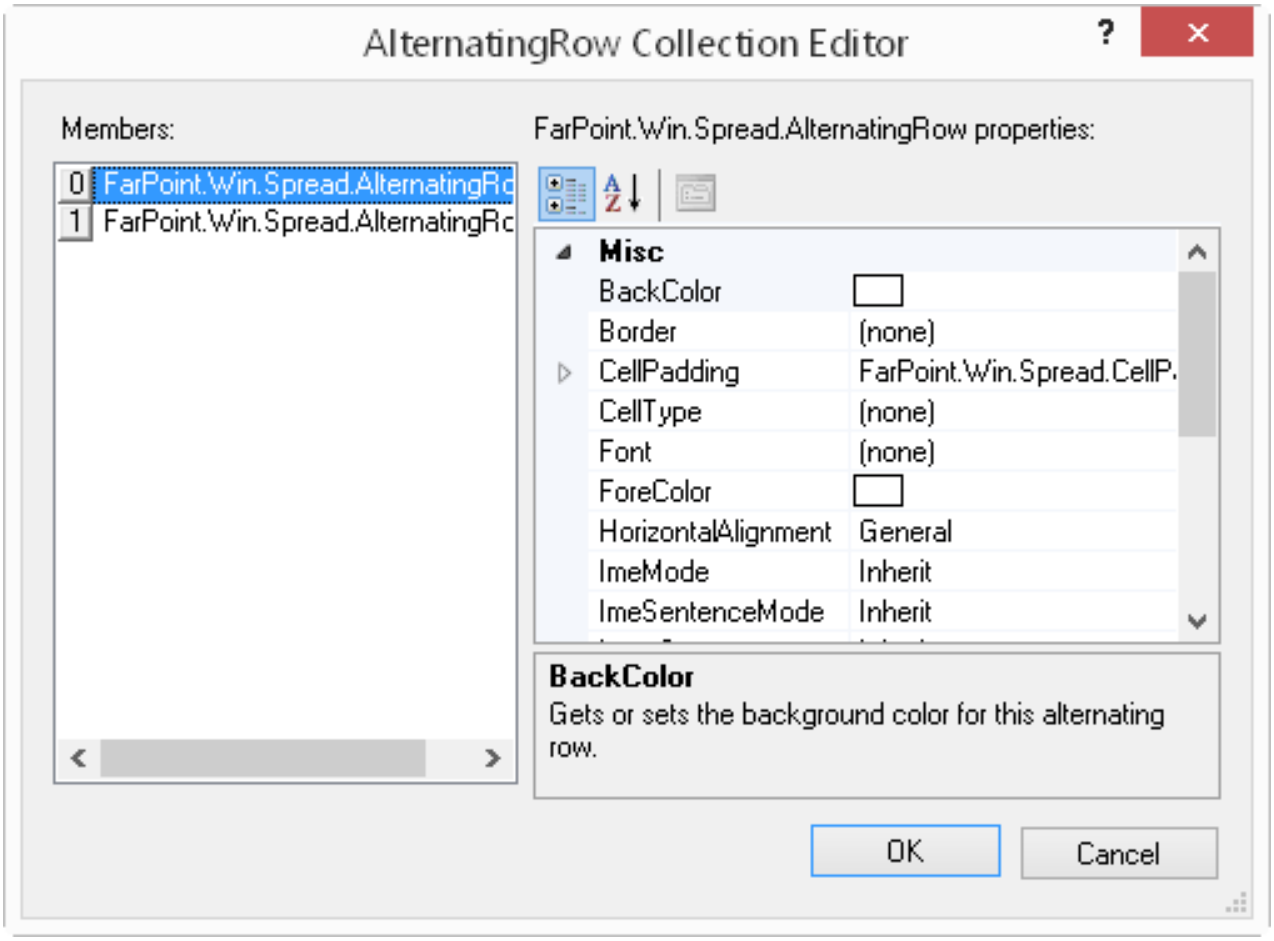
For information on the other dialog boxes in the Spread Designer, refer to the **Spread Designer Dialogs**.

Alternating Row Collection Editor

You can set colors for alternating rows with the **AlternatingRow Collection Editor** of the Spread Designer. You can launch the **AlternatingRow Collection Editor** from the Spread Designer by either

- selecting the sheet from the drop down on the right side of the designer and choosing **AlternatingRows** under the **Appearance** section
- selecting the sheet in the data area and choosing **AlternatingRows** under the **Appearance** section

The **AlternatingRow Collection Editor** appears as shown in this figure.



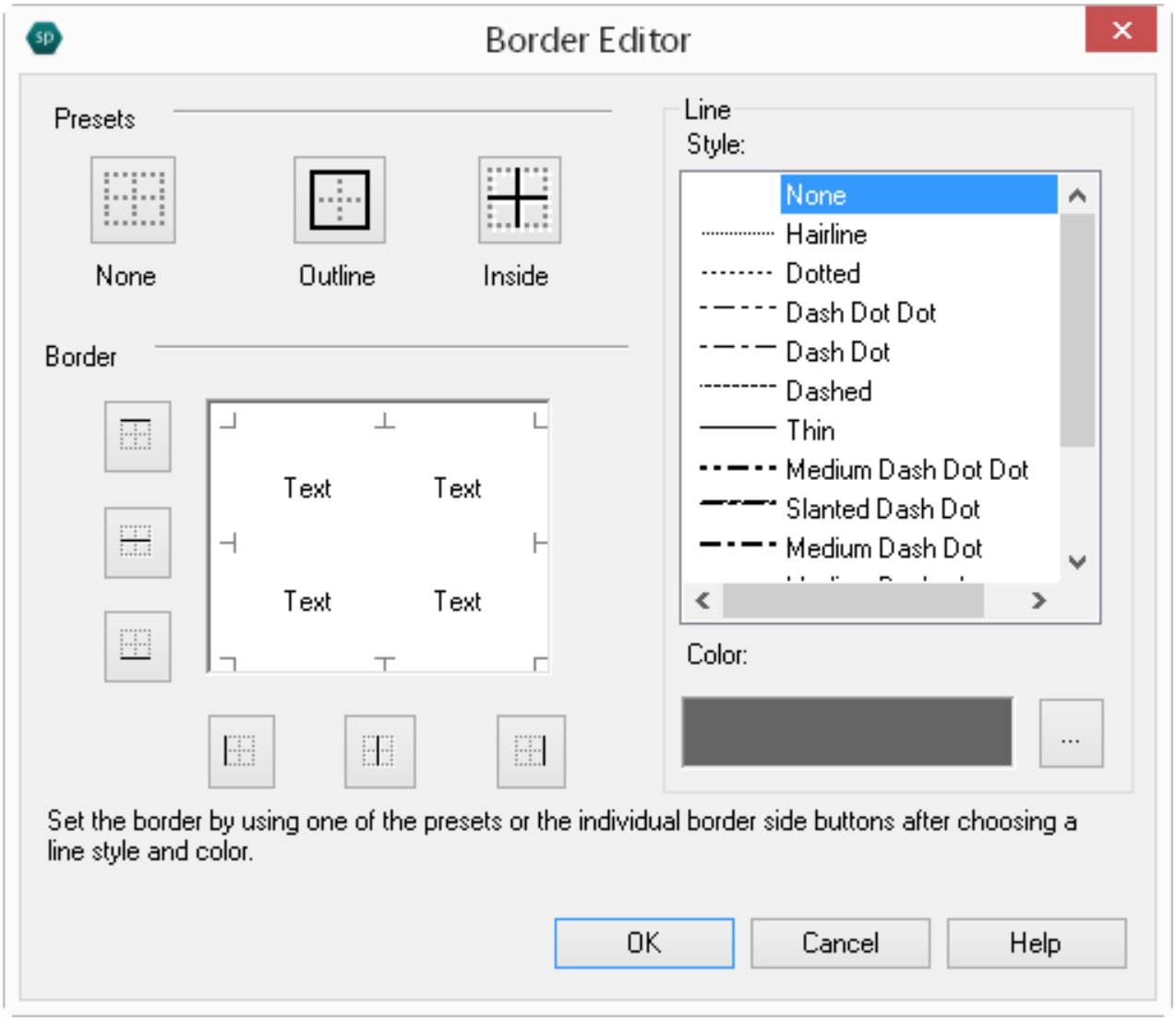
Set the various properties as needed in the **Misc** area. When done, click **OK**.

Border Editor

You can place a border around a cell or range of cells using the **Border Editor** of the Spread Designer. You can launch the **Border Editor** from the Spread Designer by either

- selecting the **Home** menu option, then the **Border** drop-down under the font section, and then selecting **More Borders**...
- selecting cells in the data area, right-clicking, and selecting **Borders**

The **Border Editor** appears as shown in this figure.



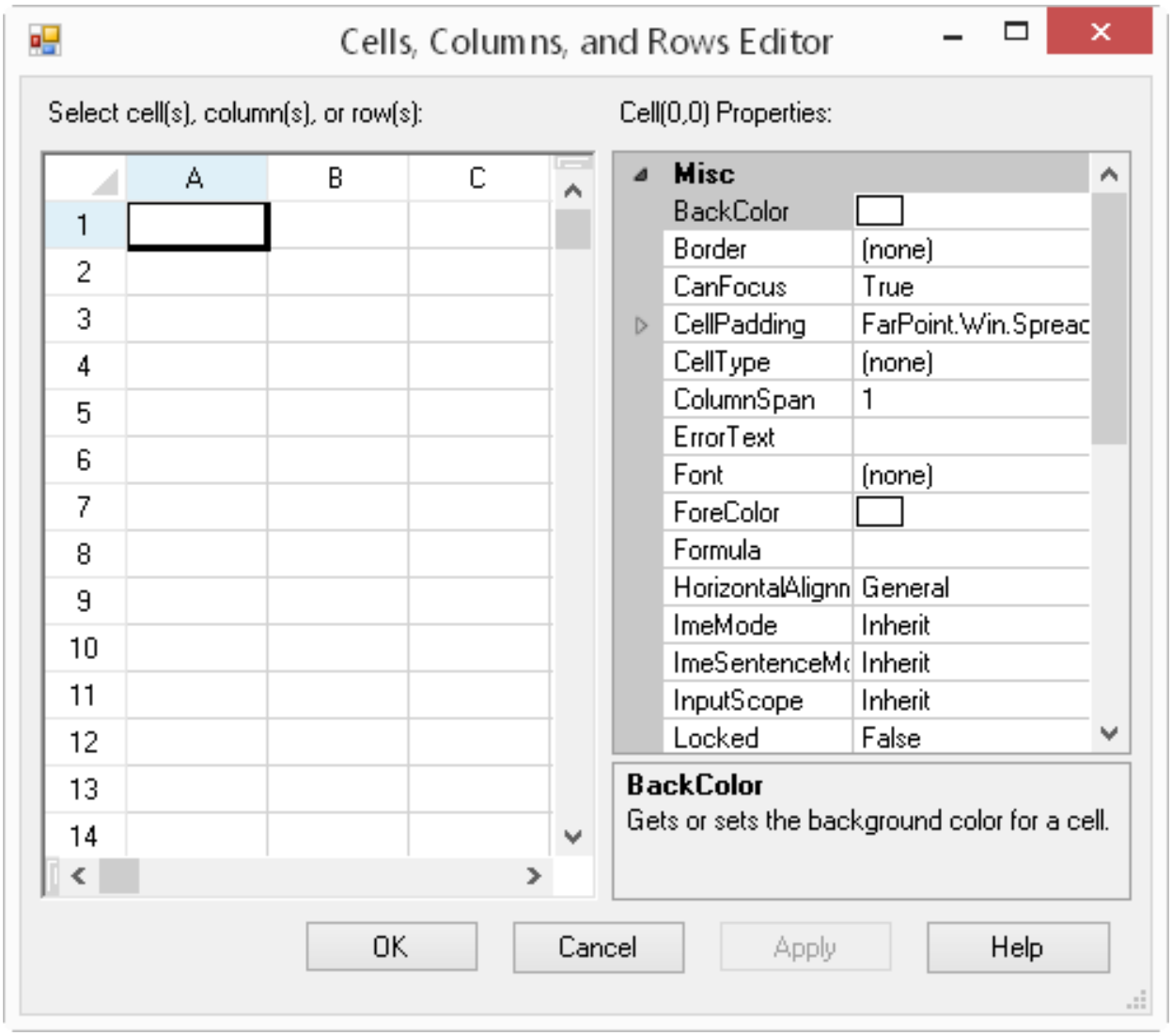
The Presets allow you to select already-defined border locations. For the entire outer edge of a range of cells, click **Outline**. For borders on all the edges of cells in a range except the outline, click **Inside**. To clear all the borders, click **None**.

In the **Border** area, click on the part of the cell where a border should appear. You do not see anything in the **Border** area of this dialog until you select a line style, since None is the default. Select the border line style and border line color in the Line settings area. When done, click **OK**.

For more information on the options for row or column size, refer to **Customizing Cell Borders (on-line documentation)** and **Customizing the Outline of the Component (on-line documentation)** in the Developer's Guide. For more details on borders, refer to the various border classes in the **FarPoint.Win ('FarPoint.Win Namespace' in the on-line documentation)** assembly.

Cells, Columns, and Rows Editor

You can customize the appearance of cells, columns or rows with the **Cells, Columns, or Rows Editor** of the Spread Designer. This editor is launched from the **Properties** window by selecting sheet in the drop-down box on the right side of the designer and then clicking on the button for the Cells, Columns, or Rows property. You can also access this dialog from the **Other Settings** section under the **Settings** menu. This figure shows the editor with a cell selected.



This editor allows you to edit various properties associated with four objects. If a cell is selected, the properties for the **Cells ('Cells Class' in the on-line documentation)** class are displayed in the properties window of this dialog. If a column is selected, the properties for the **Columns ('Columns Class' in the on-line documentation)** class are displayed in the properties window of this dialog. If a row is selected, the properties for the **Rows ('Rows Class' in the on-line documentation)** class are displayed in the properties window of this dialog. If the corner cell (of the sheet, in the upper right corner) is selected, the properties for the DefaultStyle class are displayed in the properties window of this dialog.

Typically, the value of the properties are kept when opening this editor. But there are some settings that are changed (in order to allow you to edit them and work with the editor in

general); these include making all the headers visible, even if you have them hidden by using code, and allowing notes to be editable, even if you have that turned off. In this editor you can set several settings relating to sorting, spans, notes, and other aspects of cells, columns, and rows.

Click Apply to apply those settings to the cell or column or row, or range of any of these, in Spread Designer.

For more information on the appearance of cells, columns, and rows, refer to **Customizing the Appearance of a Cell (on-line documentation)** and **Customizing the Row or Column Appearance (on-line documentation)** in the Developer's Guide.

For more information about styles and default styles, refer to **Creating and Applying a Style for Cells (on-line documentation)** in the Developer's Guide.

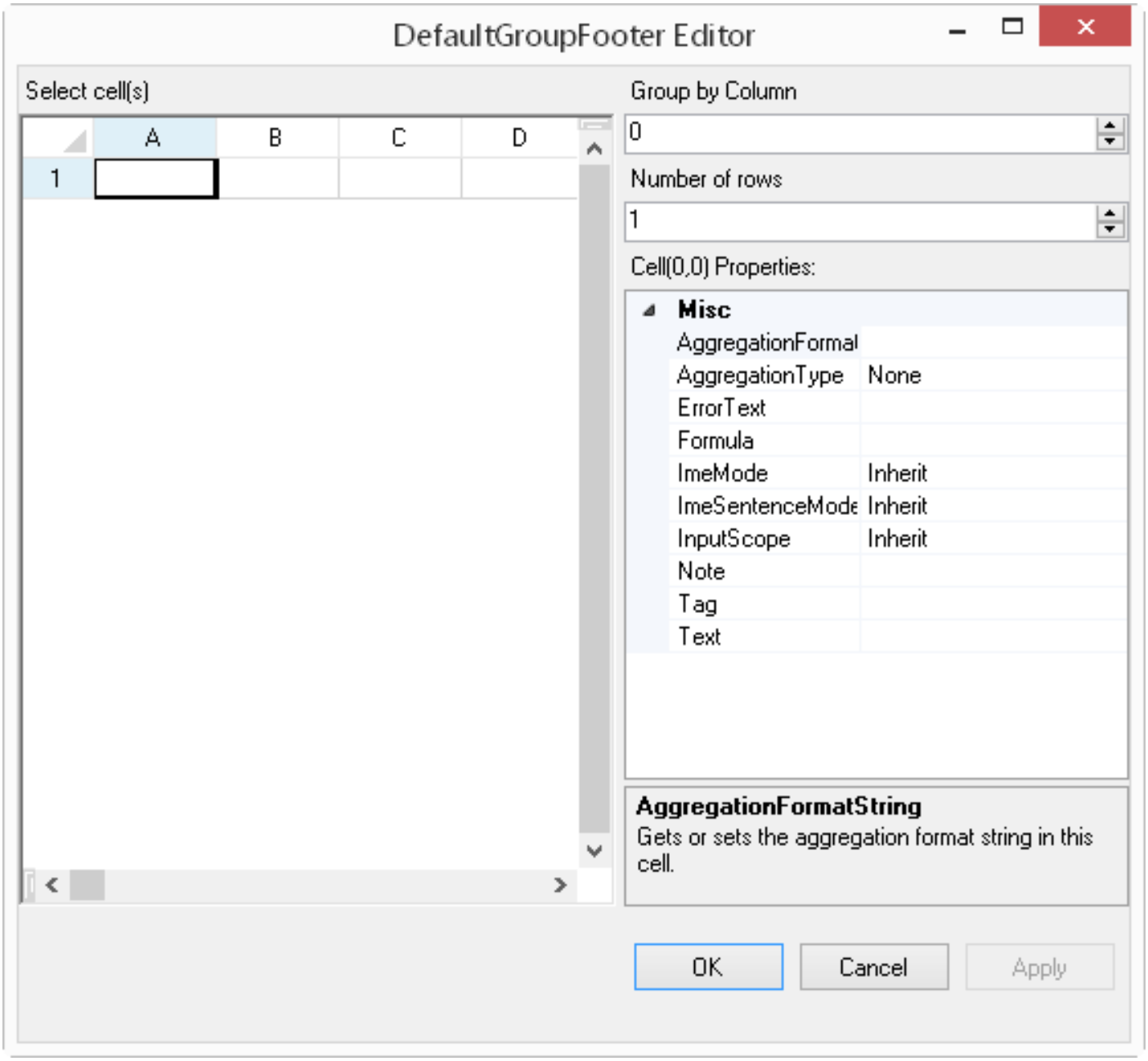
For more information about header cells, refer to **Header Editor**.

For details about the properties of a cell, refer to the **Cell ('Cell Class' in the on-line documentation)** class or the **Cells ('Cells Class' in the on-line documentation)** class. For more information about properties of a column, refer to the **Column ('Column Class' in the on-line documentation)** class or the **Columns ('Columns Class' in the on-line documentation)** class. For more information about properties of a row, refer to the **Row ('Row Class' in the on-line documentation)** class or the **Rows ('Rows Class' in the on-line documentation)** class.

DefaultGroupFooter Editor

You can use the **DefaultGroupFooter** editor to create a group footer. Use the **Group by Column** option to select the group column to set the group information for. You can also specify the formula type. Use the Formula property for the actual formula.

This editor is launched from the **Properties** window by selecting sheet in the drop-down box on the right side of the designer and then clicking on the button for **DefaultGroupFooter**.

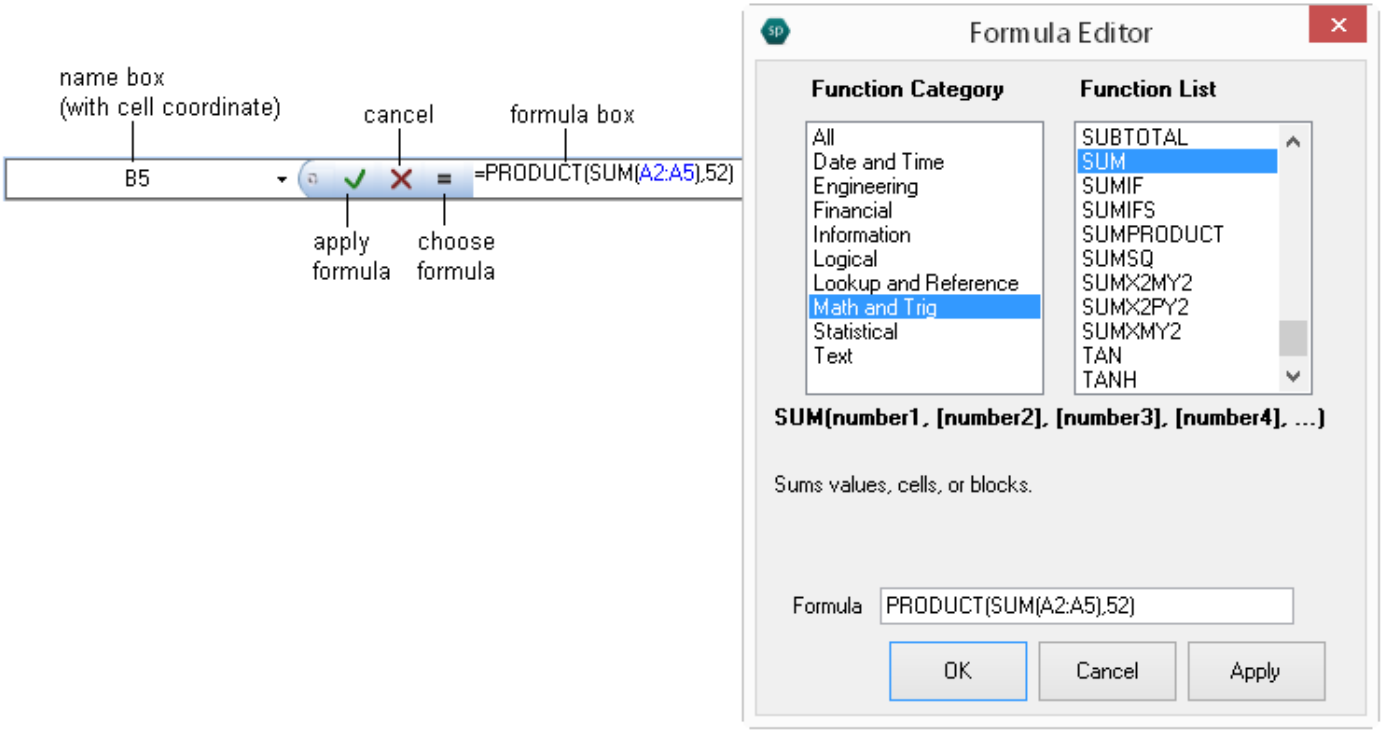


The GroupFooterVisible property must be set to true to see the group footer and AllowGroup and AllowColumnMove should be set to true to allow the user to group.

From the **File** menu choose **Apply and Exit** to apply your changes to the FpSpread component and exit Spread Designer.

Formula Editor

You can enter a formula into a cell or range of cells using the **Formula** bar or the **Formula Editor** in the Spread Designer. The **Formula** bar provides a quick way to enter a formula for a cell or group of cells. The **Formula Editor** allows you to select any of the built-in functions and is called from the **Formula** bar when you click **Equals**, as shown in the following figure.



Click Choose Formula (the equals sign button) or type equals (=) to begin the formula. This launches the **Formula Editor**. (You can also launch the **Formula Editor** by clicking the button in the Formula property in the Property Window.) The **Formula Editor** gives you a list of the more than 200 built-in functions that you can use and displays a brief description of the selected function. To choose a function, double-click on the function name and it appears in the Formula field. Functions are organized by category. You may also type operators and constants to construct your formula. For more information on formulas and functions, refer to the Formula Reference.

You can enter the formula in the Formula field in the **Formula Editor** or in the formula box in the **Formula** bar. When you are done entering the formula with the **Formula Editor**, click **Apply** or **OK**. When you are done typing the formula in the formula box, click Enter (the check mark button). This applies the formula to the selected cell or range of cells.

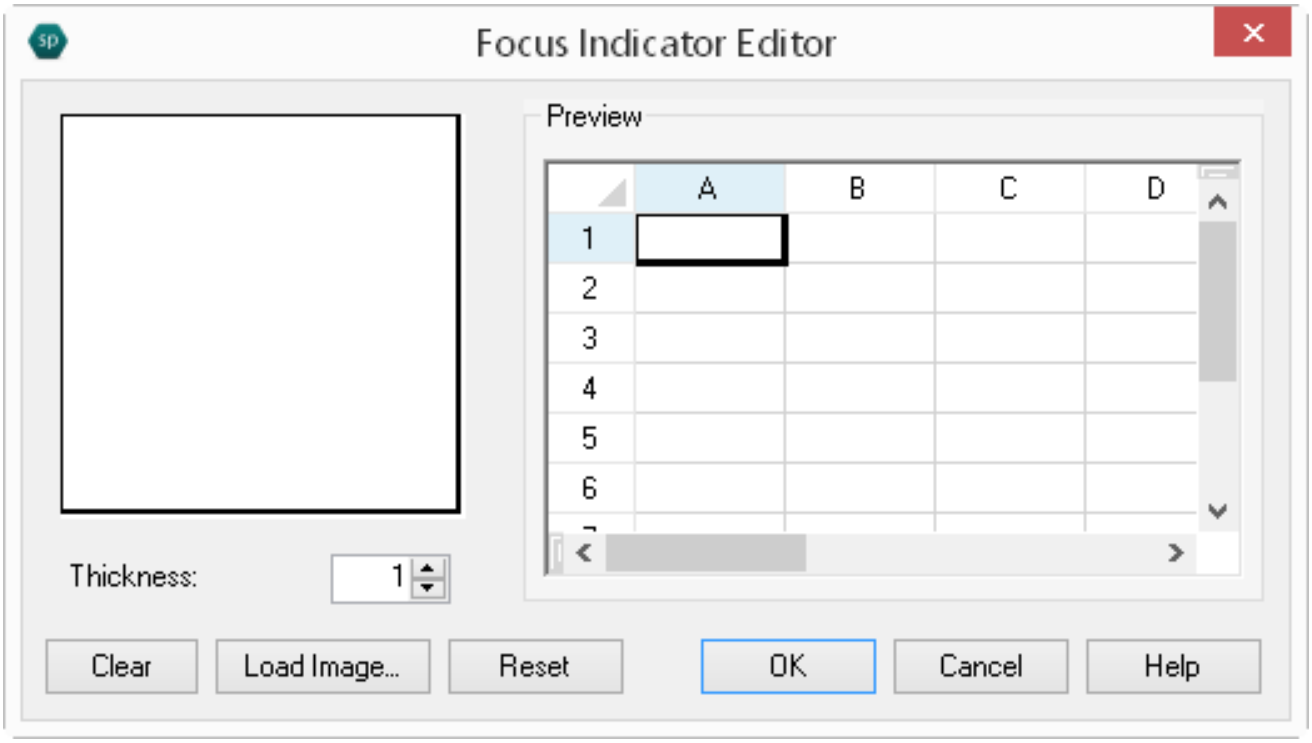
To display or hide the formula bar, from the **View** menu, select **Formula Bar**.

From the **File** menu choose **Apply and Exit** to apply your changes to the FpSpread component and exit Spread Designer.

Focus Indicator Editor

You can customize how the cell border appears when that cell is in focus using the **Focus Indicator Editor** of the Spread Designer. You can launch the **Focus Indicator Editor** from the Spread Designer by selecting the Focus Indicator icon from the **Settings** menu (**Appearance Settings** section).

The **Focus Indicator Editor** appears as shown in this figure.



Select the color or image by clicking **Load Image** and selecting a graphics file. Then select the line thickness, which is in units of pixels. The box on the left shows the loaded image and the **Preview** area on the right shows the appearance of that focus indicator. To clear the image or reset the settings, click the appropriate button. When done click **OK**.

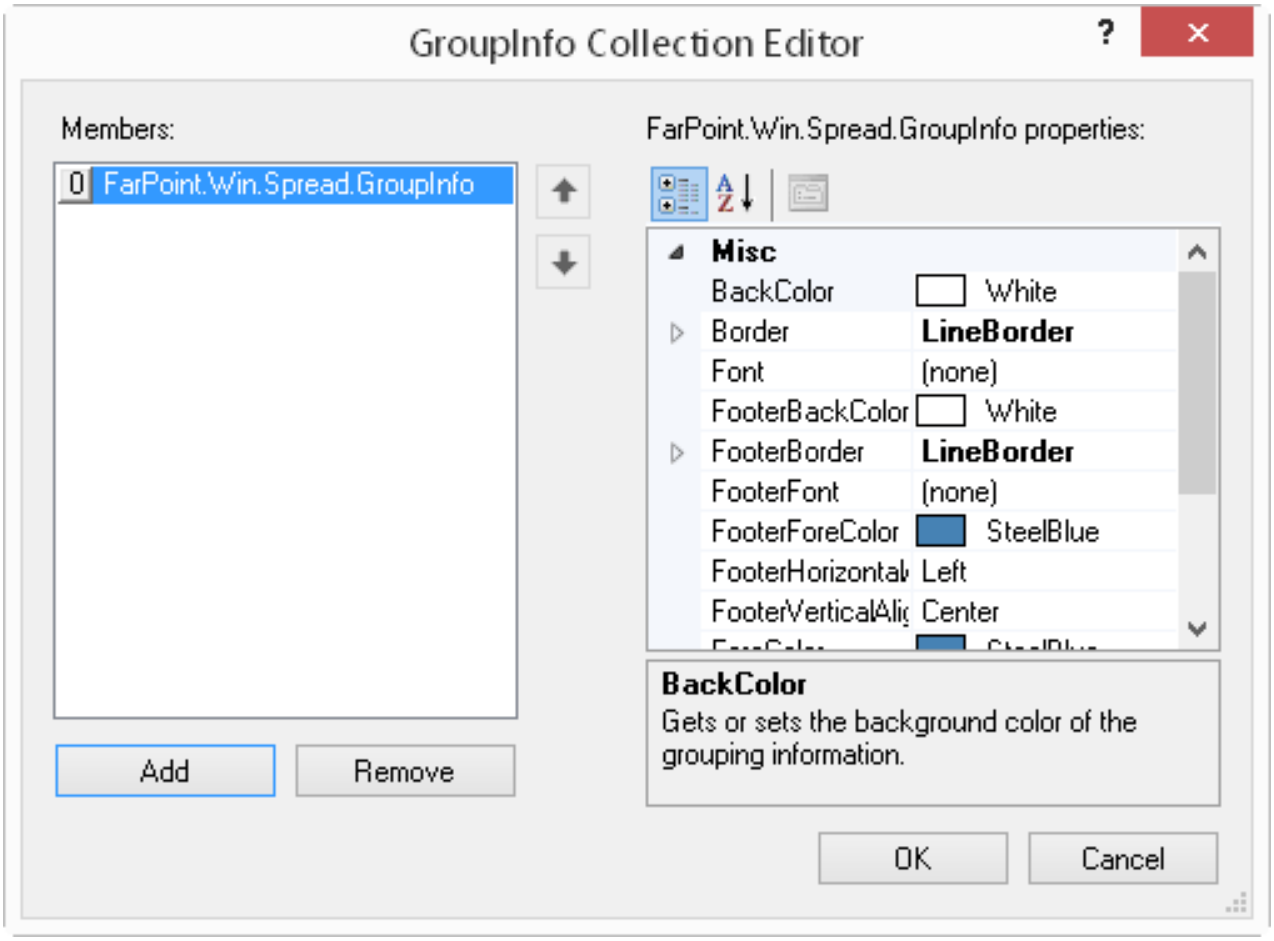
For more details on focus indicator renderer classes, refer to the various classes in the **FarPoint.Win.Spread ('FarPoint.Win.Spread Namespace' in the on-line documentation)** assembly.

GroupInfo Collection Editor

You can set basic formatting for groups with the **GroupInfo Collection Editor** of the Spread Designer. You can launch the **GroupInfo Collection Editor** from the Spread Designer by either

- selecting the sheet from the drop down on the right side of the designer and choosing **GroupInfos** under the **Misc** section
- selecting the sheet in the data area and choosing **GroupInfos** under the **Misc** section

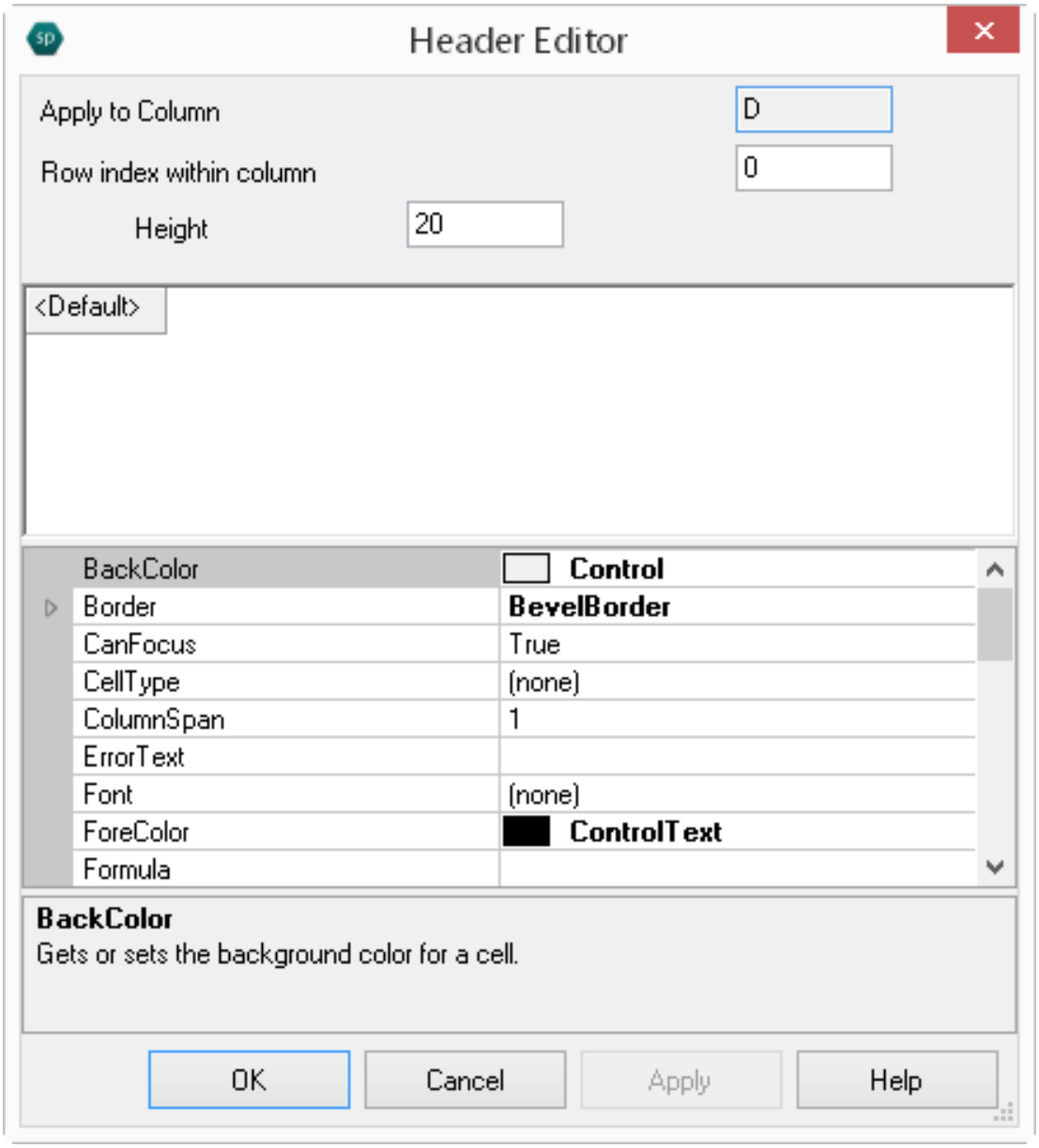
The **GroupInfo Collection Editor** appears as shown in this figure.



Click **Add** and then set the various properties as needed in the **Misc** area. When done, click **OK**.

Header Editor

You can customize the headers of rows or columns using the **Header Editor**. To launch the **Header Editor** in Spread Designer, select a header cell or cells, right-click, and select **Headers**. The **Header Editor** appears as shown in this figure.



The **Header Editor** lets you specify the text in the header of a particular row or column or range of row or columns. If more than one header is selected, from the Apply to Column field (or Apply to Row field), select a header. If you have a multiple-row column header (or a multiple-column row header), select the column (or row). Set the height in pixels. In the property list, select or type the properties you wish to set, and the preview window shows the header as it appears when you click the **Apply** button. You can click Apply to add the settings to the selected header cell and keep the editor open so that you can select more headers. When done, click **OK**.

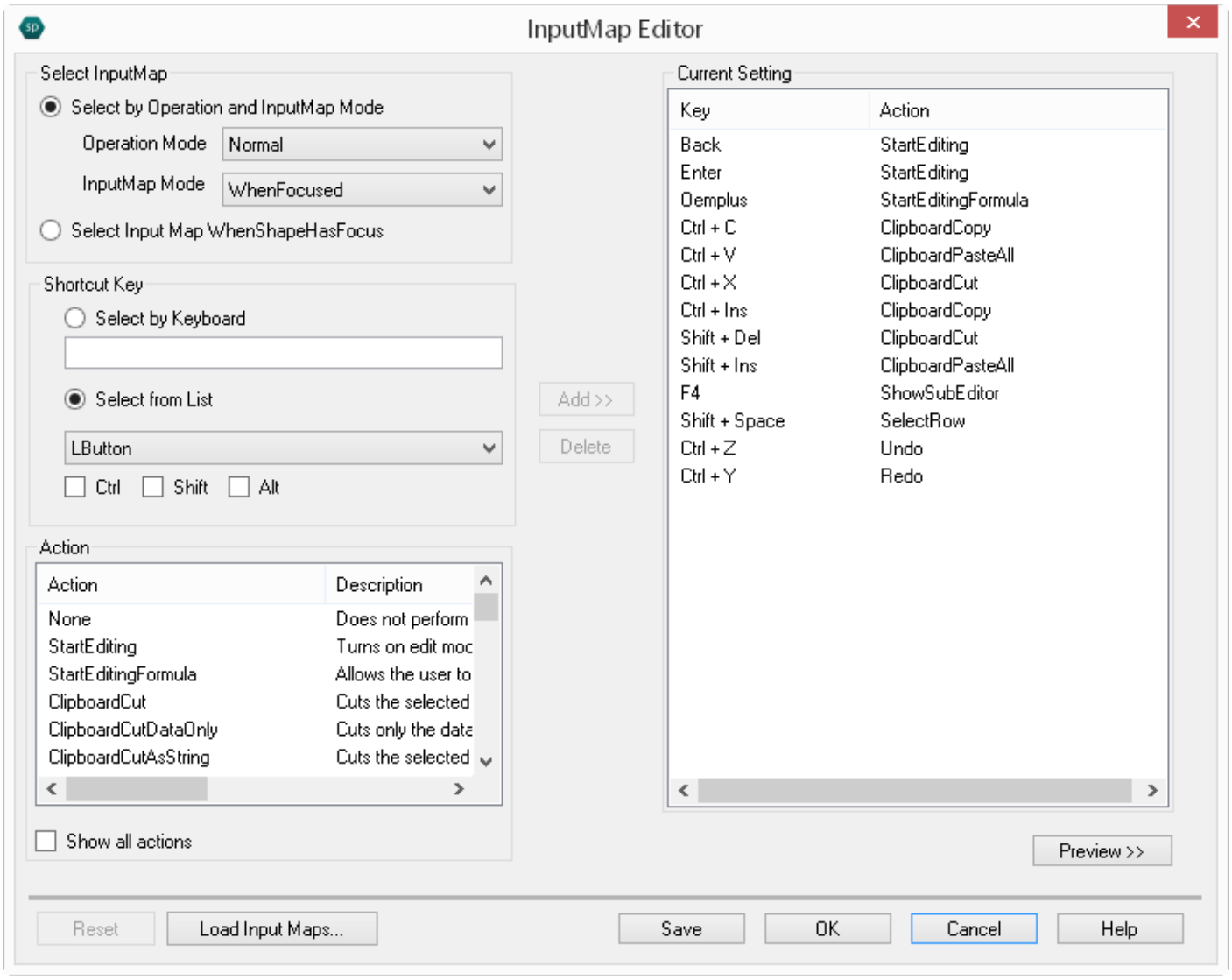
For more information on customizing headers, refer to **Customizing the Appearance of Headers (on-line documentation)** in the Developer's Guide. For more details on managing the headers in code, refer to the **ColumnHeader ('ColumnHeader Class' in the on-line documentation)** and **RowHeader ('RowHeader Class' in the on-line**

documentation) classes.

InputMap Editor

You can create input maps with the **InputMap Editor** in the Spread Designer. You can launch the **InputMap Editor** from the Spread Designer by selecting **Input Map** under the **Settings** tab. The input map icon is located in the **Other Settings** section of the **Settings** tab.

The **InputMap Editor** appears as shown in the following figure.



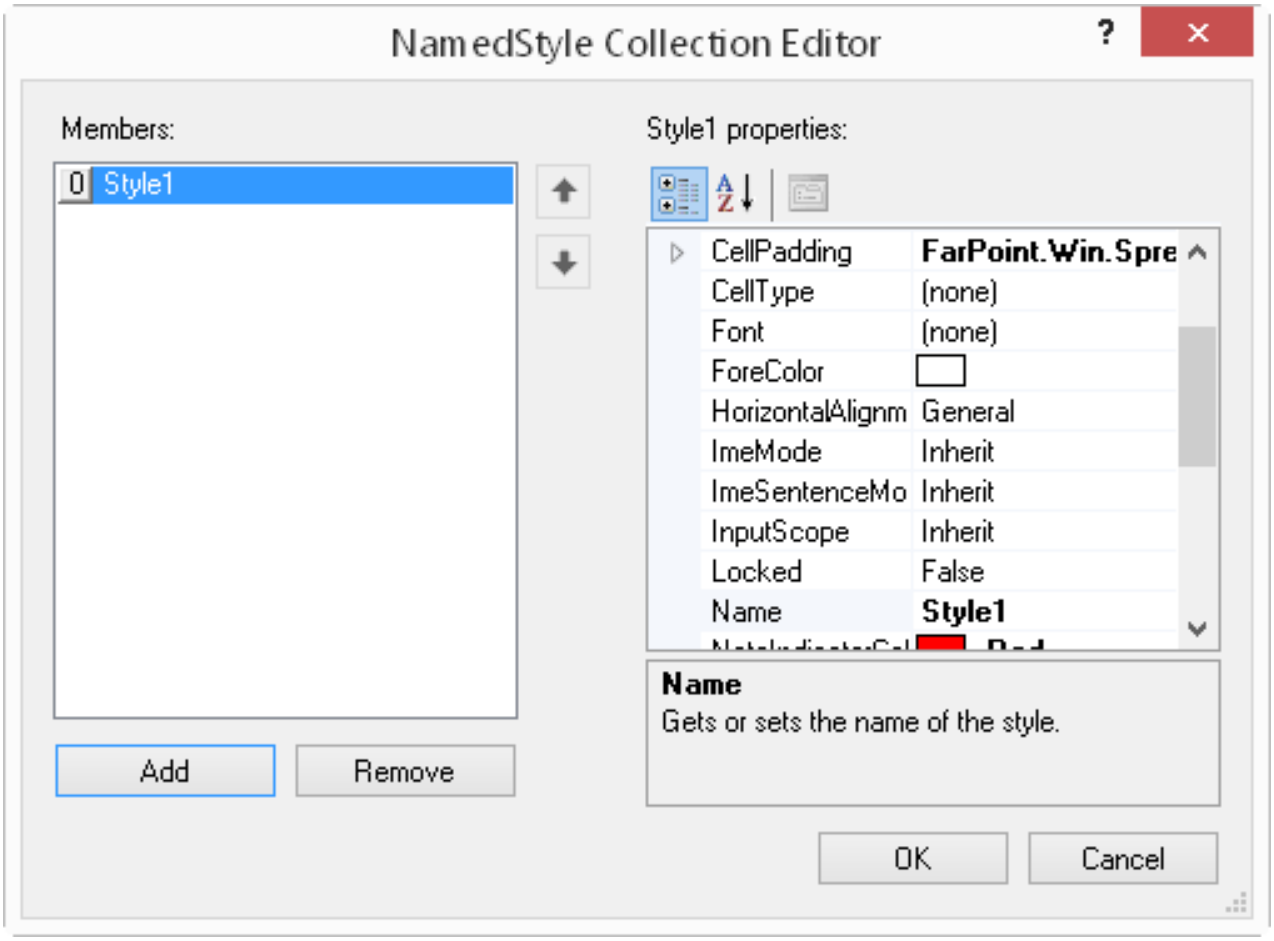
Select the mode and then specify any keys and actions. Use the **Add** button to add the new input map to the current input map list. Select **OK** when finished.

You can also save and load input maps to an XML file. The **Preview** button allows you to preview changes in the designer.

To specify a key using the "Select by Keyboard" option, click in the text box and press the key. For example, hold the "Ctrl" key and press the "D" key, and the keystroke is: Ctrl + D. The button "Select by Keyboard" is then checked automatically.

Named Style Editor

You can customize the appearance of cells by defining a named style. You can do this within the Spread Designer using the **NamedSyle Collection Editor**. This editor is launched from the **Properties** window by first selecting the Spread and then clicking on the button in the NamedStyle property. This property is under the **Appearance** section. This figure shows the editor with a named style added.



This editor allows you to edit various properties associated with a style that you define. Click **Add** to start a new style and define the properties of that style, including the name. When you are done, click **OK**.

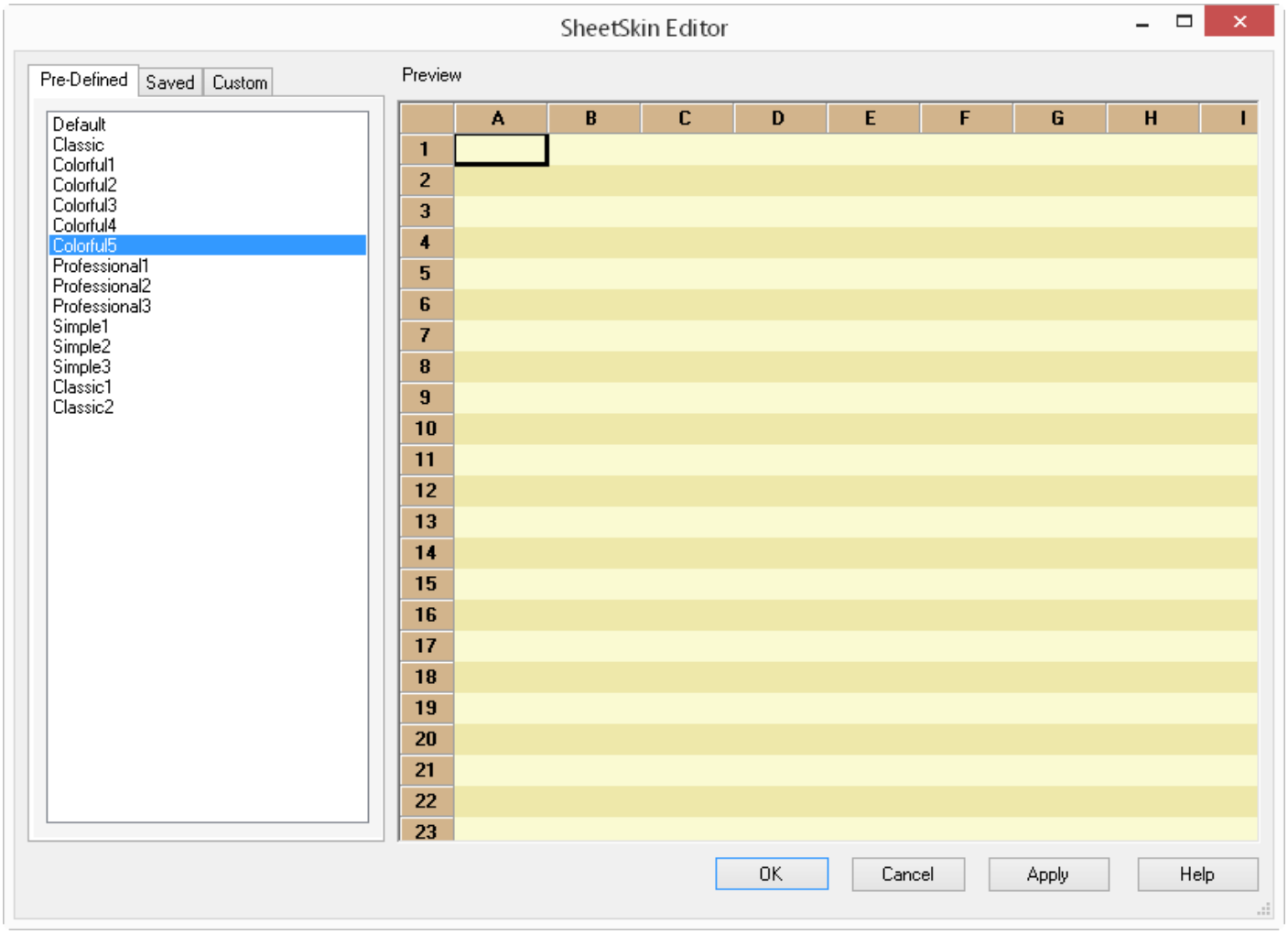
For more information about styles and default styles, refer to **Creating and Applying a Style for Cells (on-line documentation)** in the Developer's Guide.

For details about the properties of a style, refer to the **NamedStyle ('NamedStyle Class' in the on-line documentation)** class.

SheetSkin Editor

You can customize the skin, the collection of appearance settings, for the sheet with the **SheetSkin Editor** of the

Spread Designer. To launch the **Sheet Skin Editor**, from the **Settings** menu (**Appearance** section), select the SheetSkin Editor icon. Or from the **Properties** window with the sheet selected, in the **Appearance** category, select **ActiveSkin** and click on the button. The **SheetSkin Editor** appears with the Default skin selected. This figure shows a particular skin selected to illustrate the preview of that skin.



The left side of the editor allows you to choose the skin, and the right side shows a preview of the appearance before you apply it to the sheet. The first tab, **Pre-Defined**, lists the built-in skins that are already available and ready to use and customize. You can simply click on a skin name and see a small sample of the appearance in the **Preview** area. The second tab, **Saved**, lists any saved custom skins that are available. This shows any files that you have saved. You can then preview that skin and either customize it further or apply it as is. The third tab, **Custom**, allows you to create your own custom skin or customize either one of the pre-defined skins or a skin loaded from a file.

Click **Apply** to apply that skin with all its appearance settings to the sheet in Spread Designer.

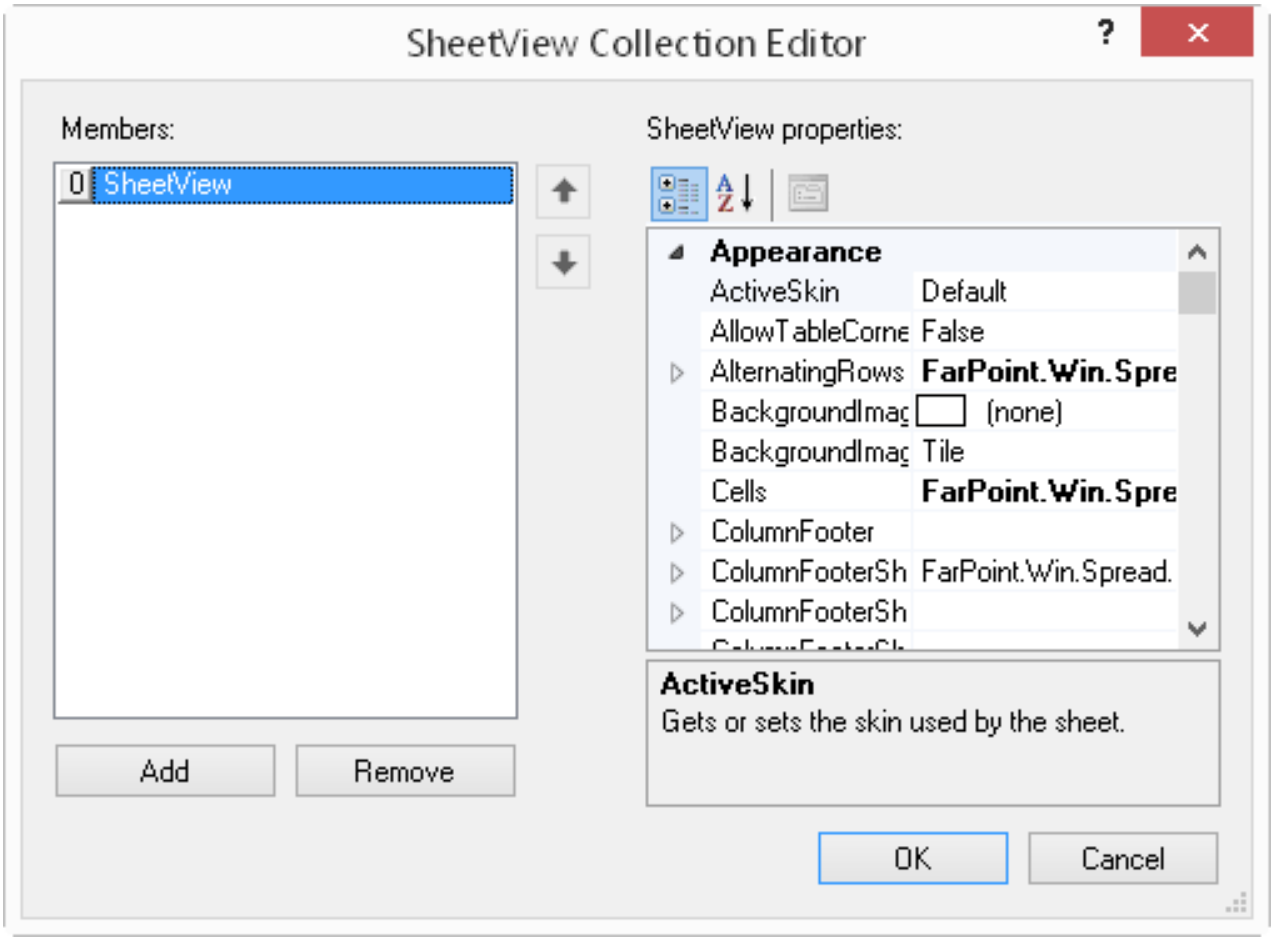
For more information about adding a new custom skin, refer to **Creating a Custom Skin for a Sheet (on-line documentation)** in the Developer's Guide.

For more information on loading and saving skins as files, refer to **Saving and Loading a Skin (on-line documentation)** in the Developer's Guide.

For details about the properties of a skin, refer to the **SheetSkin ('SheetSkin Class' in the on-line documentation)** class.

SheetView Collection Editor

You can customize the collection of sheets with the **SheetView Collection Editor** of the Spread Designer. To launch the **SheetView Collection Editor**, select the Spread (from the selection drop-down list, select Spread), and in the **Properties** window with the Spread selected, in the **Data** category, select Sheets and click on the button. The **SheetView Collection Editor** appears. This figure shows the editor with one sheet.



The left side of the editor allows you to see the list of sheets in the collection. You can click **Add** or **Remove** to add more sheets or remove specific sheets. Navigation arrows in the middle of the editor let you move up and down the list of sheets.

The right side lists the **Properties** window for the sheet selected in the members list.

Click **OK** when done setting the properties for the sheets and when done adding or removing sheets.

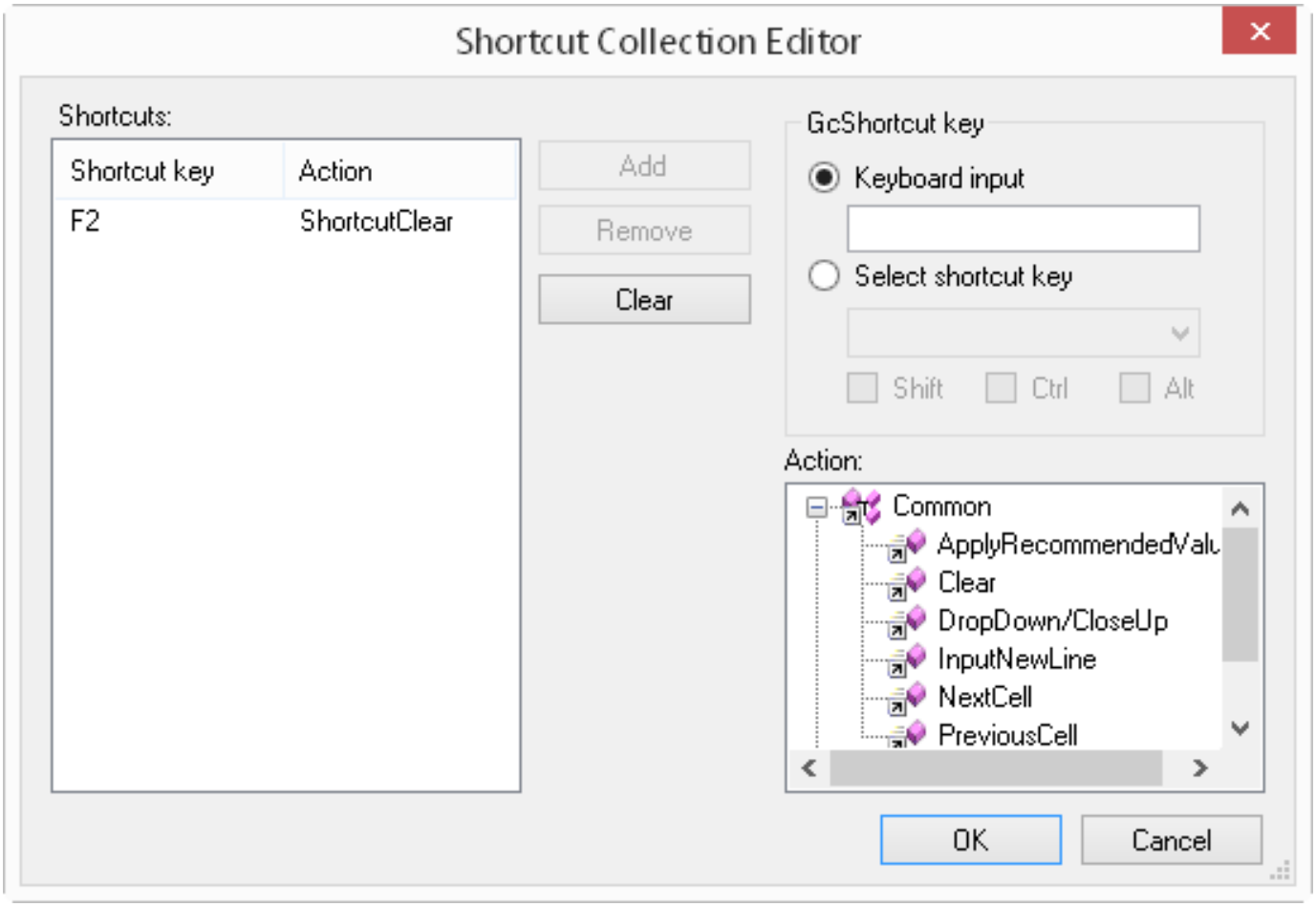
For details about the properties of a collection of sheets, refer to the **SheetViewCollection ('SheetViewCollection Class' in the on-line documentation)** class.

Shortcut Collection Editor

You can use the **Shortcut Collection Editor** to map keys to actions for the GcTextBox and the GcDateTime cells.

This editor is launched from the **Properties** window after selecting a GcDateTime or GcTextBox cell in the work area and then selecting **ShortcutKeys** under the CellType property.

The available actions depend on the cell type that is selected. The following image displays the editor for a GcTextBox cell.

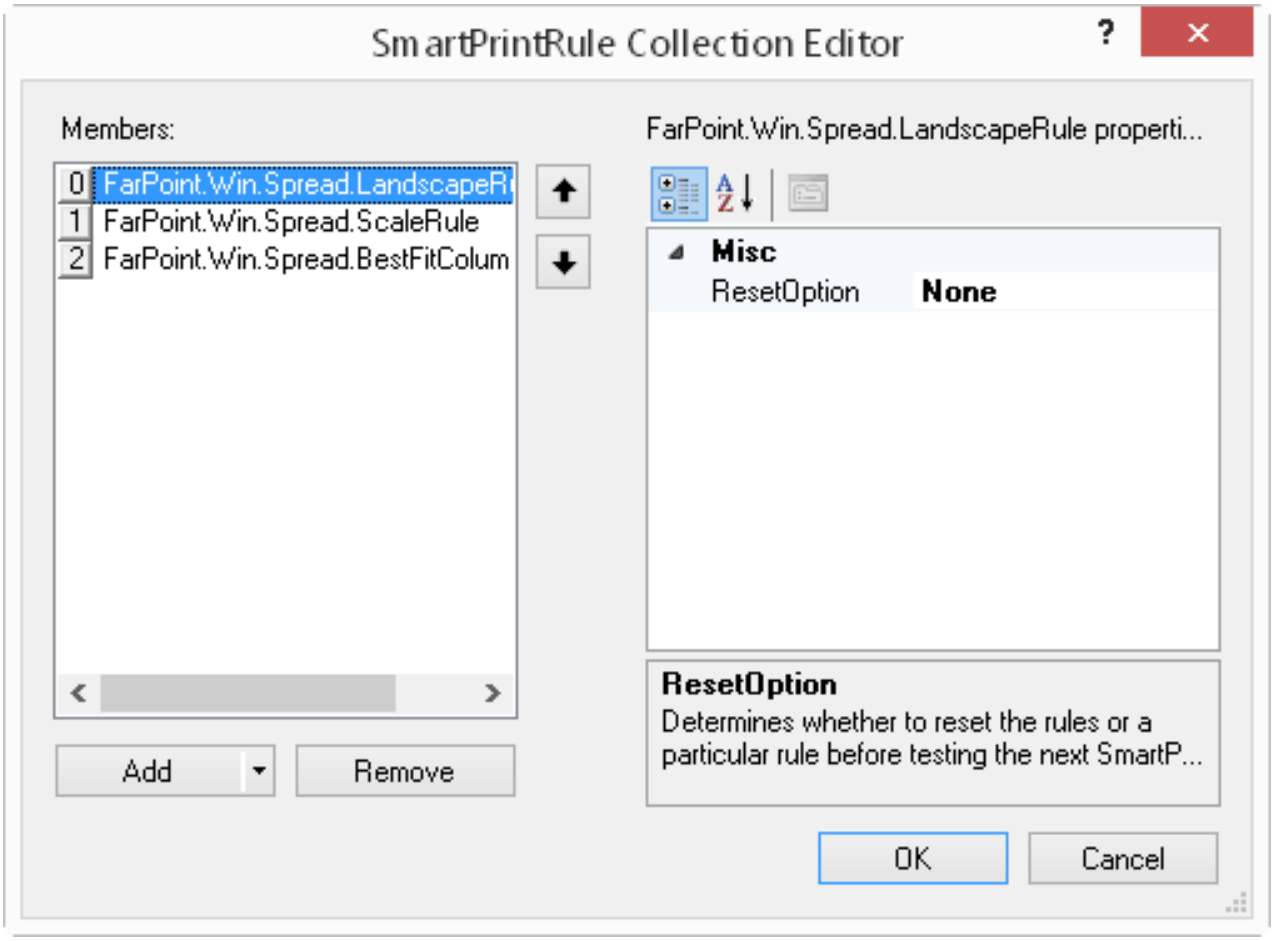


Select a shortcut key and an action. Use the **Add** button to add the mapped action and the **Remove** button to remove mapped actions. The **Clear** button clears all the mapped actions. Select **OK** to apply the changes.

SmartPrintRule Collection Editor

You can customize smart print with the **SmartPrintRule Collection** editor.

This editor is launched from the **Properties** window by selecting sheet in the drop-down box on the right side of the designer, selecting **PrintInfo**, and then clicking on the button for **SmartPrintRules** collection.



The left side of the editor allows you to see the list of rules. You can click **Add** or **Remove** to add more rules or remove specific rules. Navigation arrows in the middle of the editor let you move up and down the list of rules.

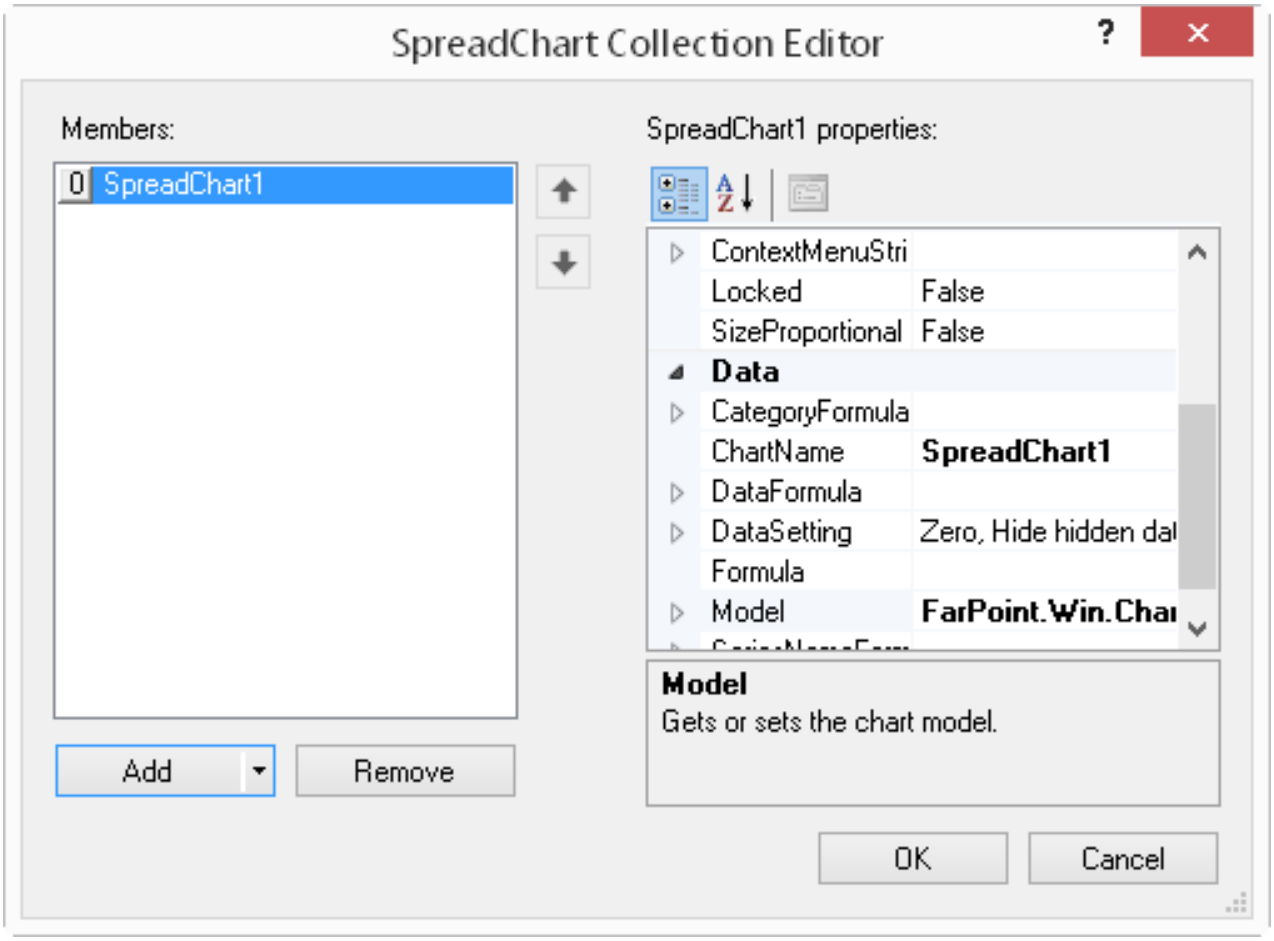
The right side lists the **Properties** window for the rule selected in the members list.

Click **OK** when done.

SpreadChart Collection Editor

You can use the **SpreadChart Collection** editor to create charts. You can set the appearance, labels, plots, and many other chart properties. For more information on charts in general, refer to **Working with the Chart Control (on-line documentation)**.

This editor is launched from the **Properties** window by selecting sheet in the drop-down box on the right side of the designer and then clicking on the button for Chart collection.



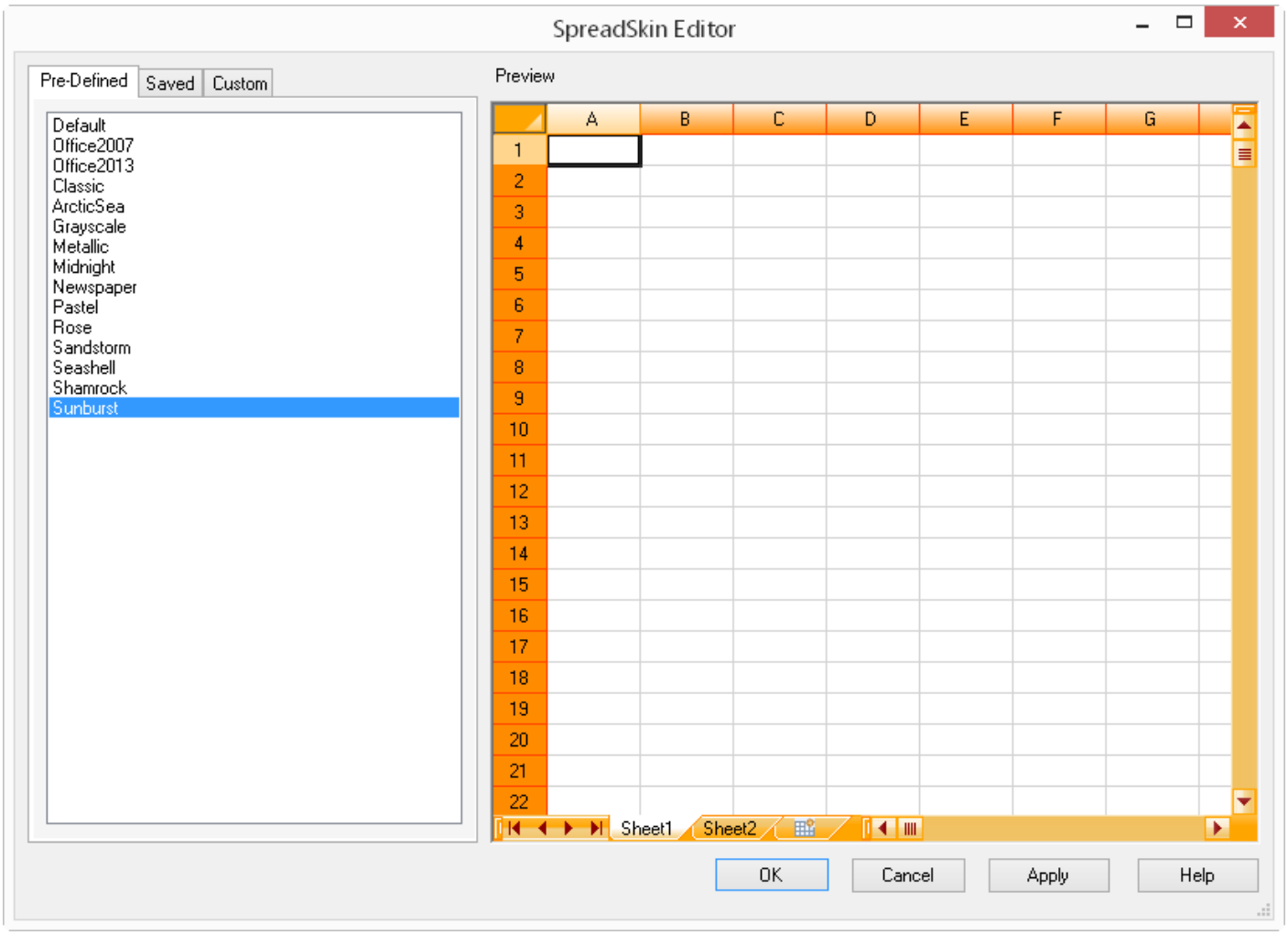
Use the **Add** button to add a chart type. The left side of the editor allows you to see the list of charts. You can click **Add** or **Remove** to add or remove charts. Navigation arrows in the middle of the editor let you move up and down the list of charts.

The right side lists the **Properties** window for the chart selected in the members list.

Click **OK** when done.

SpreadSkin Editor

You can customize the skin, the collection of appearance settings, for the entire control with the **SpreadSkin Editor** of the Spread Designer. To launch the **SpreadSkin Editor**, from the **Settings** menu (**Appearance** section), select the SpreadSkin Editor icon. Or from the **Properties** window with the spread selected, in the **Appearance** category, select **Skin** and click on the button. The **SpreadSkin Editor** appears with the Default skin selected. This figure shows a particular skin selected to illustrate the preview of that skin.



The left side of the editor allows you to choose the skin, and the right side shows a preview of the appearance before you apply it to the sheet. The first tab, **Pre-Defined**, lists the built-in skins that are already available and ready to use and customize. You can simply click on a skin name and see a small sample of the appearance in the **Preview** area. The second tab, **Saved**, lists any saved custom skins that are available. This shows any files that you have saved. You can then preview that skin and either customize it further or apply it as is. The third tab, **Custom**, allows you to create your own custom skin or customize either one of the pre-defined skins or a skin loaded from a file.

Click **Apply** to apply that skin with all its appearance settings in the Spread Designer.

For more information about adding a new custom skin, refer to **Creating a Custom Skin for a Sheet (on-line documentation)** in the Developer's Guide.

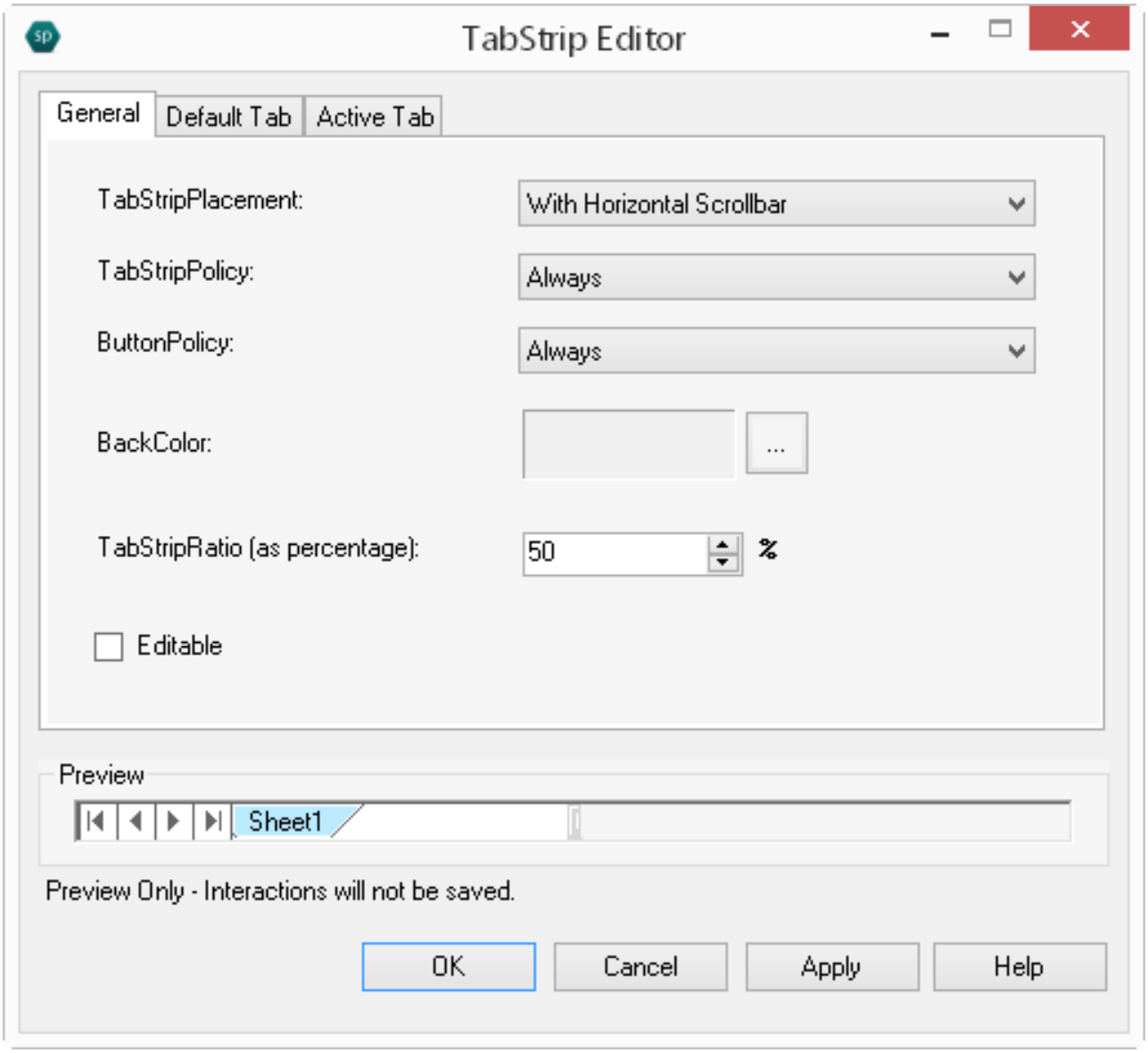
For more information on loading and saving skins as files, refer to **Saving and Loading a Skin (on-line documentation)** in the Developer's Guide.

For details about the properties of a skin, refer to the SpreadSkin class.

TabStrip Editor

You can customize how the tab strip appears by using the **TabStrip Editor** of the Spread Designer. You can launch the **TabStrip Editor** from the Spread Designer by selecting the TabStrip icon from the **Settings** menu (**Appearance** section).

The **TabStrip Editor** is shown in the following figure. The TabStripPolicy has been set to Always in this image (default setting is As Needed).



The **TabStripPlacement** option allows you to place the tab strip at the top, bottom, or with the horizontal scrollbar. The **TabStripPolicy** drop-down sets whether the sheet tabs are displayed all the time, when needed, or not at all. The **TabStripRatio** sets the width of the tab strip expressed as a percentage of the overall horizontal scroll bar width. You can also set the backcolor and set colors and fonts for the active or default tabs. When done click **OK**.

For more details on focus indicator renderer classes, refer to the various classes in the **FarPoint.Win.Spread ('FarPoint.Win.Spread Namespace' in the on-line documentation)** assembly.

Designing in the Data Area

Spread Designer helps you design your Spread component by letting you see most of the settings you make at the time you make them, and by letting you access settings that you cannot access in Visual Studio at design time. You can use Spread Designer for many aspects of design, including customizing the appearance of your component. You can also load data into the sheets in your component, if you want to do so. The Spread Designer lets you work with the design in a data area that simulates the actual spreadsheet. By selecting items and changing properties, you can see the result immediately in the data area.

The following topics describe some specific tasks you need to do in Spread Designer to customize the FpSpread component by selecting part of the spreadsheet and changing the properties either in the Properties window or a dedicated dialog.

- **Selecting an Item in the Spread Designer**
- **Setting Properties in Spread Designer**
- **Entering a Formula in Spread Designer**
- **Adding and Customizing Sheets**

For more information on the dialogs and editors, refer to the **Spread Designer Dialogs** and **Spread Designer Editors**.

For more information on working with the design once you have completed it, refer to **Working with the Design**.

Selecting an Item in the Spread Designer

To set the properties for something in Spread Designer, you need to select the object with which you want to work, then set the properties for it. For example, to set property for a cell, you must select the cell, then set properties in the properties list or from the right-click menu. There are different ways to select items and there are different properties available for customizing based on the item selected.

You can tell what object is currently selected by looking at the status bar. For information on how to interpret the notation in the status bar, refer to the **Spread Designer Status Bar**.

These are several items that can be selected in the Spread Designer.

- **Selecting an Individual Cell**
- **Selecting the Cells with Data**
- **Selecting a Contiguous Range of Cells**
- **Selecting a Row of Cells**
- **Selecting a Column of Cells**
- **Selecting a Sheet of Cells**
- **Selecting an Entire FpSpread Component**

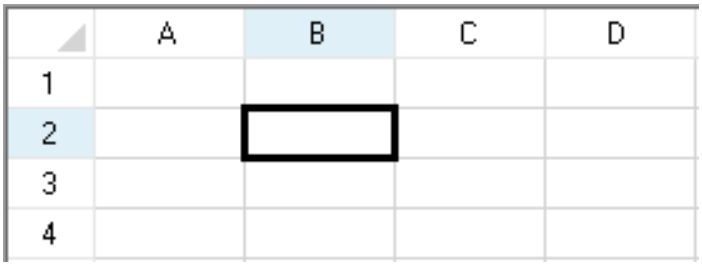
For more information on setting properties of the selected item, refer to **Setting Properties in Spread Designer**.

Note: If you are trying to work with an object, and the properties for the object do not appear to be correct, or your choices do not appear to have an effect, make sure you have selected the object with which you intend to work.

For more tasks in Spread Designer, return to **Designing in the Data Area**.

Selecting an Individual Cell

You can select an individual cell in the data area by clicking on the cell. The active cell shows the focus indicator and displays the cell with the sheet background color, in this case white.



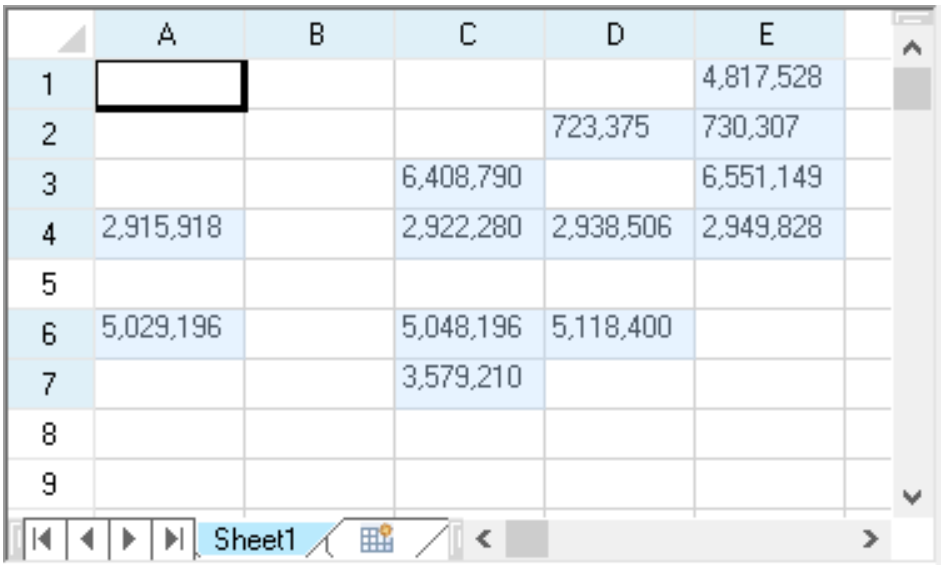
All cell types (check box, button, etc.) do not react to the first click on cell selection. This allows the Spread Designer to set the selected cell(s) into the **Properties** window for property access. You must double-click a cell for a change to occur; simply single clicking does not change the state of the button or the state of edit mode.

For information on how to set properties for a cell, refer to **Setting Cell Properties in Spread Designer**.

For information on other selectable items, return to **Selecting an Item in the Spread Designer**.

Selecting the Cells with Data

You can select all the cells in the data area that have data in them by right clicking anywhere in the data area and selecting "**Select All** > **Data**" from the context menu. The active cell still remains whichever was the last active cell, but now all the cells with data are shown as selected. An example of this is shown in the figure, with the cells that have data appearing in light blue.



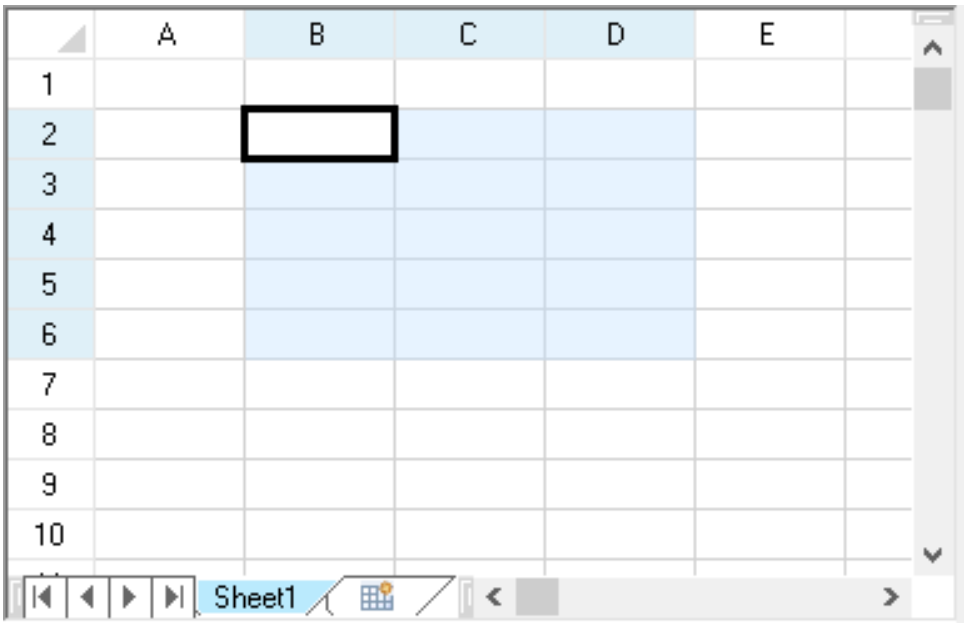
Now you can perform operations on the entire selection of cells with data. The possible operations are available from the context menu by right clicking on one of the selected cells. These include the Clipboard operations of cut, copy, and paste, setting the cell type, setting the cell border, and clearing the contents.

If the cells with data are not contiguous, then you cannot lock or span cells, but these options are also available from the right click menu.

For information on other selectable items, return to **Selecting an Item in the Spread Designer**.

Selecting a Contiguous Range of Cells

You can select a range of cells and set properties for all the cells in that range. To select a cell or range of cells, click and drag over the cells in the work area. The Spread Designer shows the cells are selected by highlighting them. The active cell shows the focus indicator and displays the cell with the sheet background color, in this case white.

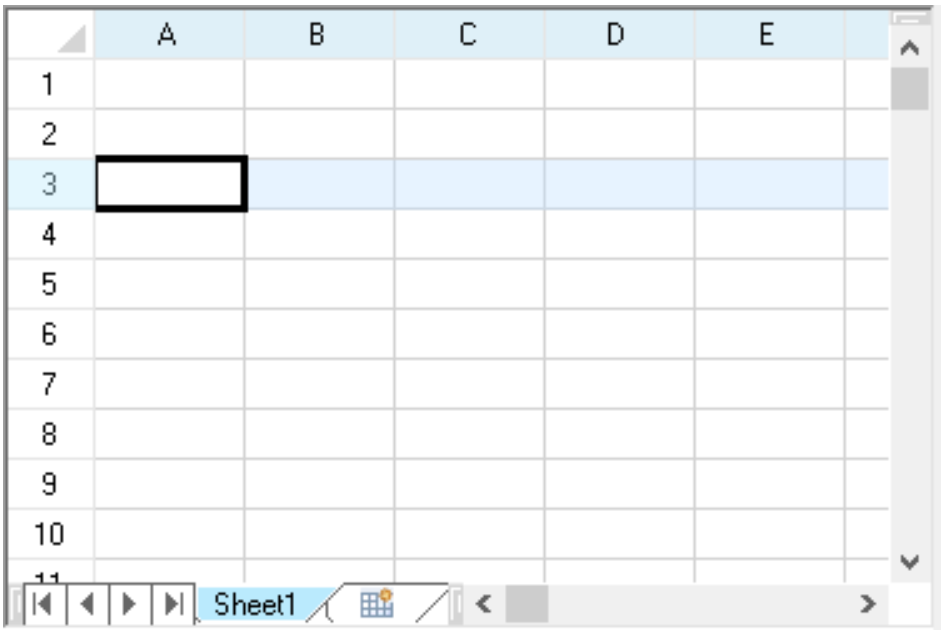


Not all cell types (check box and button for instance) react to the first click on cell selection. This allows the Spread Designer to set the selected cell(s) into the **Properties** window for property access. You must double-click a cell for a change to occur; simply single clicking does not change the state of the button or the state of edit mode.

For information on other selectable items, return to **Selecting an Item in the Spread Designer**.

Selecting a Row of Cells

You can select a row and set properties for all the cells in that row. To select a row or column, click on the header in the work area as if you are in a spreadsheet. The selected row is highlighted as shown here.



Also, you can add or remove rows or columns by using the options in the right-click menu. The Spread Designer shows the row or column is selected by highlighting all the cells in that row or column.

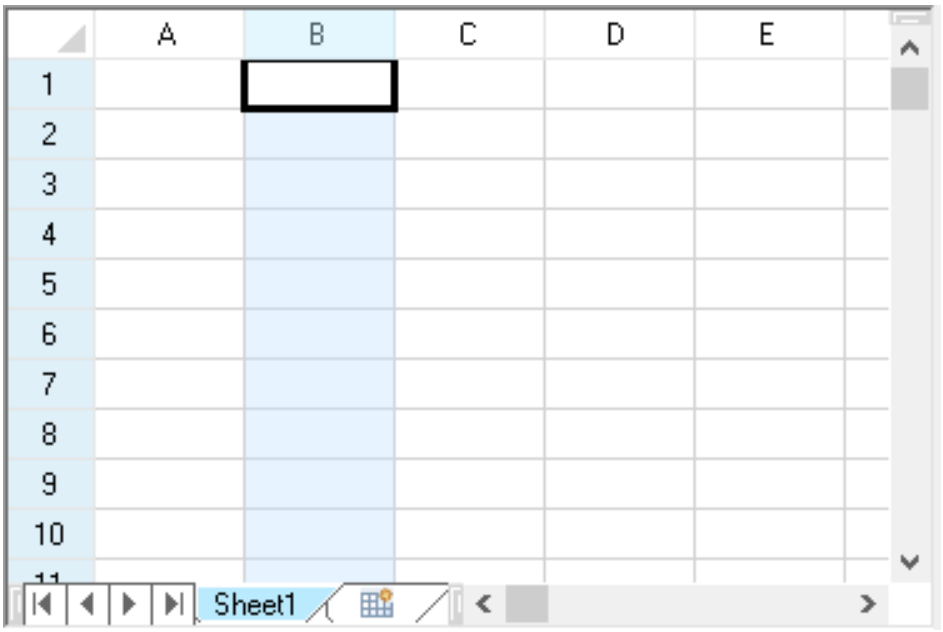
Note: There is a difference between a row (or column) locked and a cell locked; the toolbar buttons and context menu selections represent the status of the row, column, or cell selected. Having the Locked property set for a row is different than having it set for a cell in that row.

For information on how to set properties for a row of cells, refer to **Setting Row Properties in Spread Designer**.

For information on other selectable items, return to **Selecting an Item in the Spread Designer**.

Selecting a Column of Cells

You can select a column of cells and set properties for all the cells in that column. To select a row or column, click on the header in the work area as if you are in a spreadsheet. The selected column is highlighted as shown here.



Also, you can add or remove rows or columns by using the options in the right-click menu. The Spread Designer shows the row or column is selected by highlighting all the cells in that row or column.

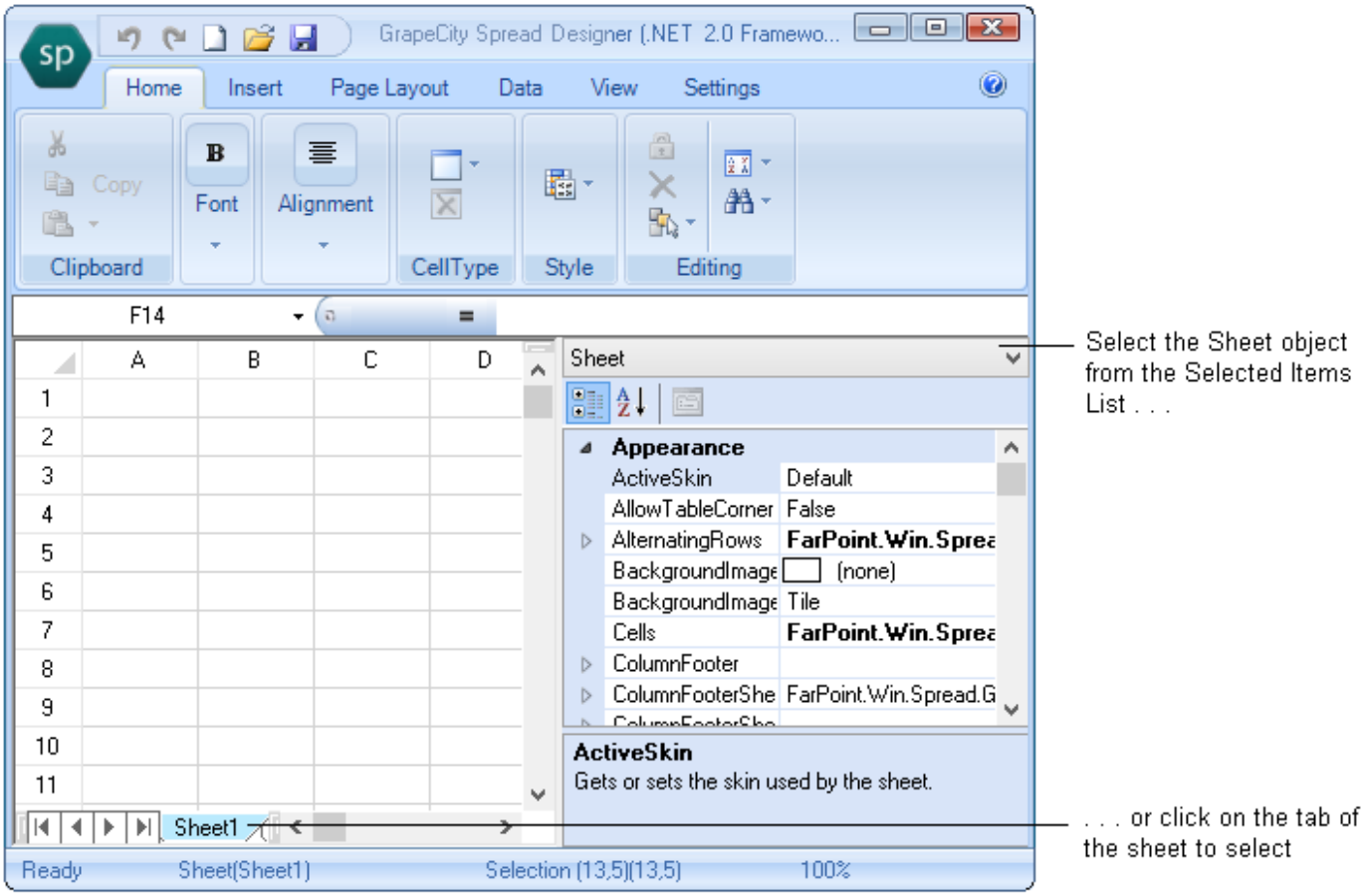
Note: There is a difference between a row (or column) locked and a cell locked; the toolbar buttons and context menu selections represent the status of the row, column, or cell selected. Having the Locked property set for a row is different than having it set for a cell in that row.

For information on how to set properties for a column of cells, refer to **Setting Column Properties in Spread Designer**.

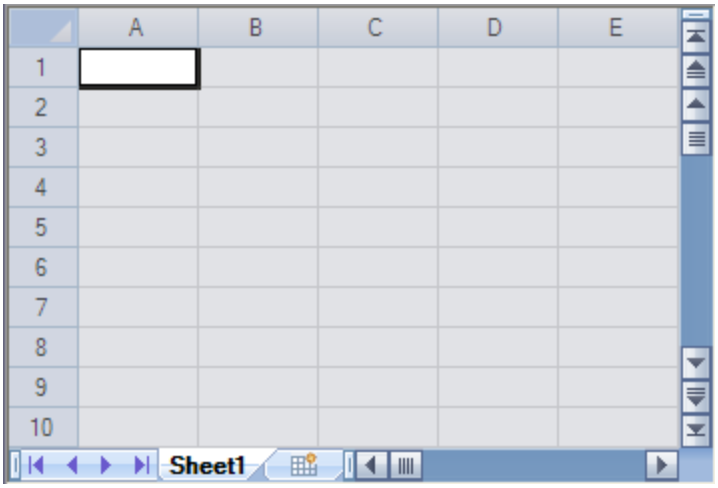
For information on other selectable items, return to **Selecting an Item in the Spread Designer**.

Selecting a Sheet of Cells

If you want to set properties for a sheet, you must select the sheet by clicking the sheet tab. Or you can select **Sheet** from the selected item list as illustrated in the figure below. In this figure, the sheet named Sheet1 is selected as the current object.



You can select the entire sheet by clicking on the corner cell, or by using **Home** (**Editing section**) > **Select All** icon > **Sheet**.



You can select all the cells in the sheet (not the headers) by using **Home** > **Select All** > **Cells**

You can select all the cells in the sheet that have data in them by using **Home** > **Select All** > **Data**.

To select the entire sheet, you can click on the sheet corner in the upper left area of the work area of the spreadsheet. This selects and highlights all the cells (corner, headers, and data area cells) in the sheet. You can also select the sheet from the selection box in the **Properties** window (above the list of properties).

For information on how to set properties for a sheet, refer to **Setting Sheet Properties in Spread Designer**.

For information on other selectable items, return to **Selecting an Item in the Spread Designer**.

Selecting an Entire FpSpread Component

To select the entire FpSpread component, you can only select it from the selection box in the **Properties** window (above the list of properties). This selects the entire component. Nothing is shown in the display other than the word “Spread” that appears in the Status Bar.

For information on other selectable items, return to **Selecting an Item in the Spread Designer**.

Setting Properties in Spread Designer

There are several ways to set the properties of the spreadsheet component or of any of its objects, using the Spread Designer. Most involve first selecting an item.

For a list of what can be selected, refer to **Selecting an Item in the Spread Designer**.

In general, with the item selected, these are the ways you can set properties for that selected item.

- Use the **Properties** window and select or type in the setting for the property
- Use the menus to select either **Sheets**, **Rows**, or **Columns** and open a dialog or editor to set properties for that item
- Right-click, and use the context (pop-up) menu to set some of the properties, typically by selecting a choice that opens a dialog or editor

For more information on specific items that can be selected and how to set properties for those items, refer to these:

- For an entire sheet of cells, refer to **Setting Sheet Properties in Spread Designer**.
- For a column of cells, refer to **Setting Column Properties in Spread Designer**.
- For a row of cells, refer to **Setting Row Properties in Spread Designer**.
- For a cell or range of cells, refer to **Setting Cell Properties in Spread Designer**.
- For a table, refer to **Setting Table Properties in Spread Designer**.

For more information on using the dialogs and editors, refer to **Spread Designer Dialogs** and **Spread Designer Editors**.

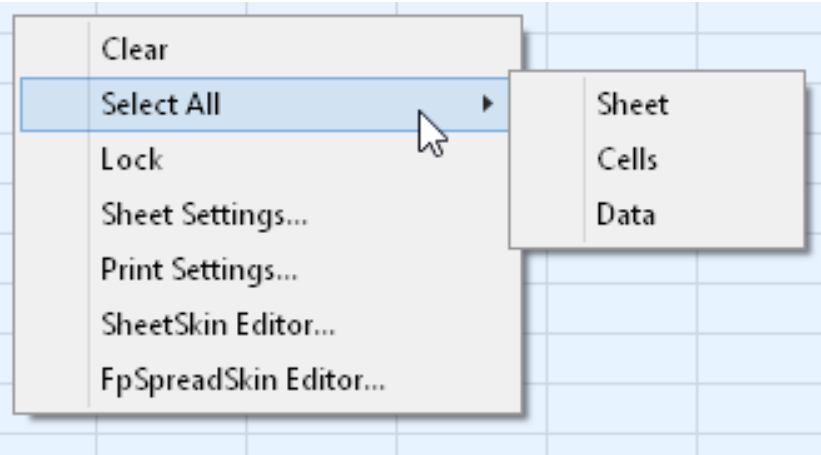
The properties window corresponds to the properties of a cell or sheet or component. It does not apply to shapes, which are on a separate layer. To change properties of a shape, right-click on a shape and select **Properties** or use the **Drawing Tools** menu. For more information on shapes, refer to **Designing Shapes**.

For more tasks in Spread Designer, return to **Designing in the Data Area**.

Setting Sheet Properties in Spread Designer

You can set properties on an entire sheet of cells and those properties apply to the sheet.

Here is the context menu available to a selected sheet. Right-click on a selected sheet in the designer to bring up this menu.



This context menu has the following items:

Context Menu Choice	Description and Reference
Clear	Removes the contents of all the cells in the selected row but does not affect the header cells.
Select All	Allows you to select the entire sheet, all the cells in the data area, or all the cells with data.
Lock	You can lock a column of cells so that the user cannot edit them. Remember this applies the lock to the column, not the individual cells.
Sheet Settings	Allows you to edit the properties for the entire sheet. For more information, refer to **Sheet Settings Dialog**.
Print Settings	Allows you to edit the printing properties for the entire sheet. For more information, refer to **Sheet Print Settings Dialog**.
SheetSkin Editor	Runs the SheetSkin Editor to allow you to edit the look and feel (skin) of the entire sheet. For more information, refer to **SheetSkin Editor**.
FpSpreadSkin	Runs the FpSheetSkin Editor to allow you to edit the look and feel (skin) of

Editor the entire control. For more information, refer to **SpreadSkin Editor**.

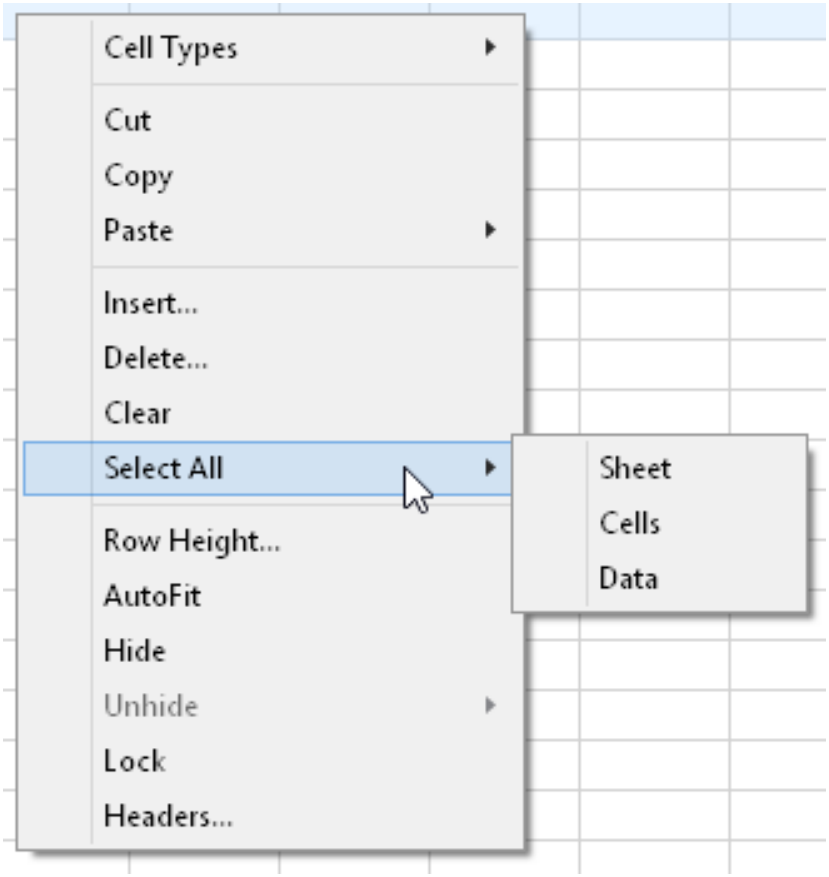
For information on how to select a sheet, refer to **Selecting a Sheet of Cells**.

For information on other selectable items, return to **Setting Properties in Spread Designer**.

Setting Row Properties in Spread Designer

You can set properties on a row of cells and those properties apply to the row. You can work with either rows or columns selected to speed the work in customizing cells in the data area. With the row (or rows) or column (or columns) selected, use the context menu by right-clicking on the selected area to perform some actions on the cells in that row or column quickly. For example you can select a cell type for the cells, you can insert or delete a row or column, and you can set the row height or column width.

With a row selected (and this is similar to that for a column selected), you can perform any of these operations available from the context menu. Here is the context menu available for selected rows.



This context menu has the following items:

Context Menu Choice	Description and Reference
Cell Types	You can select the cell type for the cells in this row. For more information, refer to **Cell Type Dialog**.
Cut, Copy, Paste	In this release the copy, cut, and paste options are not available. Any Clipboard operation would have to be done in code.
Insert	This allows you to insert a row or rows above the selected row. See the **Row or Column Insert or Delete Dialogs**.
Delete	Allows you to delete a row or rows, but not without first asking you to confirm. See the **Row or Column Insert or Delete Dialogs**.
Clear	Removes the contents of all the cells in the selected row but does not affect the header cells.
Select All	Allows you to select the entire sheet, all the cells in the data area, or all the cells with data.
Row Height	Set the height of the entire row. See the **Row Height or Column Width Dialog**.
AutoFit	Automatically sizes the row to fit the contents by adjusting the row height.
Hide / Unhide	With Hide, make the row invisible to the user, though still accessible by code. To make it visible again, use Unhide. When you hide a row, the data is kept in the data model, but the row is not displayed in the sheet.
Lock	You can lock a row of cells so that the user cannot edit them. Remember this applies the lock to the row, not the individual cells.
Headers	Runs the Header Editor to allow you to edit the header of this row. For more information, refer to **Header Editor**.

For information on working with a column of cells, refer to **Setting Column Properties in Spread Designer**.

For information on other selectable items, return to **Setting Properties in Spread Designer**.

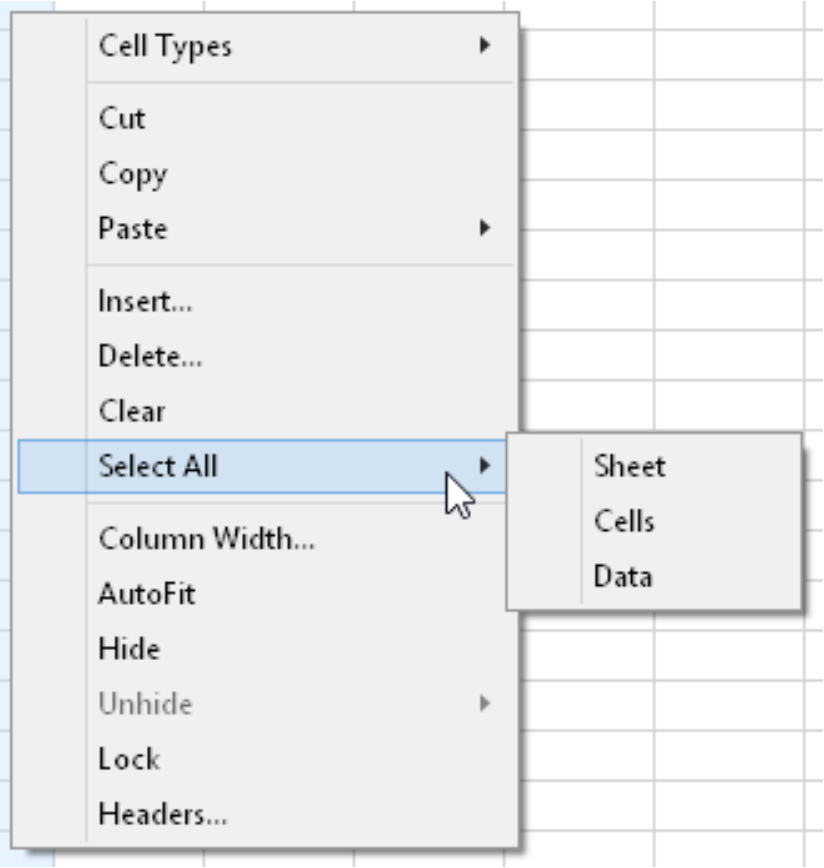
For information on how to select a column, refer to **Selecting a Row of Cells**.

For more tasks in Spread Designer, return to **Designing in the Data Area**.

Setting Column Properties in Spread Designer

You can set properties on a column of cells and those properties apply to the column. You can work with selected columns to speed the work in customizing cells in the data area. With the column (or columns) selected, use the context menu by right-clicking on the selected area to perform some actions on the cells in that column quickly. For example you can select a cell type for the cells, you can insert or delete a column, and you can set the column width.

With a column selected (and this is similar to that for a row selected), you can perform any of these operations available from the context menu. Here is the context menu available to selected columns.



This context menu has the following items:

Context Menu Choice	Description and Reference
Cell Types	You can select the cell type for the cells in this column. For more information,

	refer to **Cell Type Dialog**.
Cut, Copy, Paste	In this release the copy, cut, and paste options are not available. Any Clipboard operation would have to be done in code.
Insert	This allows you to insert a column or columns to the left of the selected column. See the **Row or Column Insert or Delete Dialogs**.
Delete	Allows you to delete a column or columns, but not without first asking you to confirm. See the **Row or Column Insert or Delete Dialogs**.
Clear	Removes the contents of all the cells in the selected column but does not affect the header cells.
Select All	Allows you to select the entire sheet, all the cells in the data area, or all the cells with data.
Column Width	Set the width of the entire column. See the **Row Height or Column Width Dialog**.
AutoFit	Automatically sizes the column to fit the contents by adjusting the column width.
Hide / Unhide	With Hide, make the column invisible to the user, though still accessible by code. To make it visible again, use Unhide. When you hide a column, the data is kept in the data model, but the column is not displayed in the sheet.
Lock	You can lock a column of cells so that the user cannot edit them. Remember this applies the lock to the column, not the individual cells.
Headers	Runs the Header Editor to allow you to edit the header of this column. For more information, refer to **Header Editor**.

For information on working with a row of cells, refer to **Setting Row Properties in Spread Designer**.

For information on other selectable items, return to **Setting Properties in Spread Designer**.

For information on how to select a column, refer to **Selecting a Column of Cells**.

For more tasks in Spread Designer, return to **Designing in the Data Area**.

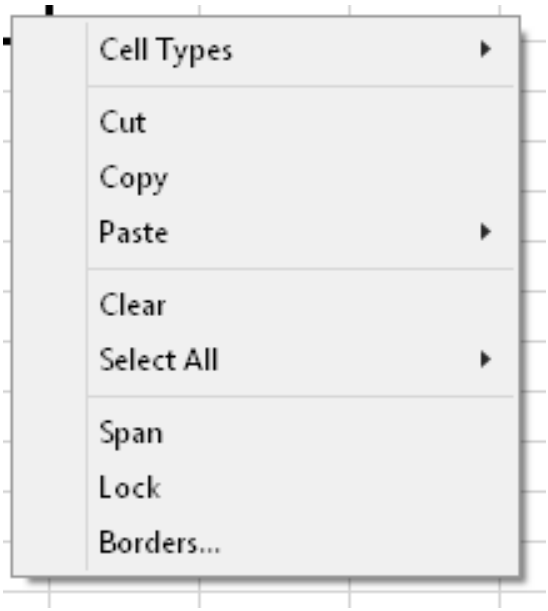
Setting Cell Properties in Spread Designer

These are some additional notes about setting properties of cells in particular. There are several ways to set the properties of an individual cell in the Spread Designer. The first step is selecting a cell. (For information on selecting a cell, refer to **Selecting an Item in the Spread Designer**.)

If you are setting cell types for a given cell or range of cells, use the cell types right-click menu or the **Cell Types** option in the **Home** menu to quickly apply the cell type. In the **Cell Types** option, there is a separate button or icon for each cell type.

When you set a cell to be a Label cell, the cell becomes locked. If you then clear this cell so that it is no longer a Label cell, the Locked property is still set, so you need to unlock these cells to reset them completely.

With a range of cells selected, you can perform any of these operations available from the context menu.



This context menu has the following items:

Context Menu Choice	Description and Reference
Cell Types	You can select the cell type for the cells in this row or column. For more information, refer to **Cell Type Dialog**.
Cut, Copy, Paste	These Clipboard operations handle the contents of the cells and cut, copy, and paste as expected.
Clear	Removes the contents of all the cells in the selected row or column but does not affect the header cells.

Select All	Allows you to select the entire sheet, all the cells in the data area, or all the cells with data.
Span	Automatically sizes the row or column to fit the contents by adjusting either the row height or column width.
Lock	You can lock a row and column of cells so that the user cannot edit them.
Borders	Runs the Border Editor to allow you to edit the borders of the cells. For more information, refer to **Border Editor**.

For information on putting a formula in a cell, refer to **Entering a Formula in Spread Designer**.

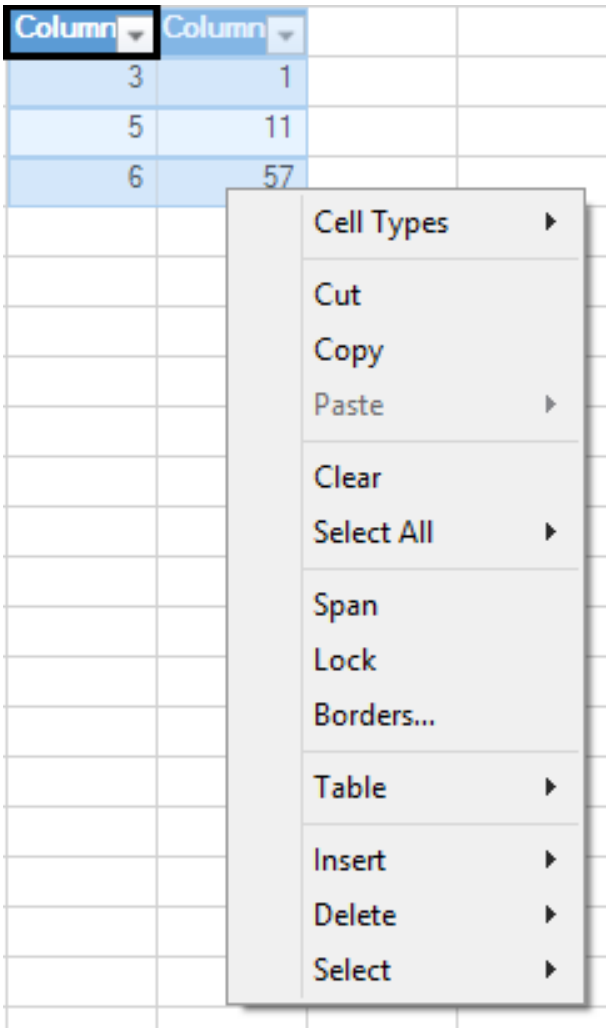
For information on how to select a cell, refer to **Selecting an Individual Cell**. For information on how to select a range of cells, refer to **Selecting a Contiguous Range of Cells**.

For more tasks in Spread Designer, return to **Designing in the Data Area**.

Setting Table Properties in Spread Designer

You can set properties for the table using the context menu.

Right-click on the table to display the context menu.



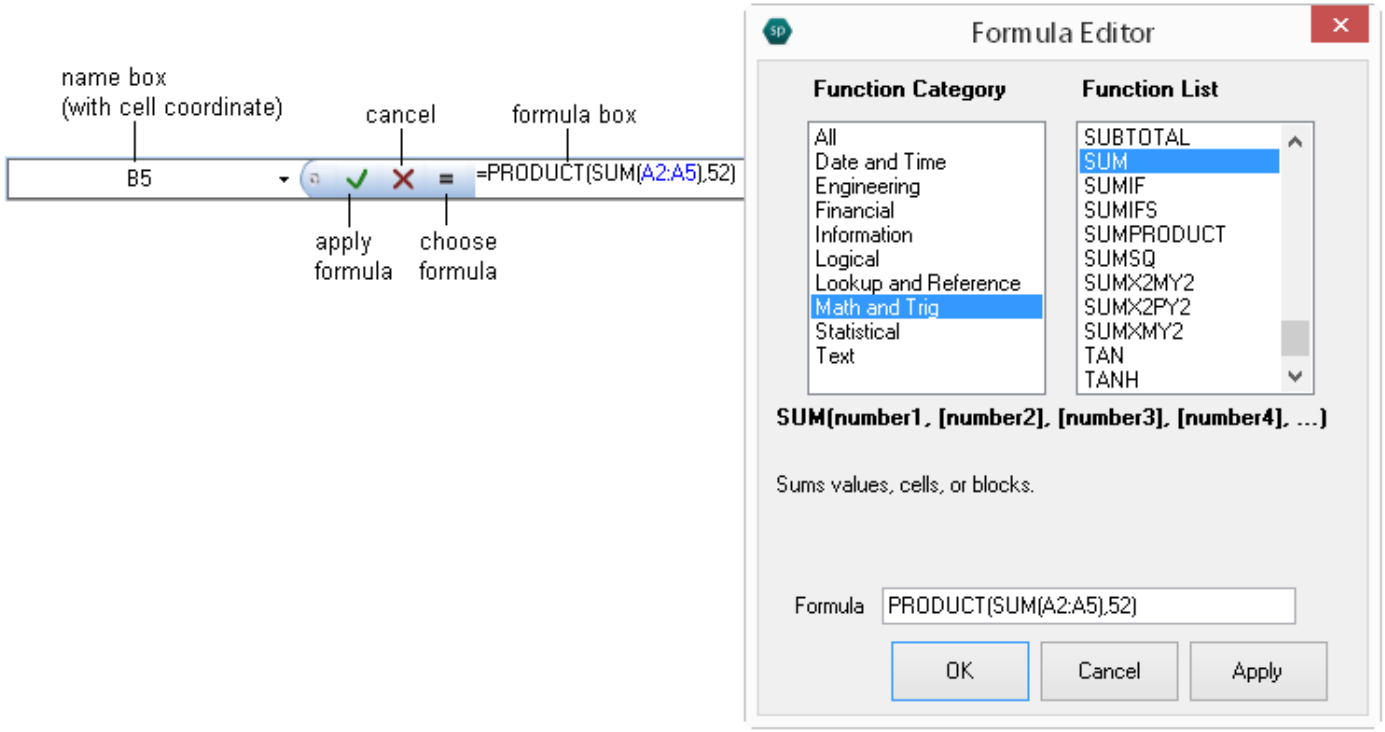
This context menu has the following items:

Context Menu Choice	Description
Cell Types	You can select the cell type for the selected item. For more information, refer to **Cell Type Dialog**.
Cut, Copy, and Paste	These Clipboard operations cut, copy, and paste the selected item.
Clear	Clears the selected item.
Select All	Selects the sheet, cells, or data.
Span	Automatically sizes the row or column to fit the contents by adjusting either the row height or column width.
Lock	Locks the selected item.
Borders	Displays the Border Editor to allow you to edit the borders of the cells. For

	more information, refer to **Border Editor**.
Table	Adds a totals row or converts to a range.
Insert	Adds columns or rows to the table.
Delete	Removes columns or rows from the table.
Select	Selects the table column data, entire table column, or table row.

Entering a Formula in Spread Designer

You can enter a formula into a cell or range of cells using the **Formula** bar and the **Formula Editor** in the Spread Designer. The **Formula** bar provides a quick way to enter a formula for a cell or group of cells. The **Formula Editor** allows you to select any of the built-in functions and is called from the **Formula** bar when you click Equals, as shown in the following figure.



Click Choose Formula (the equals sign button), which launches the **Formula Editor**, or type equals (=) to begin entering the formula. (You can also launch the **Formula Editor** by clicking the button in the Formula property in the **Property** window.) The **Formula Editor** gives you a list of the built-in functions that you can use and displays a brief description of the selected function. To choose a function, double-click on the function name and it appears in the Formula field. Functions are organized by category. You may also type operators and constants to construct your formula.

You can enter the formula in the Formula field in the **Formula Editor** or in the formula box in the **Formula** bar. When you are done entering the formula with the **Formula Editor**, click **Apply** or **OK**. When you are done typing the formula in the formula box, click Enter (the check mark button). This applies the formula to the selected cell or range of cells. When you click **OK** or **Apply**, the **Formula Editor** evaluates the formula to see if it is a valid formula. If it is not valid, it displays an error message. For more information on formulas and functions, refer to the Formula Reference.

To display or hide the formula bar, from the **View** menu, select **Formula Bar**.

From the **File** menu choose **Apply and Exit** to apply your changes to the FpSpread component and exit Spread Designer.

For more tasks in Spread Designer, return to **Designing in the Data Area**.

Adding and Customizing Sheets

In Spread Designer, you can take advantage of multiple sheets. You can add sheets, name sheets, and customize the appearance of sheets. This involves using the **Sheet Editor**, which is described in detail in **SheetView Collection Editor**.

By default, the component has one sheet, named Sheet 1 and referenced as sheet index 0, but allows multiple sheets. You can add and remove sheets in the Spread Designer.

To add a sheet, click add in the **SheetViewCollection** editor. You can also click on the new sheet icon in the sheet tab area. A new sheet named Sheetn (where n is an integer) is added to the component.

If you want to change the name of the new sheet, with the new sheet as the active sheet, in the property list in the **Appearance** category, change the SheetName property. Or simply double-click on the sheet name tab, and edit the sheet name in the text box.

To remove a sheet, from the **SheetView Collection** editor, select remove.

You can name the sheets or use the default sheet names. The default sheet name is "Sheet1" and as other sheets are added, the sheet are named incrementally "Sheet2", "Sheet3", etc. The next name is always the least number sheet available; for example if Sheet2 is removed but Sheet3 exists, adding a sheet creates a sheet named Sheet2. Subsequent sheets are Sheet4, etc.

For information about adding and customizing sheets in code, refer to **Working with Multiple Sheets (on-line documentation)** in the Developers Guide.

For information about the display of the sheet names in the sheet name buttons, refer to **Customizing the Sheet Name Tabs of the Component (on-line documentation)** in the Developers Guide.

For more tasks in Spread Designer, return to **Designing in the Data Area**.

Working with the Design

Once you are done creating the design in Spread Designer, and you have made all the changes necessary, there are several operations you can perform with that design. These topics describe how to work with the design.

These topics describe the operations you can perform with the design in the Spread Designer.

- **Applying the Design to the Form**
- **Resetting and Clearing Design Work**
- **Saving and Opening Design Files**
- **Previewing a Sheet in Spread Designer**
- **Printing a Sheet from Spread Designer**

Applying the Design to the Form

When you have finished setting the properties you want to set in Spread Designer, you can apply your changes to the FpSpread component, and then either continue to work in Spread Designer or close Spread Designer.

When you are ready to apply your changes, you can apply all of your changes, just the formatting changes you have made (such as setting the cell types for cells), or just the data changes you have made.

To apply your changes, do one of the following:

- From the Spread Button (File menu icon) choose **Apply**.
- From the Spread Button (File menu icon) choose **Apply and Exit** to apply all your changes and exit Spread Designer.
- From the Spread Button (File menu icon) choose **Exit Spread Designer** or click the **Close** button. Spread Designer then confirms if you want to apply the changes you have made in Spread Designer. If you select Yes, all changes are applied to the component.

For more tasks in Spread Designer, return to **Working with the Design**.

Resetting and Clearing Design Work

There are several ways of resetting, reverting, and otherwise clearing settings in Spread Designer. If you have made changes in Spread Designer that you do not want to apply, and you want to continue to work in the Spread Designer, you can reset all the sheet setting, you can revert to when Spread Designer was opened, or you can clear certain cells.

To revert to the original settings that were in the FpSpread component at the time you opened Spread Designer, from the **Spread Button** (**File** menu icon) choose **Revert**, then click **Yes** in

the confirmation dialog. The component in Spread Designer is restored to the settings that were in the component at the time you opened Spread Designer. This action is not available if you are running Spread Designer stand-alone (outside of a development environment). This removes all the settings, including data, that were added after you opened the Designer.

To reset all the settings in the Spread Designer, including deleting all the data in the component, from the **Spread Button** (**File** menu icon) choose **New**, then click **Yes** in the confirmation dialog. The component in Spread Designer then has all properties for all objects set back to their default values, and all data is removed, and all sheets beyond the first one are removed. For more information on resetting items, refer to **Setting and Resetting User Interaction (on-line documentation)**. This does not affect the preference settings for working with the Spread Designer, only the data and settings for the component being designed.

To clear the cells, select the cells and from the context menu, select **Clear**. This removes the data and formatting from those cells.

For more tasks in Spread Designer, return to **Working with the Design**.

Saving and Opening Design Files

When you have finished designing a Spread, you can save the file to either a Spread XML file or a BIFF-compatible file. From the **File** menu icon, select **Save** or **Save As New** and specify a file name and location.

To open an existing file, from the **File** menu, select **Open** and select the file from the **File** dialog, or select a file under the **Recent Documents** section.

For saving Spread Designer to an XML file, the Spread element contains these elements

- Data
- Drawing
- Presentation
- Settings
- Style

For more information on the save and open options from the **File** menu, refer to **File Menu**.

For details of what is exported to the BIFF-compatible file, refer to the **Import and Export Reference (on-line documentation)**.

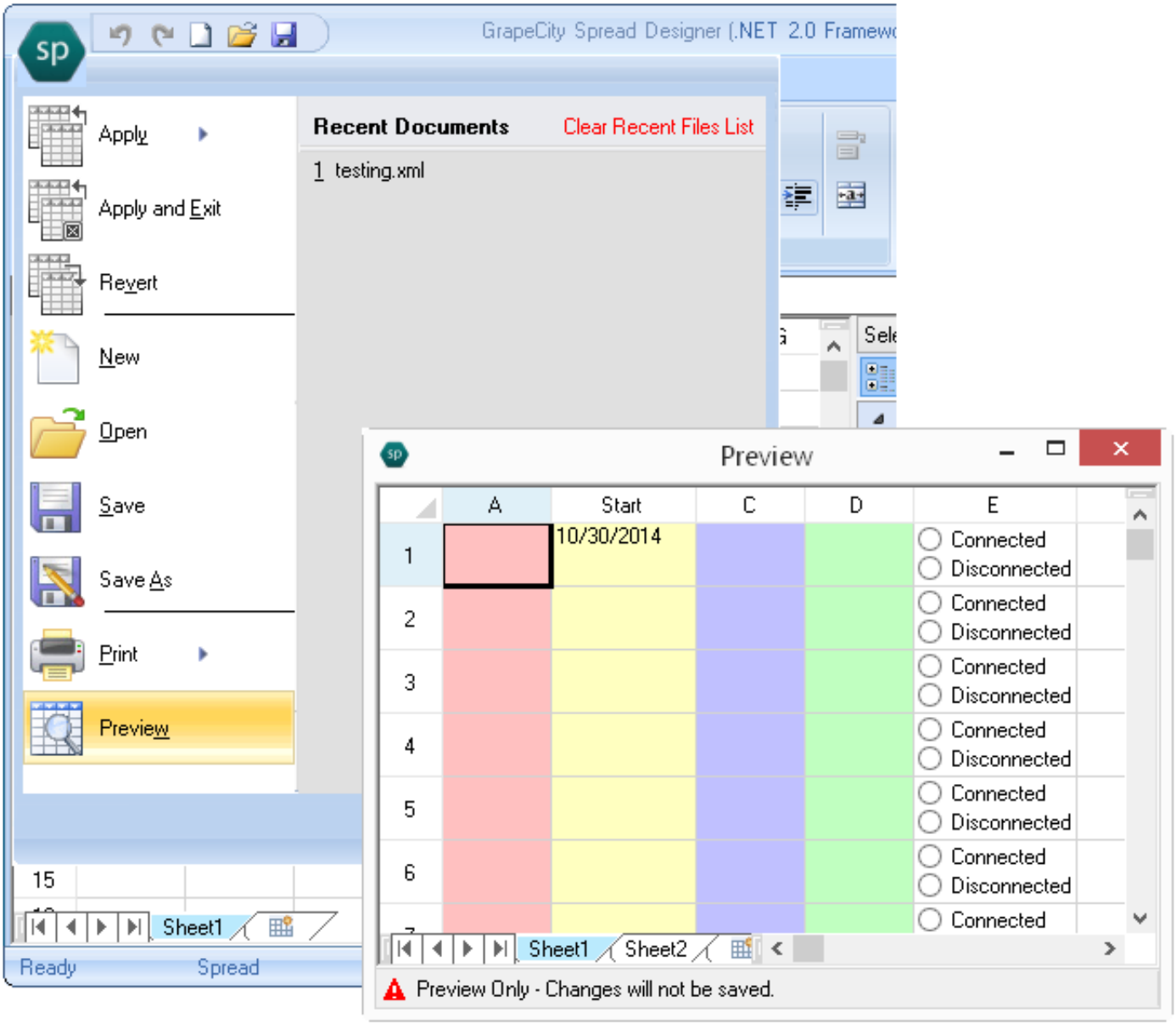
If you are using Spread Designer as a stand-alone application, you can save your work to a file before closing Spread Designer. To best preserve all the settings you have created in Spread Designer, save to a Spread XML file when using Spread Designer stand alone.

For information on saving and loading files in general, refer to the **Managing File Operations (on-line documentation)** in the Developer's Guide.

For more tasks in Spread Designer, return to **Working with the Design**.

Previewing a Sheet in Spread Designer

To see what the effects of any changes with Spread Designer would be at run time, you can preview the spreadsheet before saving an applying the changes to the spreadsheet. From the **File** menu icon, select **Preview**, and a separate window opens with the spreadsheet as it would appear at run time. This **Preview** window has all the changes you have made Spread Designer and allows you to test those changes before saving and applying them.



When done with the **Preview** window, close it by clicking the X in the upper right.

For more information on printing a sheet, refer to **Printing a Sheet from Spread Designer**.

For more tasks in Spread Designer, return to **Working with the Design**.

Printing a Sheet from Spread Designer

You can print a sheet from Spread Designer. You can also preview the print job before printing the sheet. From the **File** menu icon, select **Print** and then **Print Preview** to see a window with the page layout of a particular sheet (the latest selected sheet).

If you have already set up the printing and if you have used the **Print Preview** to see a preview of the printing results, from the **File** menu icon, select **Print** to immediately send the sheet to the printer. No dialog box appears. The Spread Designer uses your settings and prints to your default printer.

If you want to set the printing settings, use the **Page Setup Settings** available from the menu by selecting **Page Layout**. For more information, refer to the **Sheet Print Settings Dialog**.

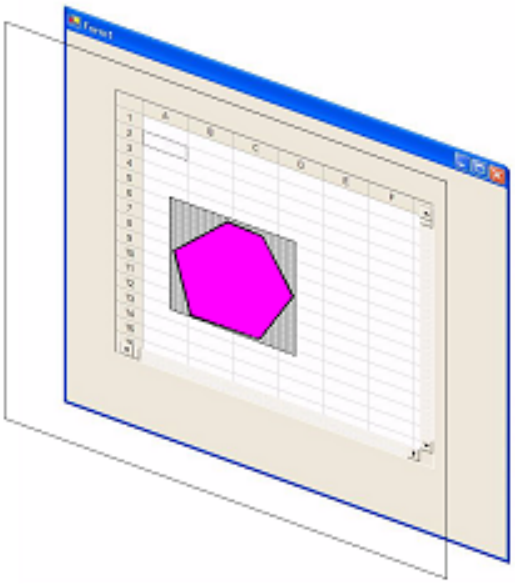
For more information about printing in general, see **Managing Printing (on-line documentation)** in the Developer's Guide.

For more tasks in Spread Designer, return to **Working with the Design**.

Designing Shapes

Each sheet can have its own drawing layer. For instance, in a spreadsheet you could create a shape like a "star" or other graphic that could highlight data or point the user to some aspect of working with the sheet. You could then proceed to customize aspects of that star or graphic from size and background color to rotation angle or gradient. The shapes are available in code (each shape being a separate class in the DrawingSpace namespace) or from the **Insert** and **Drawing Tools** menus in the Spread Designer. You can use shapes to draw attention to parts of your spreadsheet or emphasize some information or process involving the use of the spreadsheet. For example, you can display a logo on your sheet, show a process with flowchart-like graphics, or use shapes to simply highlight a particular result. There are several built-in shapes for you to use on a sheet. Each shape can be rotated and resized, and their ability to be rotated and resized by the end user can be constrained. When selected, the shape has resize handles with which you can adjust the size and a rotate handle with which you can rotate the shape. Colors, shadows, and transparency can be adjusted. Most users find it easy to create and place the shapes using Spread Designer. You may also create and place shapes using code.

Shapes are a form of graphics that are drawn on a separate layer from that of the spreadsheet. This drawing layer, or drawing space, is in front of the spreadsheet in the display. Shapes can be made all or partially transparent to reveal the spreadsheet behind. An example of a multiple-sided shape drawn in the space above a spreadsheet is shown in this figure to help you understand the concept of layers. Because the shapes appear on this separate layer from the sheet and can be thought to float above the spreadsheet, they are sometimes called floating objects.



These topics can help you use shapes:

- **Understanding the Built-in Shapes**
- **Customizing Particular Shapes**

        - **Customizing Text as a Shape**
        - **Customizing a Polygon**
        - **Customizing a Line as an Arrow**
- **Things To Do with Any Shape**
        - **Adding a Shape to a Sheet**
        - **Changing the Appearance of a Shape**
        - **Rotating a Shape**
        - **Resizing a Shape**
        - **Rotating a Shape**
        - **Adding a Drop Shadow**
        - **Locking a Shape**
        - **Using Keys with Shapes**
- **Advanced Topics for Shapes**
        - **Creating a Custom Compound Shape**
        - **Using Shapes with Maps**
        - **Using Pictures in Shapes**

For information on designing a shape, refer to the **Insert Menu**.

For information on shape keyboard navigation, refer to **Default Keyboard Navigation (on-line documentation)** in the Developer's Guide.

For information on creating camera shapes, refer to **Creating Camera Shapes (on-line documentation)** in the Developer's Guide.

For information on printing shapes, refer to **Printing a Sheet with Shapes (on-line documentation)**.

Understanding the Built-in Shapes

The FpSpread component provides the following built-in shapes that provide a basis for much of the shape customization that is possible with the component. These shapes are available from the Insert menu in the Spread Designer as well as from separate classes in code.

The shapes are summarized in this table (with arbitrarily colored examples of the shapes).

- **Basic Shapes**
- **Arrow Shapes**
- **Balloon Shapes**
- **Special Shapes**
- **Star Shapes**

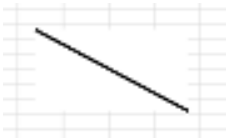
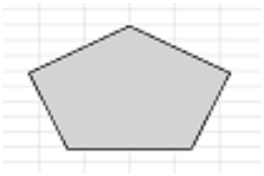
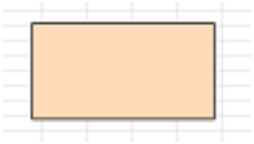
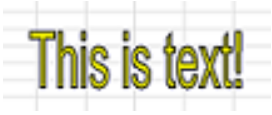
To add a shape, you can use code or you can use the Spread Designer. For more information about creating shapes in the Spread Designer, refer to the **Insert Menu**. For more information

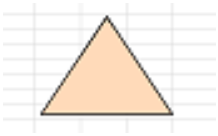
about the shapes classes, refer to the **FarPoint.Win.Spread.DrawingSpace ('FarPoint.Win.Spread.DrawingSpace Namespace' in the on-line documentation)** namespace.

Each shape can be rotated and resized, and their ability to be rotated and resized by the end user can be constrained. Colors, shadows, and transparency can be adjusted.

Basic Shapes

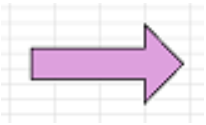
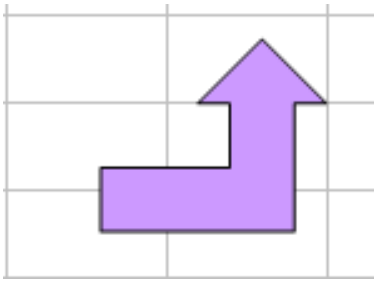
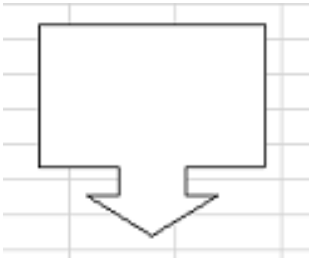
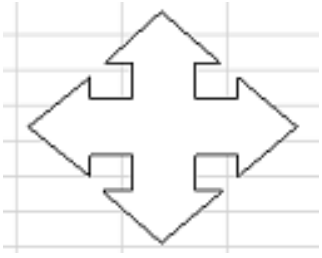
The basic shapes are summarized in this table (with arbitrarily colored examples of the shapes).

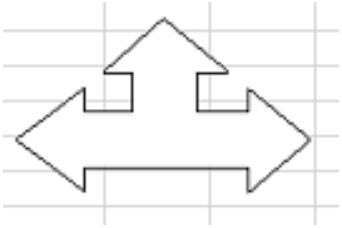
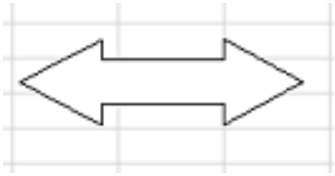
Shape	Example	Insert Menu
EllipseShape ('EllipseShape Class' in the on-line documentation)		Ellipse
LineShape ('LineShape Class' in the on-line documentation)		Line > Normal
MultiSideShape ('MultiSideShape Class' in the on-line documentation)		Polygon ...
RectangleShape ('RectangleShape Class' in the on-line documentation)		Rectangle > Default
RoundedRectangleShape ('RoundedRectangleShape Class' in the on-line documentation)		Rectangle > Rounded Corners
TextShape ('TextShape Class' in the on-line documentation)		Text . . .

TriangleShape ('TriangleShape Class' in the on-line documentation)		Triangle

Arrow Shapes

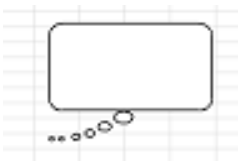
The arrow shapes are summarized in this table (with arbitrarily colored examples of the shapes).

Shape	Example	Insert Menu
ArrowShape ('ArrowShape Class' in the on-line documentation)		Arrow > Straight
BentArrowShape ('BentArrowShape Class' in the on-line documentation)		Arrow > Bent
CalloutArrowShape ('CalloutArrowShape Class' in the on-line documentation)		Arrow > Callout
CurvedArrowShape ('CurvedArrowShape Class' in the on-line documentation)		Arrow > Curved
FourWayArrowShape ('FourWayArrowShape Class' in the on-line documentation)		Arrow > Four-Way

ThreeWayArrowShape ('ThreeWayArrowShape Class' in the on-line documentation)		Arrow > Three-Way
TwoWayArrowShape ('TwoWayArrowShape Class' in the on-line documentation)		Arrow > Two-Way

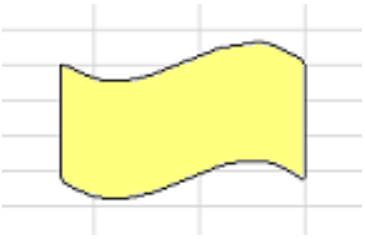
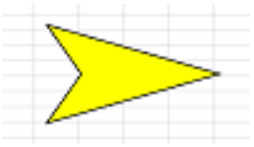
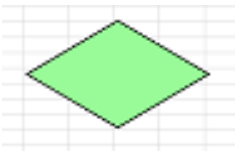
Balloon Shapes

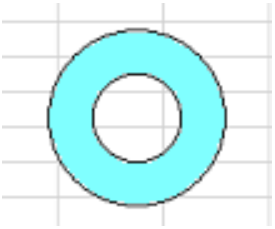
The balloon shapes are summarized in this table (with arbitrarily colored examples of the shapes).

Shape	Example	Insert Menu
CaptionBalloonShape ('CaptionBalloonShape Class' in the on-line documentation)		Balloon > Caption
ExclamationBalloonShape ('ExclamationBalloonShape Class' in the on-line documentation)		Balloon > Exclamation
SquareCaptionBalloonShape ('SquareCaptionBalloonShape Class' in the on-line documentation)		Balloon > Square
ThoughtBalloonShape ('ThoughtBalloonShape Class' in the on-line documentation)		Balloon > Thought

Special Shapes

The special shapes are summarized in this table (with arbitrarily colored examples of the shapes).

Shape	Example	Insert Menu
ArcShape ('ArcShape Class' in the on-line documentation)		Special > Arc
BannerShape ('BannerShape Class' in the on-line documentation)		Special > Banner
CheckmarkShape ('CheckmarkShape Class' in the on-line documentation)		Special > Checkmark
ChevronShape ('ChevronShape Class' in the on-line documentation)		Special > Chevron
CrescentShape ('CrescentShape Class' in the on-line documentation)		Special > Crescent
DiamondShape ('DiamondShape Class' in the on-line documentation)		Special > Diamond

DonutShape ('DonutShape Class' in the on-line documentation)		Special > Donut
HeartShape ('HeartShape Class' in the on-line documentation)		Special > Heart
LightningBoltShape ('LightningBoltShape Class' in the on-line documentation)		Special > Lightning Bolt
UniversalNoShape ('UniversalNoShape Class' in the on-line documentation)		Special > Universal No
XShape ('XShape Class' in the on-line documentation)		Special > X

Star Shapes

The star shapes are summarized in this table (with arbitrarily colored examples of the shapes).

Shape	Example	Insert Menu

FivePointStarShape ('FivePointStarShape Class' in the on-line documentation)

Star > Five-Point Star

BurstShape ('BurstShape Class' in the on-line documentation)

Star > Burst

Customizing Particular Shapes

These topics describe how to customize particular shapes.

- **Customizing Text as a Shape**
- **Customizing a Polygon**
- **Customizing a Line as an Arrow**

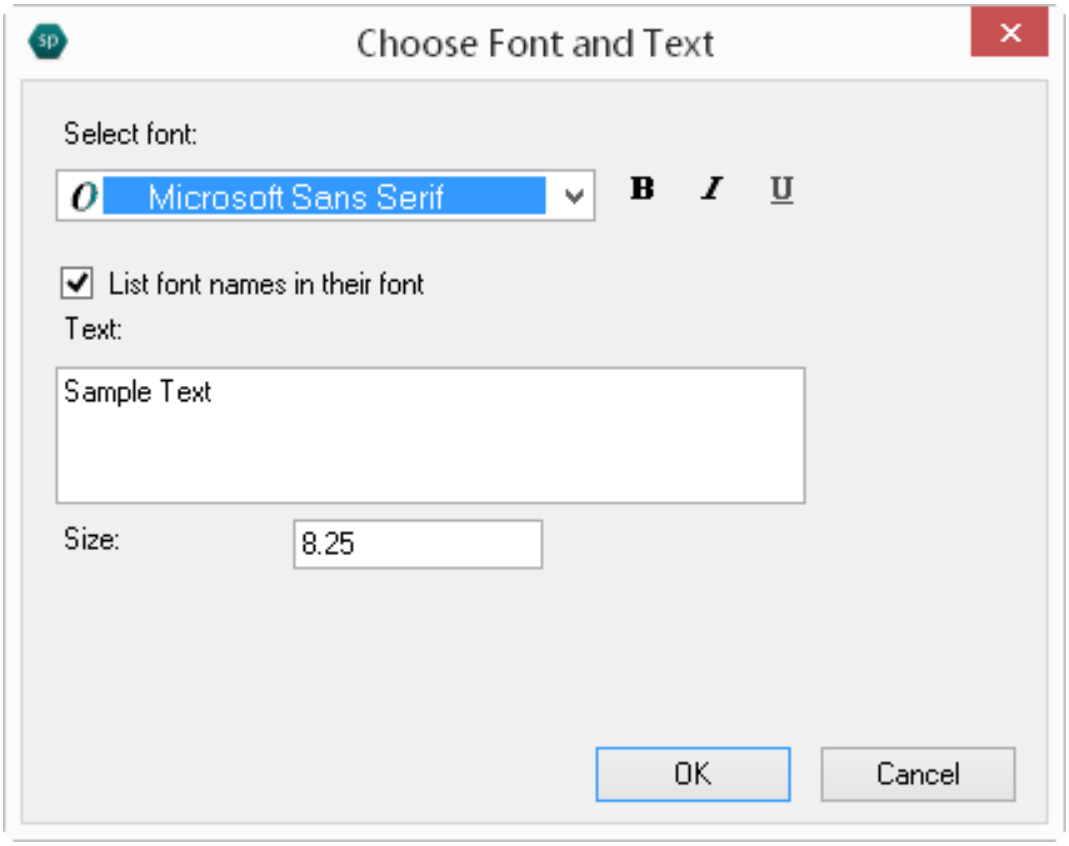
Customizing Text as a Shape

The text shape is unique among the shapes that can be placed on a sheet. This shape allows you to type in text that itself is treated as a shape. You can create a text shape in code or in the Spread Designer.

Use the WordArt option in the Insert menu to create a text shape. Once a shape has been created, the **Drawing Tools** menu can be used to set properties.

When you create a text shape in code, you must set a dimension (either Height or Width) after setting the Text property. When the Text property is set, the size of the shape changes based on the current font and text string settings. It then needs to be informed of the new size to which it should be constrained. If a new Height or Width is not specified after setting the Text property, the size of the shape created may be unpredictable (and may be so small as to be illegible).

When you create a text shape in the Spread Designer you can set several properties to customize its appearance. When you first create a text shape, the **Text Properties** dialog is displayed as shown here.



This includes the following items:

Text Settings	Description and Reference
Font	Select a font from the drop-down list of fonts available on your system
Text	Type the text in the text block.
Size	Set the size. This is not a property that is later editable.

To change the properties of the text shape, right click on the text (not the space in between the text), and select **Properties**. The **Shape Properties** dialog is displayed. To change the fill color of the text shape, select the BackColor property. (The ForeColor property is not the color of the text shape itself.) To change the outline color of the text shape, select the OutlineColor property. The font size cannot be set with this dialog; the size is determined by the size of the overall shape. For more information about the **Shape Properties** dialog, refer to **Shape Properties Dialog**.

You cannot the text to be only spaces; you must enter at least one non-space character.

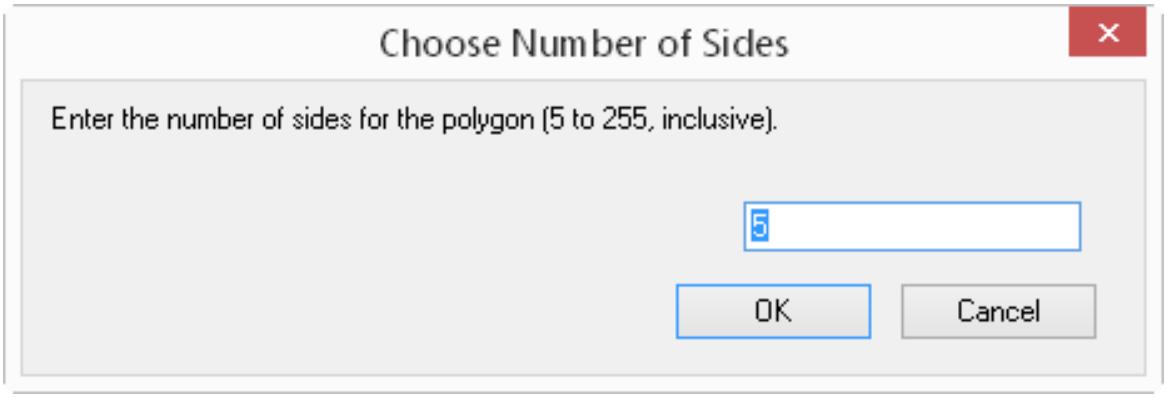
For more details on the text shape in code, refer to the **TextShape ('TextShape Class' in the on-line documentation)** class.

Customizing a Polygon

The polygon (or multiple-sided shape) is unique among the shapes that can be placed on a sheet. This shape allows you to specify any number of sides (above four). The Rectangle and Triangle and Line shapes already cover the shapes with lower number sided shapes. You can create a polygon in code or in the Spread Designer.

When you create a polygon in code, you must set the number of sides.

When you create a polygon in the Spread Designer you are asked the number of sides with the dialog that is shown here.



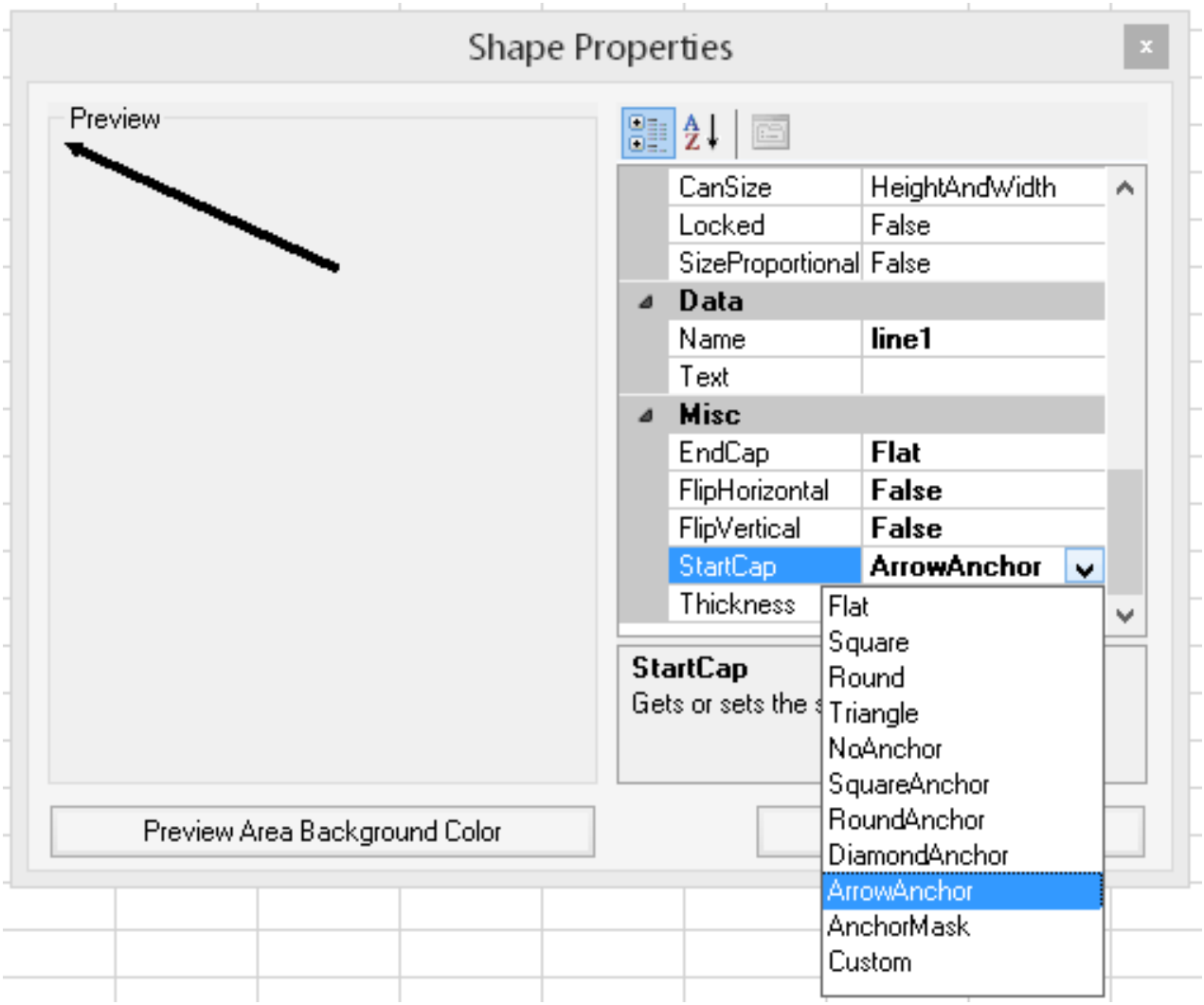
The number of sides must be an integer.

For more details on the polygon in code, refer to the **MultiSideShape ('MultiSideShape Class' in the on-line documentation)** class.

Customizing a Line as an Arrow

Besides an arrow shape, you can setup a line shape and change the ends to be arrow heads. You can create an arrow from a line shape in code or in the Spread Designer.

When you create a line in the Spread Designer you can then set the start cap and end cap using the shape properties as shown here. Create a shape in the designer using the Insert menu and shape option, then right-click on the shape to set additional properties.



The cap types are listed in this table, shown with a simulated image that roughly illustrates the appearance.

Type of Cap	Appearance
Flat	
Square	

Round

Triangle

NoAnchor

SquareAnchor

RoundAnchor

DiamondAnchor

ArrowAnchor

AnchorMask	
Custom	User-defined.

For more details on the line shape in code, refer to the **LineShape ('LineShape Class' in the on-line documentation)** class in the Assembly Reference.

Things To Do with Any Shape

These topics describe how to perform routine actions with any of the shapes.

- **Adding a Shape to a Sheet**
- **Changing the Appearance of a Shape**
- **Rotating a Shape**
- **Resizing a Shape**
- **Moving a Shape**
- **Adding a Drop Shadow**
- **Locking a Shape**
- **Using Keys with Shapes**

Adding a Shape to a Sheet

You can add a shape to a sheet in one of two ways, broadly speaking. These are using code or using the Spread Designer interface.

One way is to add it programmatically, which is described in **Working with Shapes in Code (on-line documentation)** in the Developer's Guide.

Another way is to add it using the Insert menu, which is described in the **Insert Menu** and specifically the Shape Properties dialog, which is described in **Shape Properties Dialog**.

You can add any number of shapes to a sheet and overlap them and adjust their appearance. For more on customizing the shape, refer to **Changing the Appearance of a Shape**.

Changing the Appearance of a Shape

You can change several properties of a shape using the Spread Designer or code.

To change the appearance of a shape using the Spread Designer, refer to the **Insert Menu** and the Shape Properties dialog in **Shape Properties Dialog**.

To change the appearance of a shape using code, set the properties of a shape object as illustrated in this example. Refer to the **FarPoint.Win.Spread.DrawingSpace ('FarPoint.Win.Spread.DrawingSpace Namespace' in the on-line documentation)** namespace and select the particular shape and define its properties using code. Here is an example of an arrow shape with its outline color and background color being set. The example also sets the size and placement of the shape with the SetBounds property.

Example

C#

```
// Add arrow shape with its outline color and background color set.
FarPoint.Win.Spread.DrawingSpace.ArrowShape arrow = new
FarPoint.Win.Spread.DrawingSpace.ArrowShape();
arrow.BackColor = Color.Plum;
arrow.ForeColor = Color.Pink;
arrow.SetBounds(0,0,200,100);
fpSpread1.ActiveSheet.AddShape(arrow);
```

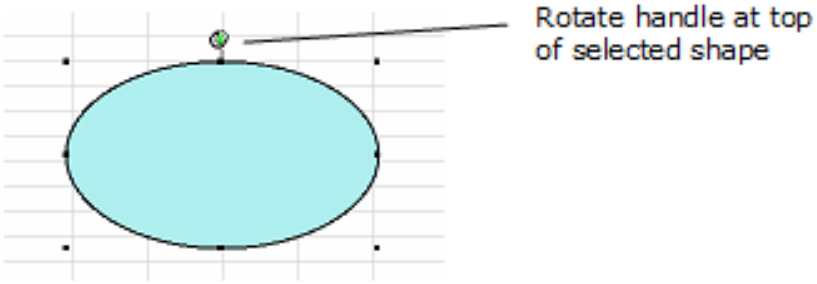
VB

```
' Add arrow shape with its outline color and background color set.
Dim arrow As New FarPoint.Win.Spread.DrawingSpace.ArrowShape()
arrow.BackColor = Color.Plum
arrow.ForeColor = Color.Pink
arrow.SetBounds(0,0,200,100)
fpSpread1.ActiveSheet.AddShape(arrow)
```

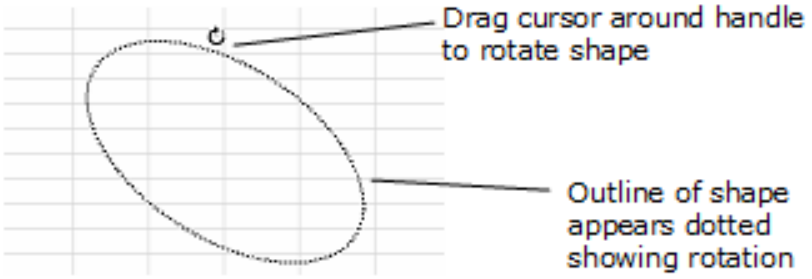
Rotating a Shape

You can rotate a shape.

To rotate a shape, in Spread Designer, select the shape and move the rotate handle (small green dot) until the shape is rotated to the position you want. Click on the rotate handle at the top of the shape and drag the cursor around the handle. The shape disappears temporarily leaving only a dotted line until you unclick again.



Once you click on the rotate handle, the small green circle at the top of the selected item, drag the pointer and immediately the display changes. Only a dotted line of the outline of the shape is displayed and you can see the rotation of the shape. See the figure of the example shown here.



The cursor changes indicating that you are rotating the shape. When done rotating, let up on the pointer and the shape is displayed in that rotated position.

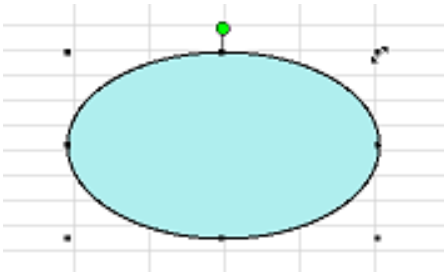
If you rotate a shape by the rotate handle, it rotates by five degrees for every mouse move message, which allows the rotation to move smooth and quickly. To rotate a shape by one degree for each mouse move message, hold down the Ctrl key while rotating with the mouse.

You can allow the end user to rotate the shape or prevent them from doing so, using the CanRotate property.

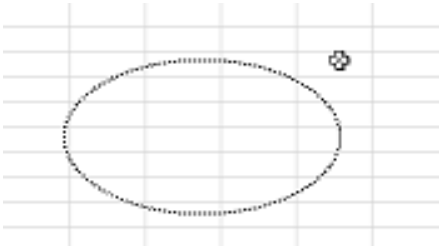
Resizing a Shape

You can resize a shape.

To resize a shape, in Spread Designer, select the shape and move the resize handles which appear at the corners and sides of the shape. To resize the shape proportionately, select the corner resize handles. Click to select the object. Then click the handle and drag it.



As you drag a resize handle, the shape disappears temporarily and only the outline is displayed as a dotted line. The cursor changes indicating that you are resizing the shape.



When done resizing, let up on the pointer and the shape is displayed with the new size and dimensions.

For a rounded rectangle, you can change the roundness of the ends by clicking and dragging on the rounding handle (yellow square).

You can allow the end user to resize the shape or prevent them from doing so, using the CanSize property.

Moving a Shape

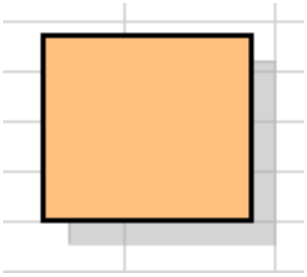
You can move a shape.

To move a shape, in Spread Designer, select the shape and drag the shape to the new location.

You can allow the end user to move the shape or prevent them from doing so, using the **CanMove ('CanMove Property' in the on-line documentation)** property.

Adding a Drop Shadow

You can add a drop shadow to a shape as shown in this figure for this rectangle shape.



From the Spread Designer, with the shape selected, from the **Drawing Tools** menu, click the **Drop Shadow** option and select **custom**. The **Shadow Properties** dialog appears. The units for the offset values are in pixels.

Locking a Shape

You can lock a shape and prevent the user from interacting with it. The shape remains visible but cannot be moved, rotated, or changed.

Locking a cell does not lock any shapes (floating objects) over that cell. A protected sheet only means that all the cells in that sheet marked as locked are locked; it does not apply to shapes over that sheet. To lock a shape, change the Locked property of that shape. In Spread Designer, this can be done by right-clicking the shape and selecting **Properties**. This opens the **Shape Properties** dialog. In this dialog, set the Locked property to true. In code, set the Locked property for that shape to true. Lock each shape by setting the locked property on that shape.Each shape can be locked individually.Locking means that the shape can not be selected or interacted with.

For more information about locking cells on a sheet, refer to **Locking a Cell (on-line documentation)**.

Using Keys with Shapes

You can use the following keys on the keyboard to work with the shapes:

- arrow keys to move the shape in that direction
- Esc key to leave the shape and move focus to the cell
- Tab key to move the focus from shape to shape

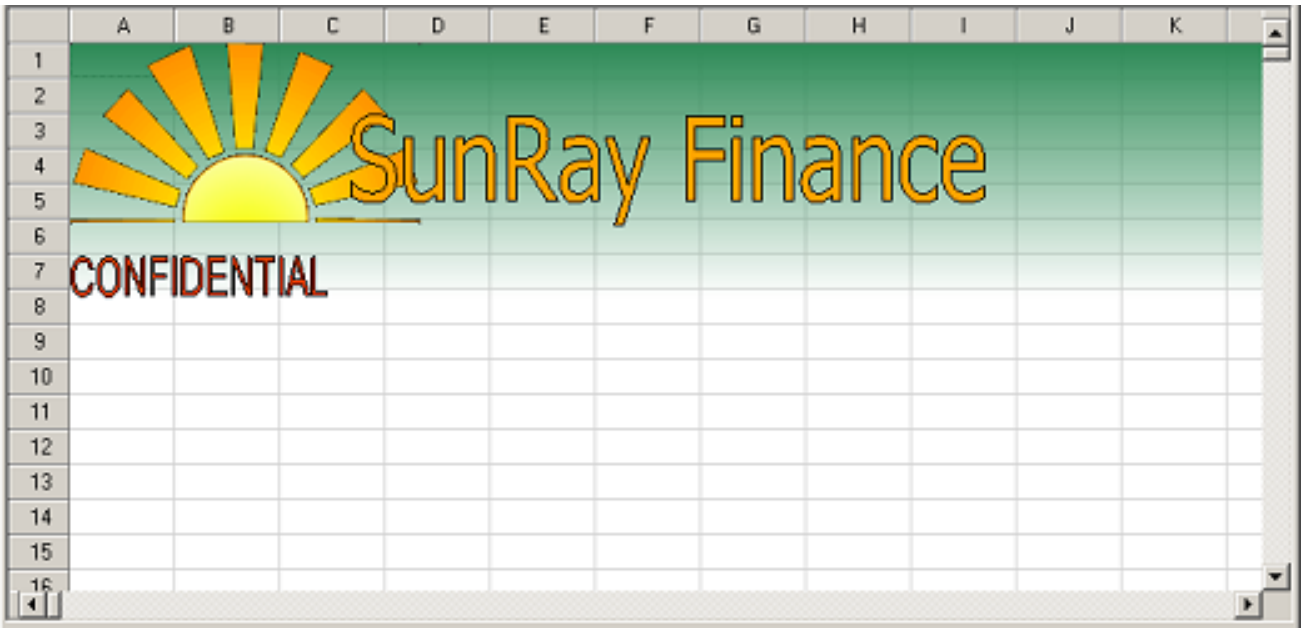
Advanced Topics for Shapes

These topics describe some additional ways to work with shapes in Spread Designer.

- **Creating a Custom Compound Shape**
- **Using Shapes with Maps**
- **Using Pictures in Shapes**
- **Creating Free-Hand Annotations**

Creating a Custom Compound Shape

One of the inherent capabilities of all shape classes is the ability to have other shape objects embedded in them. This is a great way of making compound shapes. This topic explains how to create a custom compound shape that combines several built-in shapes and serves as a watermark, which can identify information or corporate identity subtly (without obstructing or obscuring the spreadsheet) as shown here. With this example, you can see how to create a custom compound shape.



To create this custom compound shape, define a custom shape class, called CompanyWatermark, and set the properties to customize this appearance. This custom shape combines several elements: a background gradient fades from a specified color to transparency; an embedded shape contains an image of the company logo; a separate embedded text shape spells the company name; and a text shape provides additional information such as Web site address or company motto or security classification.

Deriving the Custom Class

Start by deriving a class from the standard RectangleShape class. This creates a rectangular palette in which to place the embedded shapes. You could just as easily use other shapes such as ellipses, or polygons, but your embedded shapes may be "clipped" (because embedded shapes do not exceed the boundaries of the parent shape). Here is the code:

C#

```
public class CompanyWatermark :
FarPoint.Win.Spread.DrawingSpace.RectangleShape
```

Visual Basic

```
Public Class CompanyWatermark
Inherits FarPoint.Win.Spread.DrawingSpace.RectangleShape
```

Setting Properties

Then create properties for accessing the internal shapes. One of the benefits of creating a compound shape is that you can hide many of the unnecessary properties of the embedded

shapes. You can expose, through custom properties, only the pertinent information. The first property is the "CompanyColor" property. This is the main color in the background gradient, which gradually fades to transparency in the main shape. It is also alpha-blended so as not to fully obscure the sheet below. With the gradient class, other properties such as Style, which determines the gradient direction and type of gradient, can also be set. This example uses a Style of GradientStyle.TopDown.

The next property is an image property called "CompanyLogo". This property sets the graphic to be displayed in the embedded logo shape. This example locks the logo shape to the upper left corner of the watermark. You could very simply extend this with properties to allow alignment of the logo.

Embedding Text Shapes

The most important part of the watermark is the company name. You can create this with an embedded TextShape object to represent the company name. This has been exposed on the watermark shape as the "CompanyName" property, which is a string. There are many customizable features of the TextShape class that can be exposed such as Font or ForeColor, though they are not exposed here. Also, for simplicity of this sample, the company name shape is locked to be centered in the watermark shape.

And, finally, there is a secondary TextShape object that holds some additional text information in the watermark. This could be a company motto, slogan, Web site address or even words like "CONFIDENTIAL" or "Copyright 2005". Anchor this text to the bottom left corner of the watermark shape for this example. Many additional properties can be set on this embedded shape. This example only exposes items of interest. The text for this shape is exposed as the "CompanyText" property.

Concluding Remarks

In the figure above, you see the full implementation of the CompanyWatermark class with the other functions that were described. To create the pictured watermark, choose "System.Drawing.Colors.SeaGreen" as the "CompanyColor", a custom bitmap as the "CompanyLogo", "SunRay Finance" as the "CompanyName", and "CONFIDENTIAL" as the "CompanyText".

Since Spread can scroll the viewport panes, override the TopChange and LeftChange events of Spread to move the watermark with the current sheet so that it always appears across the top and is as wide as the spreadsheet control. Also override the Top and Left properties of the watermark class to move the embedded objects to be visible always within the watermark.

One of the features of the TextShape class is to stretch the text always to the dimensions of the shape using the Font associated with it. This has been changed in the example with the MeasureText method. The text string is measured using the control’s Graphics object and current Font and then sets the TextShape dimensions accordingly. This guarantees that the shape keeps the size locked to the specified font and font size.

Using Shapes with Maps

You can set the keyboard actions to correspond with shape actions with maps. There is an input map for shapes but it is available only with code, not with the Spread Designer.

For more information on action maps and input maps, refer to **Managing Keyboard Interaction (on-line documentation)** of the Developers Guide and specifically the Default Behavior for Shapes found in **Default Keyboard Navigation (on-line documentation)**.

Using Pictures in Shapes

You can use pictures (images or graphics) in shapes:

- as background
- as foreground

After inserting a shape, you may right click on the shape to view its properties. There, you have a complete list of editable options for the shape, including image background and image foreground, which lets you import an image from elsewhere on your computer.

For more information about using pictures as background, refer to the description of the **Background Tab**.

Creating Free-Hand Annotations

You can draw a free-hand shape in annotation mode.

Using Code

This example uses button controls to start and stop the drawing mode.

Example

C#

```
private void button1_Click(object sender, EventArgs e)
        {
            fpSpread1.StartAnnotationMode(true);
            //fpSpread1.StartAnnotationMode();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            fpSpread1.StopAnnotationMode();
```

```
        }

        private void fpSpread1_AnnotationModeStarting(object sender,
FarPoint.Win.Spread.AnnotationModeEventArgs e)
        {

            e.DrawingSurface.ForeColor = Color.BlueViolet;
            e.DrawingSurface.BackColor = Color.Thistle;
        }

        private void fpSpread1_AnnotationModeEnding(object sender,
FarPoint.Win.Spread.AnnotationModeEventArgs e)
        {
            listBox1.Items.Add("Stop Drawing");
        }
```

VB

```
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
        FpSpread1.StartAnnotationMode(True)
        'FpSpread1.StartAnnotationMode()
    End Sub

    Private Sub Button2_Click(ByVal sender As System.Object, ByVal e
As System.EventArgs) Handles Button2.Click
        FpSpread1.StopAnnotationMode()
    End Sub

    Private Sub FpSpread1_AnnotationModeStarting(ByVal sender As
System.Object, ByVal e As
FarPoint.Win.Spread.AnnotationModeEventArgs) Handles
FpSpread1.AnnotationModeStarting
        e.DrawingSurface.ForeColor = Color.BlueViolet
        e.DrawingSurface.BackColor = Color.Thistle
    End Sub

    Private Sub FpSpread1_AnnotationModeEnding(ByVal sender As
System.Object, ByVal e As
FarPoint.Win.Spread.AnnotationModeEventArgs) Handles
FpSpread1.AnnotationModeEnding
        ListBox1.Items.Add("Stop Drawing")
    End Sub
```

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