

Formatting Worksheets and Data

Although you're free to accept the default formatting for any worksheet by using the preset column widths, row heights, font, and font size, you're unlikely to do so very often. Simply put, properly formatted worksheets are easier to read and understand than those that use the default settings.

And if you apply Excel's *attractive* formatting features (such as shading and border styles for cells, and fonts, styles, colors, and alignment for data), you can transform a run-of-the-mill worksheet into something worthy of being published in a corporate report.

🗸 Tip

• For information on formatting tables, see Chapter 11.

Setting Column Width and Row Height

Unless you've set a specific width for a column or height for a row, each row and column automatically adjusts to fit the data it contains, as follows:

- Row height adjusts to the largest font size in any cell within the row.
- Column width adjusts to the longest number in any cell within the column.
 A lengthy text string in a cell (Figure 9.1), on the other hand, does *not* result in a column-width adjustment. If adjacent cells are empty, the extra text spills into them. If adjacent cells contain data, only the text that fits within the current cell width is displayed.

To set a column width:

- **1.** To select the column(s), *do one or a combination of the following*:
 - ▲ **Single column.** Click its letter or select a single cell within the column.
 - ▲ Multiple contiguous columns. Dragselect the column letters.
 - ▲ Multiple noncontiguous columns. [Ctrl]-click each column letter.
- **2.** On the Home tab, click the Format icon in the Cells group. *Do one of the following*:
 - ▲ To set a single width for all selected columns, choose Column Width from the drop-down menu (Figure 9.2). In the Column Width dialog box (Figure 9.3), enter a number (representing the approximate number of characters), and click OK.
 - ▲ Choose AutoFit Column Width. Excel will continually adjust the column width to the longest number or text string that appears anywhere in each of the selected columns.

| | А | В | С |
|---|--------------|-------------|------------|
| 1 | This is a ve | ery long te | xt string. |
| 2 | This is a ve | 123 | |

Figure 9.1 Cells A1 and A2 contain the same text string. Because cells B1 and C1 are empty, A1's text spills into them. But because B2 contains data, the text string in cell A2 is truncated.

| ¦ata Ir | nsert 🔻 | |
|---------|-------------------------------|---|
| ₿¥ o | elete 🔻 | |
| 🛗 F | ormat 🔹 | |
| Cell | Size | |
| ‡⊡ | Row <u>H</u> eight | |
| | <u>A</u> utoFit Row Height | |
| ** | Column Width | |
| | AutoF <u>i</u> t Column Width | |
| | Default Width | |
| Visi | bility | |
| | Hide & <u>U</u> nhide | F |
| Org | anize Sheets | |
| | <u>R</u> ename Sheet | |
| | Move or Copy Sheet | |
| | <u>T</u> ab Color | F |
| Pro | tection | |
| | Protect Sheet | |
| ÷ | <u>L</u> ock Cell | |
| 8 | Format C <u>e</u> lls | |
| | | |

Figure 9.2 Choose a column width or row height command.



Figure 9.3 Enter a new column width (in characters) and click OK.

| Row Height | ? X |
|---------------------|--------|
| <u>R</u> ow height: | 12.75 |
| ОК | Cancel |

Figure 9.4 Enter a new row height (in points) and click OK.

| | Width: 8.29 | (63 pixels) |
|-----|-------------|-------------|
| D + | → E | F |
| | | |
| | | |

Figure 9.5 Click and drag between column letters to resize the column on the left (in this case, column D).

To set a row height:

- **1.** To select the row(s), *do one or a combination of the following:*
 - ▲ **Single row.** Click its number or select a single cell within the row.
 - ▲ Multiple contiguous rows. Dragselect the row numbers.
 - ▲ Multiple noncontiguous rows. [Ctrl]-click each row number.
- **2.** On the Home tab, click the Format icon in the Cells group. *Do one of the following*:
 - ▲ To set a single height for all selected rows, choose Row Height from the drop-down menu (see Figure 9.2). In the Row Height dialog box (**Figure 9.4**), enter a height in *points* (72 points per inch) and click OK.
 - ▲ Choose AutoFit Row Height. Excel will continually adjust the row height to accommodate the largest font or text wrap in each of the selected rows.

Tips

- You can *manually* adjust column widths and row heights:
 - ▲ **Column width.** Click the right border of the column's letter and drag to the left or right (**Figure 9.5**).
 - ▲ **Row height.** Click the bottom border of the row's number and drag up or down.
- You can simultaneously set a width or height for *multiple* columns or rows. Select the columns or rows, and then manually adjust the width or height of any one of them.
- To instantly make a column wide enough to accommodate the longest number or text string in the column, double-click the column letter's right border. To adjust a row height in the same manner, doubleclick the row number's bottom border.

About Data and Cell Formatting

If you start a new worksheet by simply entering data, it will all have the same formatting. Every text and number entry will use the same font, size, style, and color. Numbers will be displayed using the General format (as typed, unless the column isn't wide enough to show the entire number). Cells will have no background color and no borders.

However, Excel offers many data- and cellformatting options. To make any worksheet more attractive and easier to interpret, you can do the following:

- Apply different fonts, styles, sizes, and/or colors to data within selected cells.
- Set paragraph alignment for individual cells (left-, center-, or right-aligned).
- Wrap text within cells or shrink it to fit, rather than let it the spill into adjacent cells.
- Apply a variety of Number formats to cells that contain numeric data, such as setting the number of decimal places and formatting as currency or percentages.
- Use *conditional formatting* to make certain numbers stand out, such as values below the average or values that correspond to a rule of your own creation.
- Fill cells with color.
- Add *borders* (lines) around cell edges.
- ✓ Tips
- If you don't care for the default font used to format worksheets, you can change it. Click the File tab to go to the Backstage, and then click Options. In the General section of the Excel Options dialog box (Figure 9.6), choose a new font and/or size, and click OK.

| When creating new workbooks | 5 |
|--------------------------------------|---------------|
| Use this fo <u>n</u> t: | Body Font 💌 |
| Font size: | 11 💌 |
| Default <u>v</u> iew for new sheets: | Normal View 💌 |
| Include this many sheets: | 3 |

Figure 9.6 You can change the default font and/or font size for all new worksheets.

Displaying the gridlines on any worksheet is traditional—*but optional*. To hide the gridlines, click the View tab and remove the check mark from Gridlines in the Show group.

| Aria | 1 | | • | 10 | • | A A |
|------|---|------------|-----|----|---|--------------|
| B | I | <u>u</u> . | H | - | ð | • <u>A</u> • |
| | | F | ont | | | 5 |

Figure 9.7 Character-formatting commands can be selected from the Font group.

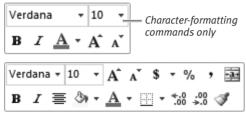


Figure 9.8 The Mini toolbar displays different formatting commands when text within a cell (top) or the cell itself (bottom) is selected.

| | Conditional Form | | | | | |
|-------------------|------------------|---------------|---------------|---------------|---------------|----|
| Good, Bad and N | eutral | | | | | Ŀ |
| Normal | Bad | Good | Neutral | | | |
| Data and Model | | | | | | |
| Calculation | Check Cell | Explanatory | Input | Linked Cell | Note | |
| Output | Warning Text | | | | | |
| Titles and Headin | gs | | | | | |
| Heading 1 | Heading 2 | Heading 3 | Heading 4 | Title | Total | |
| Themed Cell Style | 5 | | | | | |
| 20% - Accent1 | 20% - Accent2 | 20% - Accent3 | 20% - Accent4 | 20% - Accent5 | 20% - Accent6 | |
| 40% - Accent1 | 40% - Accent2 | 40% - Accent3 | 40% - Accent4 | 40% - Accent5 | 40% - Accent6 | |
| 60% - Accent1 | 60% - Accent2 | 60% - Accent3 | 60% - Accent4 | 60% - Accent5 | 60% - Accent6 | 1 |
| Accent1 | Accent2 | Accent3 | Accent4 | Accent5 | Accent6 | ł. |
| Number Format | | | | | | |
| Comma | Comma [0] | Currency | Currency [0] | Percent | | Ŧ |
| Merge Styles | | | | | | |

Figure 9.9 Choose a style from the Cell Styles gallery to format headings, titles, totals, and good/bad data.



Figure 9.10 Choose paragraph-formatting commands from the Alignment group.

Character and Paragraph Formatting

By choosing commands from the Home tab or the Mini toolbar, you can specify a font for selected text within a cell or the entire cell, as well as change the paragraph alignment.

To set character or paragraph formatting:

- **1.** Do one of the following:
 - ▲ To format all text within a cell, select the cell.
 - ▲ To format only certain text within a cell, select the text you want to format.
- **2.** To apply character formatting, *do any of the following:*
 - ▲ On the Home tab, choose characterformatting commands from the Font group (**Figure 9.7**).
 - ▲ Right-click the cell or selected text, and choose formatting commands from the Mini toolbar (**Figure 9.8**).
 - ▲ Click the Cell Styles icon in the Styles group and choose a style from the gallery (**Figure 9.9**). Note that cell styles can only be applied to an entire cell—not to selected text within a cell.
- **3.** To apply paragraph formatting, choose commands from the Alignment group on the Home tab (**Figure 9.10**).

🖌 Tip

Character and paragraph formatting can also be applied to multiple selected cells simultaneously. Use any of the selection techniques described on pages 160–161 prior to choosing formatting commands.

Fitting Text Within a Cell

Occasionally, a cell can contain more text than will fit. To fully display the text, you can allow the additional characters to overflow into adjacent cells, widen the column in which the cell is located, or use one of the methods described below.

To enable text wrap:

- **1.** Select the cell or cells in which you want text to wrap.
- On the Home tab, click the Wrap Text icon in the Alignment group (see Figure 9.10). Text within the selected cells wraps. The row height increases as needed in order to accommodate present and future text in the row (Figure 9.11).

To shrink text to fit a cell:

- Select the cell or cells containing text you want to shrink to fit the cell width.
- On the Home tab, click the Format icon in the Cells group and choose Format Cells. The Format Cells dialog box appears.
- **3.** On the Alignment tab (**Figure 9.12**), click Shrink to fit and then OK. Text in the cells is reduced as necessary in order to fit the cell widths.

✓ Tips

- To eliminate text wrap from selected cells, click the Wrap Text icon again.
- If you've enabled text wrap, you may also want to set a vertical alignment for the entire row or selected cells within the row (Figure 9.13).
- If you set a specific height for a row, its height will no longer increase to accommodate text wrap.

| | A | В | С |
|---|--------------------------|---------|----------|
| | Departmental Budget | | |
| 1 | Worksheet - January 2007 | January | February |

Figure 9.11 Long text, such as the string in cell A1, can be wrapped within its cell.

| ormat Cel | ls | | | | | |
|-----------------------------------|---|------|---------|-----|------------|---|
| Number | Alignment | Font | Border | Fil | Protection | |
| Text cont <u>W</u> ra Shrir | tal: ident) ify distributed rol p text is to fit pe cells a eft ection: | | Indent: | | | Orientation T e x t t t t t t t t t t t t t |
| | | | | | | OK Cancel |

Figure 9.12 Click Shrink to fit and then click OK.

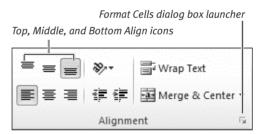


Figure 9.13 Bottom Align was set for the column heads in cells B1 and C1 in Figure 9.11 (above).

- Wrap Text and Shrink to Fit are mutually exclusive. To enable Shrink to Fit in the Format Cells dialog box, you must first remove the check mark from Wrap Text (if present).
- You can also open the Format Cells dialog box by clicking the Format Cells dialog box launcher in the Font, Alignment, or Number group (Figure 9.13).

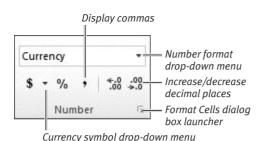


Figure 9.14 Choose common number-formatting options from the Number group.

| Category lis | t Options |
|---|---|
| Format Ce s | |
| Number Alignment Cartegory General Utercare Carteral Utercare Carteral Data Carteral Time Percentage Fraction Scientific Scientific Text Special Custom | Sample Sample Sample Sample Sample Sample Discase 2 Discase 2 Discase 2 Discase 2 Disample Disample Discase 2 Discase 2 Disample Di |
| | OK Cancel |

Figure 9.15 For more complex formatting, as well as date and time formats, use the Format Cells dialog box.

Number Formatting

Like any modern spreadsheet application, Excel 2010 offers many formats that you can apply to numeric, date, and time data. You can format numbers as currency, percentages, fractions, or scientific notation, for example. You can optionally display numbers with commas and a fixed number of decimal places.

Note that the display options set for a given cell do *not* affect the way its number is stored or used in calculations. For instance, if you apply a currency format to a cell containing 28.1225, \$28.12 will display. The remaining .0025 isn't gone; it simply isn't shown.

To apply a Number format:

- **1.** Select the cell or cells to which you want to apply a Number format.
- **2.** Do one of the following:
 - On the Home tab, choose formatting options from the Number group (Figure 9.14).
 - ▲ Right-click any selected cell and choose format options from the Mini toolbar (see Figure 9.8).
 - ▲ Click the Format Cells dialog box launcher (see Figure 9.13). Choose formatting options from those on the Number tab (**Figure 9.15**). Click OK to apply the options to the selected cells.

🖌 Tip

 Be sure to thoroughly explore the Number tab of the Format Cells dialog box. It also includes date and time formatting options. And if you choose the Special category, you'll find formats for ZIP codes, phone numbers, and Social Security numbers.

Conditional Formatting

By specifying *conditional formatting* (formatting that's applied only when specified criteria are met), you can make important data stand out from other elements in a data set. You can do any of the following:

- Overlay every member of the data set with a data bar, color, or icon that shows its position in the distribution.
- Apply a color highlight to a specific number of items that are highest, lowest, above average, or below average.
- Apply a color highlight to items identified by a *rule*, such as bowling averages greater than 200.

Unlike manually applied formatting, conditional formatting updates itself as required. That is, if the data that has been conditionally formatted changes, the items formatted in this manner (highlighted in green, for instance) will automatically change, too.

To apply data bars, color scales, or icon sets to data:

- **1.** Select the cell range to which you want to apply conditional formatting.
- On the Home tab, click the Conditional Formatting icon in the Styles group. A drop-down menu appears (Figure 9.16).
- Choose an option from the Data Bars, Color Scales, or Icon Sets submenu (Figure 9.17).

A live preview is provided for each conditional formatting option.

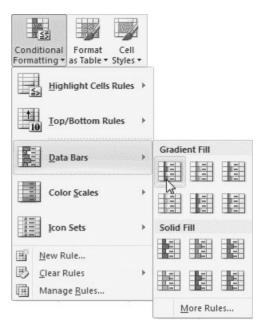


Figure 9.16 Choose conditional formatting from this drop-down menu in the Styles group of the Home tab.

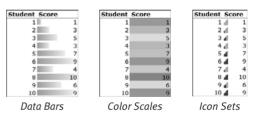


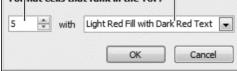
Figure 9.17 You can show the relative size of every item in a data distribution by formatting with data bars, a color scale, or an icon set.



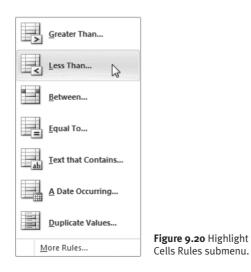
Figure 9.18 Choose an option from the Top/Bottom Rules submenu to select the highest/lowest items or those above/below the average for the data set.

Number or percentage Formatting options Top 10 Items For mat cells that rank in the TOP:

? X







To apply a Top/Bottom Rule to data:

- **1.** Select the cell range to which you want to apply a Top/Bottom Rule.
- **2.** On the Home tab, click the Conditional Formatting icon in the Styles group.
- **3.** From the drop-down menu that appears, choose an option from the Top/Bottom Rules submenu (Figure 9.18).
- **4.** Set options in the dialog box that appears (Figure 9.19). A live preview is shown.
 - ▲ For Average rules, the dialog box allows you to select fill and text colors.
 - ▲ For Top and Bottom rules, you can also set the cutoff point (as a number or percentage), highlighting only the lowest five scores, for example.
- 5. Click OK to apply the rule to the selected cell range.

To apply a Highlight Cells Rule to data:

- **1.** Select the cell range to which you want to apply a Highlight Cells Rule.
- **2.** On the Home tab. click the Conditional Formatting icon in the Styles group.
- **3.** From the drop-down menu, choose an option from the Highlight Cells Rules submenu (Figure 9.20).
- **4.** In the dialog box that appears, set options and click OK to apply the rule.

Tips

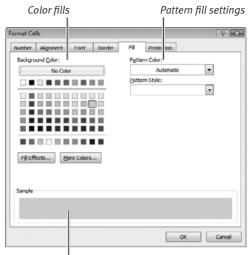
- You can apply multiple types of conditional formatting to the same range.
- To remove conditional formatting, select the range, open the Conditional Formatting drop-down menu, and choose Clear Rules > Clear Bules from Selected Cells.

Adding Cell Backgrounds and Borders

In addition to formatting cell content, you can apply formatting to cell borders and backgrounds. For example, you can create a double-line border beneath a row to visually separate data from a totals row. Or you could make critical cells stand out by applying a colored fill to them.

To fill cells with color:

- **1.** Select the cells to which you want to apply a background color.
- **2.** On the Home tab, open the Format Cells dialog box by *doing one of the following:*
 - ▲ Click the Format icon in the Cells group and choose Format Cells from the drop-down menu.
 - ▲ Click the Format Cells dialog box launcher in the Font, Alignment, or Number group (see Figure 9.13).
 - ▲ Right-click one of the selected cells and choose Format Cells from the context menu that appears.
- **3.** In the Format Cells dialog box, click the Fill tab (**Figure 9.21**).
- 4. Do one of the following:
 - ▲ Fill cells with a solid color. Click a color icon in the Background Color section. (To choose a color that isn't displayed, click More Colors.)
 - ▲ Fill cells with a pattern. Choose a pattern color and style from the drop-down menus.
 - ▲ Fill cells with a gradient. Click the Fill Effects button. Set options in the dialog box that appears (Figure 9.22) and click OK.
- **5.** Click OK to close the Format Cells dialog box.



Preview of color, pattern, or gradient fill

Figure 9.21 Select fill options on the Fill tab of the Format Cells dialog box.

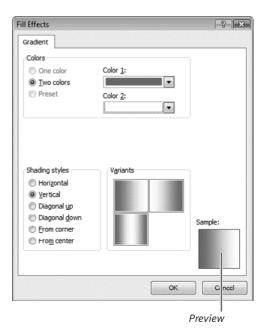


Figure 9.22 You can apply a custom gradient to cells. Doing so often results in a 3D-like effect.

| rmat Cells | | | | -9-1 |
|---------------------------------------|------------------------|--------------|---------------------|------------------|
| Number Alimment | Font Border | FIL E | rotection | |
| Line | Presets | | | |
| Style: | | | | |
| | None | Outline | Inside | |
| | Border | | | |
| | | | L | |
| | | Text | F | |
| Color: | | Text | | |
| | | _ | - | |
| | | | | |
| The velected border style o abo e. | an be a splied by dick | ing the pres | iets, preview diagr | am or the button |
| _ | | | ОК | Cancel |

Figure 9.23 You can add, remove, or modify borders for the currently selected cells.

Custom Conditional Formatting

While you can quickly apply conditional formatting to a range by merely choosing an option from one of the Conditional Formatting submenus (see Figures 9.16, 9.18, and 9.20), you can *customize* the settings for any conditional formatting rule to show only particular values in a specified manner.

Choose More Rules from the bottom of the appropriate Conditional Formatting submenu. Depending on the conditional formatting type, you can specify a minimum and/or maximum plotted value, indicate how negative values will be displayed, or change the number of plotted values for a top/bottom rule, for example.

To add cell borders:

- **1.** Select the cells to which you want to add one or more border lines.
- **2.** On the Home tab, open the Format Cells dialog box by *doing one of the following:*
 - ▲ Click the Format icon in the Cells group and choose Format Cells from the drop-down menu.
 - ▲ Click the Format Cells dialog box launcher in the Font, Alignment, or Number group (see Figure 9.13).
 - ▲ Right-click one of the selected cells and choose Format Cells from the context menu that appears.
- **3.** In the Format Cells dialog box, click the Border tab (**Figure 9.23**).
- 4. Do any of the following:
 - ▲ Add border lines. Select a line style and color from the left side of the dialog box. To use one of the presets (such as Outline), click its icon. To add a single border line of the selected style and color, click its border icon or the spot in the sample where you want to add the line.
 - ▲ **Remove border lines.** To simultaneously remove *all* border lines from the selected cells, click the None preset. To remove a single border, click its border icon or the spot in the sample from which you want to remove the line.
 - ▲ Change border line properties. To change the style or color of borders, select a new style and/or color, and click the preset or border icon that you want to reformat.
- **5.** Click OK to close the dialog box.

🖌 Tip

 Border styles can also chosen from the drop-down menu in the Font group.

Removing, Replacing, and Reusing Formats

Whether you've applied character, paragraph, number, or conditional formatting, the applied formatting can be removed or replaced. And to simplify the process of applying existing formatting to additional cells or ranges, you can also *reuse* formatting.

To remove formatting:

- Select the cell range from which you want to remove formatting, and switch to the Home tab.
- 2. Do any of the following:
 - ▲ To remove all character, paragraph, and number formatting, click the Clear icon in the Editing group and choose Clear Formats from the drop-down menu (**Figure 9.24**).
 - ▲ To selectively remove character style formatting (bold, italic, underline, or double underline) from selected cells or selected characters within a cell, reapply the style formatting option.
 - ▲ To remove conditional formatting from the selected cells, open the Conditional Formatting drop-down menu and choose Clear Rules > Clear Rules from Selected Cells.
 - ▲ To remove all conditional formatting from the current worksheet, click the Conditional Formatting icon and choose Clear Rules > Clear Rules from Entire Sheet.

Tips

- Applying Clear Formats also causes cell data to revert to the default font and size.
- The Clear Formats command can also be used to remove conditional formatting.



Figure 9.24 Choose Clear Formats to remove all formatting from the selected cells.



Figure 9.25 Use the Format Painter tool to copy cell formatting to another cell or range.

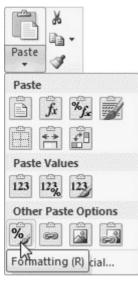


Figure 9.26 To perform a normal paste, click the Paste icon. To paste anything other than copied data (such as formatting), click an icon in the Paste drop-down menu.

To replace formatting:

- Select the cell range for which you want to replace or modify the current formatting. Switch to the Home tab.
- 2. Do any of the following:
 - ▲ To alter paragraph formatting, choose options from the Alignment group (see Figure 9.10).
 - ▲ To set a new font or size, select options from the Font group (see Figure 9.7) or the Mini toolbar (see Figure 9.8).
 - ▲ To replace or modify Number formatting, select options from the Number group (see Figure 9.14) or the Number tab in the Format Cells dialog box (see Figure 9.15).

To reuse existing formatting:

- **1.** Select a cell that contains the formatting you want to duplicate.
- **2.** On the Home tab, click the Format Painter icon in the Clipboard group (**Figure 9.25**).
- **3.** Do either of the following:
 - ▲ Click the cell to which you want to apply the formatting.
 - ▲ Drag-select the cell range to which you want to apply the formatting.

🗸 Tip

■ You can also reapply existing formatting using copy-and-paste. First, copy ([Ctrl]C]) the cell whose formatting you want to reuse. Next, select the target cells, click the Paste icon in the Clipboard group of the Home tab and click the Formatting icon (Figure 9.26). You can also specify copied properties that you want to paste by choosing Paste Special from the Paste icon's drop-down menu.

Worksheet Formatting

In addition to specifying a new default font and size, as well as turning off the display of gridlines, you may occasionally want to try some of these sheet-formatting options:

- ◆ Background. You can use any image from your hard disk as a background for the current sheet (Figure 9.27). On the Page Layout tab, click the Background icon in the Page Setup group, select an image from the Sheet Background dialog box, and click Open.
- ◆ Themes. If you don't feel like manually selecting fonts, colors, and effects, you can choose a predesigned theme. Select the Page Layout tab and view the Themes gallery in the Themes group. Each theme contains a complementary set of fonts, colors, and effects. When you insert a new chart or SmartArt graphic, for example, theme formatting is automatically used. Similarly, when you select a color for text or an object, the color set will display only variations of the theme colors.
- Tab Color. You may find it helpful to color-code the sheet tabs in a workbook to make them easier to identify. To do so, right-click a sheet tab and choose a color from the Tab Color pop-out (Figure 9.28).

Remove background |

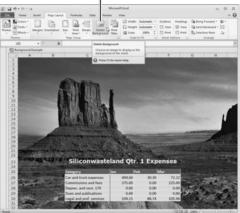


Figure 9.27 As long as you apply contrasting font colors, a photo or graphic can serve as an interesting sheet background.



Figure 9.28 Choose a color for the current tab. Choose No Color to remove a previously applied color.