



***COREL***<sup>®</sup>

**WordPerfect**<sup>®</sup> **X3**



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## Getting started in WordPerfect

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This chapter tells you how to perform basic operations in WordPerfect. You can explore the work area and gain a better understanding of the basic tools and features available for creating powerful word processing documents.

In this section, you'll learn about

- discovering WordPerfect
- exploring the work area
- creating and opening documents
- entering and inserting text
- selecting and deleting text
- performing Web searches powered by Yahoo!®

### Discovering WordPerfect

WordPerfect X3 provides exceptional ease of use and complete formatting control for producing newsletters, articles, reports, proposals, books, and other documents. The popular Reveal Codes, Corel® RealTime Preview™, and Legal features help reduce the amount of time you spend on document formatting, freeing you to focus on creating content. WordPerfect X3 also provides enhanced compatibility with Microsoft Word, the new ability to import PDFs, and robust PDF publishing capabilities that ensure you can freely exchange information with colleagues and clients, regardless of the software they use.

Here's a list of some of the new and enhanced features:

- **New!** Import PDF files with WordPerfect  
For more information, see “Working with PDF files” in the online Help.
- **Enhanced!** Publish to PDF  
For more information, see “Working with PDF files” in the online Help.
- **New & Enhanced!** Word Count  
For more information, see “Counting words” in the online Help.

- **Enhanced!** Document Routing  
For more information, see “Routing documents” in the online Help.
- **Enhanced!** Pasting and exporting HTML  
For more information, see “Copying and pasting text from a Web browser” on page 49 and “Working with HTML files” on page 27.
- **New!** Online Resources  
For more information, see “Performing Web searches powered by Yahoo!” on page 7.
- **New!** Removing metadata  
For more information, see “Excluding metadata when saving documents” in the online Help.
- **New!** Label formats  
For more information, see “Creating labels” in the online Help.

## Exploring the work area

The work area in WordPerfect includes everything you see on your screen when you start the application. The large open area is the document window.

The menu bar, located at the top of the work area just below the title bar, provides access to most of the WordPerfect commands.

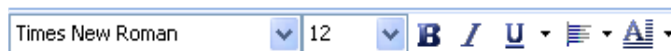
### Toolbars

Many menu commands can be accessed through toolbars, located below the menu bar.



*This is the WordPerfect toolbar.*

The property bar is a context-sensitive toolbar that displays buttons and options related to the task you are performing. For example, when text is selected, the property bar contains only text-related commands.



*This is the property bar.*

By default, the property bar is located above the document window.



## The application bar

The application bar displays information about the status of the active WordPerfect document. By default, the application bar is located below the document window.

When you open a file, a document button with the name of the file appears on the application bar. You can use document buttons to quickly move between the documents. For more information about moving between documents, see “Navigating documents” in the online Help.



*These items appear on the right side of the application bar.*

## Creating and opening documents

You can create a document in WordPerfect by using the default template, a blank document that includes formatting elements such as margin settings, tab settings, and toolbars. WordPerfect also includes ready-made project templates that you can open and use to create a wide range of documents, including letters, fax cover sheets, calendars, and business cards.

For more information about templates, see “Creating documents using project templates” in the online Help.

You can open word-processing documents that were created in WordPerfect or in another application. The advantage of opening, rather than importing a document created in another application, is that many of the formatting attributes in the original document, such as page size, margins, font properties, bullets, and underlining are preserved. Some of the features not supported include embedded pictures, hidden text, interline spacing, kerning, macros, multiple page layouts (the first one in the document is used throughout), and OLE objects. For more information about importing files, see “Import and export file formats for WordPerfect” in the reference information section of the online Help.

### To create a document by using the default template

- Click **File** ► **New**.


#### You can also

---

Create a document from a project template      Click **File** ► **New from project**.

---




You can also apply the default template to a new document by clicking the **New blank document**  button on the toolbar.

### **To open a document**

- 1 Click **File** ▶ **Open**.
- 2 Choose the drive and folder where the document is stored.
- 3 Choose a file.
- 4 Click **Open**.



You can also open a document by clicking the **Open**  button on the toolbar.  
If you know where a file is located, you can type the full path and filename in the **File name** list box.

### **Entering and inserting text**

You can enter text in the document window. You can use the shadow cursor to show where the text will be positioned.

You can also enter text in a text box so that it appears in a separate frame.

You can insert text from another file.

If you have more than one document opened, you can use the application bar to insert text from one document to another document.

For information about selecting and deleting text, see “Selecting and deleting text” on page 6.

### **To enter text in a document window**

- 1 Click in the document window.
- 2 Type text.

### **To enter text by using the shadow cursor**

- 1 Click **View** ▶ **Shadow cursor**.

A check mark next to the menu command indicates that the shadow cursor is enabled.

- 2 Click anywhere on the page.
- 3 Type text.



The shadow cursor changes appearance to show how text will be aligned when you start typing. Small arrows beside the shadow cursor point in different directions when text is left-justified, centered, or right-justified.

### **To enter text in a text box**

- 1 Click **Insert** ► **Text box**.
- 2 Type text.

### **To insert text from another document**

- 1 Click where you want to insert the text.
- 2 Click **Insert** ► **File**.
- 3 Choose the drive and folder where the document is stored.
- 4 Choose a file.
- 5 Click **Insert**.

### **To insert text from another document by using the application bar**

- 1 Select the text you want to insert.
- 2 Drag the selected text to the button on the application bar that displays the name of the document into which you want to insert the text, but don't release the mouse button.

This document opens in the document window.

- 3 Point to where you want to insert the text, and release the mouse button.



For more information about using the application bar, see “Customizing the application bar” in the online Help.



The text you select is removed from the document. You can copy the text by holding down **Ctrl** while dragging.

## Selecting and deleting text

You can select text, a tabular column, a rectangular block of text, or a range of text. You can also deselect text and delete text. You can also set selection options.

### To select text

To select	Do the following
A character or word	Drag across a character or word.
A sentence	Click in a sentence. Click <b>Edit</b> ▶ <b>Select</b> ▶ <b>Sentence</b> .
A paragraph	Click in a paragraph. Click <b>Edit</b> ▶ <b>Select</b> ▶ <b>Paragraph</b> .
A page	Click on a page. Click <b>Edit</b> ▶ <b>Select</b> ▶ <b>Page</b> .
A document	Click <b>Edit</b> ▶ <b>Select</b> ▶ <b>All</b> .

### To select a tabular column

- 1 Select the text from the first character in the tabular column to the last character in the tabular column.
- 2 Click **Edit** ▶ **Select** ▶ **Tabular column**.

### To select a rectangular block of text

- 1 Select the text from the upper left corner to the lower left corner of the block.
- 2 Click **Edit** ▶ **Select** ▶ **Rectangle**.

### To select a range of text in a document

- 1 Click **Edit** ▶ **Select** ▶ **Section**.
- 2 From the **Select** list, choose one of the following options:

- **Page** — lets you select certain pages
- **Secondary page** — lets you select certain secondary pages
- **Chapter** — lets you select certain chapters
- **Volume** — lets you select certain volumes

3 Type a value in the **Range** box.

### To deselect text

- Click anywhere outside the selected text.

### To delete text

- 1 Select the text you want to delete.
- 2 Press **Delete**.



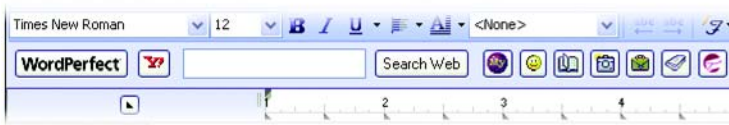
You can also delete text by clicking after the text you want to delete and pressing **Backspace**.

### To set the selection options for a document

- 1 Click **Tools** ▶ **Settings**.
- 2 Click **Environment**.
- 3 In the **Environment settings** dialog box, click the **General** tab.
- 4 Enable the **Automatically select whole words when dragging to select text** check box.

### Performing Web searches powered by Yahoo!

WordPerfect features searching technology powered by Yahoo!, which allows you to perform a Web search directly from a document. You can choose to display or hide the Yahoo! Search bar. You can search either by selecting text or by using the Yahoo! Search bar. Using the Yahoo! Search bar gives you access to various online sites and services.




*The new Yahoo! Search bar lets you quickly search the Web and access important online resources.*

## To display or hide the Yahoo! Search bar

- Click View ► Yahoo! Search.



You can also hide or display the Yahoo! Search bar clicking the **Yahoo!**  button on the toolbar.

## To perform a Web search by using the Yahoo! Search bar

- 1 In the search box on the Yahoo! Search bar, type the term you want to search.
- 2 Click the **Search Web** button.

## To perform a Web search by selecting text

- 1 Select the term you want to search.
- 2 Right-click, and click **Search with Yahoo!**.



You can perform a Web search by selecting text when the Yahoo! Search bar is hidden.



## Working with files

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File management is an important part of any project. You can insert files into documents, count words in a document, and convert multiple files to the WordPerfect file format. You can save files to earlier versions of WordPerfect or to other file formats.

In this section, you'll learn about

- inserting files into active documents
- counting words
- converting multiple files
- saving documents

### Inserting files into active documents

You can insert a copy of a file into an active document.

#### To insert a file into an active document

- 1 Click where you want to insert the file.
- 2 Click **Insert** ► **File**.
- 3 Choose **All files** from the **File type** list box.
- 4 Choose the drive and folder in which the file is stored.
- 5 Click a file.
- 6 Click **Insert**.



For information about opening files, see “Opening and previewing files” in the online Help.

## Counting words

With WordPerfect, you can find out how many words are in a document or in selected text. You can also verify the number of pages, paragraphs, sentences, and lines that are in the document. In addition, you have the ability to exclude various elements, such as headers, footers, footnotes, endnotes, or comments, from the word count.



*The new <Count> button appears on the Application bar, making it easier than ever to count words in a document.*

### To count words in a document

- 1 Click **Tools** ► **Word count**.
- 2 Disable any of the following check boxes to exclude document elements from the count:
  - **Headers**
  - **Footers**
  - **Comments**
  - **Footnotes**
  - **Endnotes**
  - **Watermarks**
  - **Text boxes**
  - **Box captions**
- 3 Click **Update**.

The word count summary appears in the **Statistics** area.



While working in a document, you can perform or refresh a word count by clicking the **<Count>** button on the **Application** bar.

### To count words in selected text

- 1 Select the text.
- 2 Click **Tools** ► **Word count**.

The word count summary appears in the **Statistics** area.



While working in a document, you can perform or refresh a word count by clicking the **<Count>** button on the **Application** bar.



## Converting multiple files

The WordPerfect Office Conversion Utility lets you convert various types of files, such as files created in older versions of WordPerfect, or Microsoft Word files, to one of five WordPerfect file formats.

If you chose the standard installation of WordPerfect Office, the WordPerfect Office Conversion Utility is available by default. If the utility is not available, you can add it by modifying the installation.

For more information about using the WordPerfect Conversion Utility, see the WordPerfect Conversion Utility Help.

### To install the WordPerfect Office Conversion Utility

- 1 Close any open applications.
- 2 On the Windows taskbar, click **Start** ▶ **Settings** ▶ **Control panel**.  
If your operating system is Windows XP, click **Settings** ▶ **Control panel**.
- 3 Double-click the **Add/Remove programs** icon.
- 4 Choose **WordPerfect Office X3** from the **Currently installed programs** list, and then click **Change**.
- 5 In the InstallShield wizard, enable the **Modify** option, and click **Next**.
- 6 In the list of features, open the **WordPerfect Office X3** ▶ **Utilities** category.
- 7 Click the icon next to the **WordPerfect Conversion Utility** item, and click **This feature will be installed on local hard drive**.
- 8 Click **Next**.
- 9 Click **Install**.

### To convert multiple files

- 1 On the Windows taskbar, click **Start** ▶ **Programs** ▶ **WordPerfect Office X3** ▶ **Utilities** ▶ **Conversion utility**.
- 2 Click **Add**.
- 3 Choose the drive and folder in which the files you want to convert are stored.  
If you can't see the files, choose **All files** from the **File type** box.
- 4 Click **Add all**.

If you want to convert the files in the folders within the folder, enable the **Include subfolders** check box.

- 5 From the **Convert to** list box, choose a version of WordPerfect.

## Saving documents

By default, you can save documents in WordPerfect 6/7/8/9/10/11/12/X3 format. This ensures cross-platform compatibility for documents saved in WordPerfect 6.x and later, and lets you save a document in an earlier version of WordPerfect. You can also save documents in formats other than WordPerfect, such as Microsoft Word.

WordPerfect lets you save documents in compound file format. When you save a document in compound file format, OLE compound document information is wrapped around the WordPerfect document, which lets you open the document more quickly. However, saving a document containing embedded objects in compound file format increases both the file size and the time required to open and save the file.

You can save selected text or graphics in a new WordPerfect document.

WordPerfect lets you create backup copies of documents. Creating backup copies helps prevent the loss of your work if you close a document before saving it, or if a power failure occurs.

### To save a document

- 1 Click **File** ▶ **Save**.
- 2 Choose the drive and folder in which you want to save the file.  
To save a file in a format other than WordPerfect, choose a file format from the **File type** list box.
- 3 Type a name in the **Filename** box.  
To embed the fonts in the document, enable the **Embed fonts using TrueDoc®** check box.
- 4 Click **Save**.

### You can also

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Save changes to a document

Click **File** ▶ **Save**.

---

## You can also

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Rename a file

Right-click the file, and click **Rename**. Type a new name in the **Filename** box.

---




If you have already saved the document, you will not be prompted to specify the drive, folder, and filename.

Embedding ensures that the information for all fonts used in a document is saved with the document. You may want to embed fonts if you are using an unusual font, or if you want to ensure that the font you are using is displayed properly.

A filename cannot exceed 255 characters.



You can also save a document by pressing **F3** or by clicking the **Save**  button on the toolbar.

## To save a document to a new location

- 1 Click **File** ► **Save as**.
- 2 From the **Save in** list box, choose the drive and folder in which you want to store the document.

If you want to embed the fonts in the document, enable the **Embed fonts using TrueDoc** check box.

- 3 Click **Save**.



Embedding ensures that the information for all fonts used in a document is saved with the document. You may want to embed fonts if you are using an unusual font, or if you want to ensure that the font you are using is displayed properly.

## To save selected text or a graphic in a new document

- 1 Select the text or graphic you want to save in a new document.
- 2 Click **File** ► **Save**.
- 3 In the **Save** area, enable one of the following options:
  - Selected text

- Selected graphic
- 4 Click **OK**.
  - 5 In the **Save file** dialog box, choose the drive and folder in which you want to save the file.
  - 6 Type a name in the **Filename** box.
  - 7 Click **Save**.

### **To save a document in compound file format**

- 1 Click **File** ► **Save as**.
- 2 Type a name in the **Filename** box.
- 3 Choose **WordPerfect compound file** from the **File type** list box.
- 4 Click **Save**.



If a file is password protected, WordPerfect saves OLE object information in WordPerfect format, rather than in compound file format. Saving files in WordPerfect format prevents others from using an OLE-enabled application to viewing embedded objects in a password-protected file.

### **To set timed document backups**

- 1 Click **Tools** ► **Settings**.
- 2 Click **Files**.
- 3 On the **Document** page, enable the **Timed document backup every** check box.
- 4 Type a value in the **minutes** box.



## Viewing and navigating

---

WordPerfect lets you switch document views. You can also use Reveal Codes, which lets you quickly format long or complex documents by viewing and editing formatting codes.

In this section, you'll learn about

- switching document views
- using Reveal Codes

### Switching document views

In WordPerfect, you can view documents in four ways: draft, page, two pages, and browser preview.

In draft view, WordPerfect displays the body text of a document the way it will look when it is printed. Draft view does not display formatting such as headers, footers, and watermarks.

Page view displays a document with all of its formatting, the way it will look when it is printed.

Two pages view displays the same formatting as page view, except that two consecutive pages display side by side in the document window.

The browser preview displays a document in HTML format, suitable for an intranet or for the Web; however, WordPerfect codes with no equivalent HTML tags are either modified or deleted from the document. For more information about creating HTML documents, see “Publishing to HTML” in the online Help.


### To switch the document view

- Click **View**, and click one of the following:
  - **Draft** — to hide some document elements such as footers, page breaks, margins, and watermarks

- **Page** — to display the document the way it will look when printed
- **Two pages** — to display two consecutive pages in a document side by side
- **Preview in browser** — to display a document in HTML format

## You can also

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Switch between **Preview in browser** and **Page view** Click the **Change view**  button.

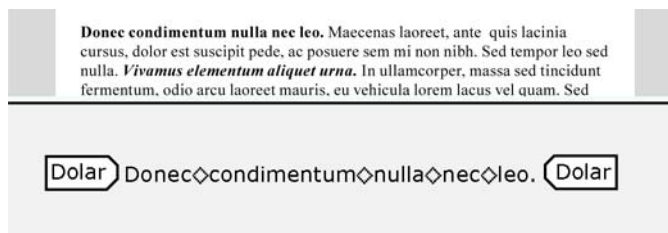
---

Display the ruler in **Two pages** view In **Two pages** view, click **View** ▶ **Ruler**.

---

## Using Reveal Codes

Formatting codes are inserted when you add text and formatting to a document. Reveal Codes gives you full control over document formatting, especially when copying and pasting text from various sources. For example, to remove bold formatting, you can turn on Reveal Codes, locate the `<B>` code, and then just drag it out of the Reveal Codes window. You can also double-click any code in the Reveal Codes window to make advanced alterations to the settings or styles. Codes are hidden by default; however, they can be displayed in a separate window below the active document.



*This is how the text is displayed in the Reveal Codes window.*

You can hide or display formatting codes. You can also customize the display of the codes; for example, you can specify the font style and color, and several other formatting options. In addition, you can print the contents of the Reveal Codes window.

For more information about printing Reveal Codes, see

### To hide or display formatting codes

- Click **View** ▶ **Reveal Codes**.

A check mark beside **Reveal Codes** indicates that formatting codes are displayed.

## To customize the display of formatting codes

- 1 Click **Tools** ► **Settings**.
- 2 Click **Display**.
- 3 Click the **Reveal Codes** tab.
- 4 In the **Format** area, enable or disable any of the following check boxes:
  - **Wrap lines at window** — to continue codes on the next line
  - **Show spaces as bullets** — to display a bullet for each space character
  - **Show codes in detail** — to display formatting information with codes
  - **Auto-display codes in Go to dialog** — to display the Reveal Codes window when a code match is found in a specific section of the document

### You can also

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Change the font	Click <b>Font</b> , and choose a font from the <b>Face</b> list box.
Change the font size	Choose a font size from the <b>Size</b> list box.
Change the font color	In the <b>Color</b> area, disable the <b>Use system colors</b> check box. Open the <b>Text</b> color flyout, and click a color.
Change the background color	In the <b>Color</b> area, disable the <b>Use system colors</b> check box. Open the <b>Background</b> color flyout, and click a color.
Use Windows system colors	In the <b>Color</b> area, enable the <b>Use system colors</b> check box.

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## Formatting pages

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WordPerfect lets you format a document by modifying the physical arrangement of information on pages. For example, you can adjust page size and margins. You can also add columns to documents. When formatting pages, you can modify the format of an entire page or a portion of a page.

In this section, you'll learn about

- setting page margins
- choosing page size and orientation
- customizing page sizes
- making text fit a specific number of pages
- creating and deleting columns

### Setting page margins

WordPerfect lets you set margins using various methods. You can set margins by using guidelines. Guidelines are vertical or horizontal dotted lines that are displayed on pages. You can also set margins using exact measurements or the ruler.

All margin settings affect the current page and subsequent pages until you change them.

#### To set the margins using the margin guidelines

- 1 Click **View** ► **Guidelines**.
- 2 Enable the **Margins** check box.
- 3 Point to one of the following guidelines:
  - left vertical dotted guideline
  - right vertical dotted guideline
  - upper horizontal dotted guideline
  - lower horizontal dotted guideline

The pointer changes to a double-sided arrow.

- 4 Drag the guideline to a new position.

### To set the margins using exact measurements

- 1 Click in the document where you want the margin changes to start.
- 2 Click **Format** ► **Margins**.
- 3 Click the **Page setup** tab.
- 4 In the **Document margins** area, type values in any of the following boxes:
  - **Left** — lets you specify where the left margin starts
  - **Right** — lets you specify where the right margin starts
  - **Top** — lets you specify where the top margin starts
  - **Bottom** — lets you specify where the bottom margin starts

### You can also

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Set all margins to the last margin value edited

In the **Document margins** area, click **Equal**.

---

Set all margins to the minimum size allowed by the current printer


In the **Document margins** area, click **Minimum**.


---



You can also set margins by clicking **File** ► **Page setup**.

### To set the margins using the ruler

- 1 Point to the **Margin marker**  to the left or right of the ruler.

The pointer changes to a double-sided arrow.
- 2 Drag the **Margin marker**  to a new location on the ruler.

## Choosing page size and orientation

When creating documents, you can choose the size and orientation of pages. The page size and orientation determine how a printer formats and prints pages. You can choose from preset page sizes, or you can create your own. For more information about creating custom page sizes, see “Customizing page sizes” on page 21.

Page sizes are matched to the printer you have selected. A size may not be available when you change to another printer or a different computer. If the same size is not available, WordPerfect finds the best match for a page size, selecting from those available with the other printer. If the match does not work, you may need to customize a page size.

### To select a preset page size

- 1 Click **File** ► **Page setup**.
- 2 Click the **Page setup** tab.
- 3 From the **Page definition** list box, choose one of the following:
  - **Printer page types** — lists all page size options for installed printers
  - **Standard page types** — lists all page size options for most printers
- 4 Choose a page definition from the **Page definition** list.
- 5 In the **Page definition applies to** area, enable one of the following options:
  - **Current and following pages** — applies the page definitions to the current and following pages
  - **Current page only** — applies the page definitions to the current page only



If you apply the page size definition to the current page only, WordPerfect inserts a delay code in the next page. For more information about delay codes, see “Inserting and editing delay codes” in the online Help.

### To specify page orientation

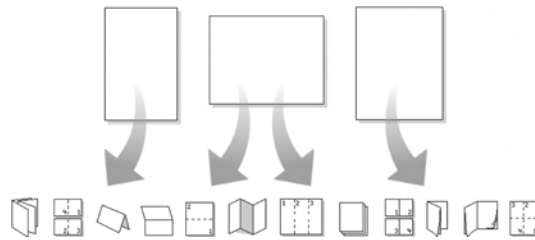
- 1 Click **File** ► **Page setup**.
- 2 Click the **Page setup** tab.
- 3 In the **Orientation** area, enable one of the following options:
  - **Portrait** — prints the document on pages that have greater length than width
  - **Landscape** — prints the document on pages that have greater width than height

### Customizing page sizes

If you require a page size that is not available in WordPerfect, you can create a custom page size. You can do this by creating a page size or modifying a preset page size. When you create a custom page size, it is added to the printer’s page size selection as a preset.

Therefore, you can apply the custom size to more than one document. If you no longer require the custom or modified page sizes, you can delete the page size or restore the default page sizes.

In addition, you can divide a physical page into several logical pages. Dividing pages is useful when you want to create small documents, such as pamphlets, raffle tickets, or business cards.



*These are examples of how you can divide pages.*

As you edit a document, each logical page is treated as a separate page. The document window also changes to show the dimensions of the logical page. After you fill a logical page, the text continues on the next logical page.

## To create a custom page size

- 1 Click **File** ► **Page setup**.
- 2 Click the **Page setup** tab.
- 3 Click **Add**.
- 4 In the **Add new form** dialog box, type a name for the new page size in the **Name** box.
- 5 Choose a predefined paper type from the **Type** list box.
- 6 Choose a predefined paper size from the **Size** list box.  
If you want to create a page size definition from a nonstandard paper size, choose **User defined size** from the **Size** list box.
- 7 Type values in the following boxes:
  - **Width**
  - **Height**
- 8 Choose a paper source from the **Source** list box.

## You can also

---

Display the available page size definitions for all the installed printers	In the <b>Show page size for</b> area, enable the <b>All printers</b> option.
Display the available page size definitions for the printer you have selected	In the <b>Show page size for</b> area, enable the <b>Current printer only</b> option.
Specify a vertical printing adjustment	In the <b>Printing adjustment</b> area, choose an adjustment from the <b>Vertical</b> list box. Type a value in the box.
Specify a horizontal printing adjustment	In the <b>Printing adjustment</b> area, choose an adjustment from the <b>Horizontal</b> list box. Type a value in the box.

---



The paper source is not saved as part of the document. It must be redefined for each document.

All printers have a nonprintable zone. If information is formatted to print in this area, it will not print. To shift information out of the nonprintable zone, you must specify printing adjustments.

## To modify a preset page size

- 1 Click **File** ► **Page setup**.
- 2 Click the **Page setup** tab.
- 3 Choose a page definition from the **Page definition** list.
- 4 Click **Edit**.
- 5 Modify any of the settings.

## To delete a page size

- 1 Click **File** ► **Page setup**.
- 2 Click the **Page setup** tab.
- 3 From the **Page definition** list box, choose one of the following:
  - **Printer page types** — lists all page size options for installed printers
  - **Standard page types** — lists all page size options for most printers
- 4 Choose a page definition from the **Page definition** list box.

- 5 Click **Delete**.



When you delete a page size definition, you can no longer use that definition; a document can print with a similar page definition, but it may not be an exact match.

### **To restore default page sizes**

- 1 Click **File** ► **Page setup**.
- 2 Click the **Page setup** tab.
- 3 From the **Page definition** list box, choose one of the following:
  - **Printer page types** — lists all page size options for installed printers
  - **Standard page types** — lists all page size options for most printers
- 4 Click **Restore**.

### **To divide a page**

- 1 Click **File** ► **Page setup**.
- 2 Click the **Layout** tab.
- 3 In the **Divide pages** area, type a value in one of the following boxes:
  - **Columns** — lets you divide a page into a specified number of columns
  - **Rows** — lets you divide a page into a specified number of rows

## **Making text fit a specific number of pages**

You can make selected text or all text in a document fit a specific number of pages.

### **To make text fit a specific number of pages**

- 1 Click in a document.
- 2 Click **Format** ► **Make It Fit**.
- 3 Type a value in the **Desired number of pages** box.

The number of pages you set must be within 50 percent of the document's current page count.
- 4 In the **Items to adjust** area, enable any of the following check boxes:
  - **Left margin**

- Right margin
- Top margin
- Bottom margin
- Font size
- Line spacing

5 Click Make it fit.



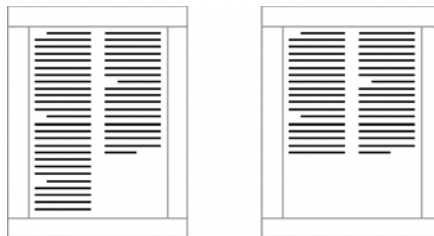
To make only a certain block of text fit, select the text.

## Creating and deleting columns

You can use columns to divide text vertically on a page. You can use four types of columns in documents: newspaper, balanced newspaper, parallel, and parallel with block protect. You can add columns to documents to create newsletters, glossaries, scripts, or inventory lists. You can discontinue columns when they are complete. You can also delete columns and quickly move through columns.

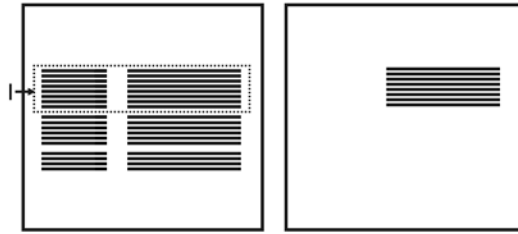
Text in newspaper columns flows down the column to the bottom of a page or column break and starts again at the top of the next column.

Balanced newspaper columns are similar to regular newspaper columns, but each column is adjusted on the page so that all columns are equal in length.



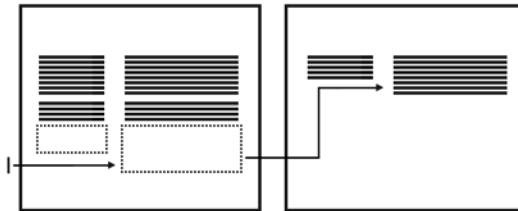
*These are examples of pages with columns. The left page displays newspaper columns. The right page displays balanced newspaper columns.*

The parallel column text is grouped across the page in a row. The next row starts below the longest column of the previous row. Parallel columns are useful for resumes, scripts, charts, inventory lists, or lists where columns span multiple pages.



*This is an example of parallel columns.*

Parallel columns with block protect keep each row of columns together. If a column in one row becomes so long that it moves across a page break, the entire row moves to the next page. You can also use tables to create this type of column. For information about working with tables, see “Using tables and charts” in the online Help.




*This is an example of parallel columns with block protect.*

## To create columns

- 1 Click a page.
- 2 Click **Format** ► **Columns**.
- 3 Type a value in the **Number of columns** box.
- 4 In the **Type of columns** area, enable one of the following options:
  - **Newspaper** — makes text flow down a column to the bottom of a page or column break and continues it at the top of the next column
  - **Balanced newspaper** — adjusts newspaper columns so that columns are of equal length
  - **Parallel** — groups columns across the page in rows, and starts subsequent rows below the longest column of the previous row
  - **Parallel w/block protect** — keeps all rows of the columns together across page breaks





You can also apply columns to a page by clicking the **Columns**  button on the toolbar.

### To discontinue columns

- 1 Click where you want columns to discontinue.
- 2 Click **Format** ▶ **Columns**.
- 3 Click **Discontinue**.



Press **Ctrl + Enter** to end one column and start the next column.

### To delete all columns

- 1 Click in the top-left corner of the first column.
- 2 Click **Format** ▶ **Columns**.
- 3 Click **Discontinue**.



You can also delete columns by dragging the `{Col Def}` code out of the Reveal Codes window.

### To navigate columns

To move to	Press
The top of a column	<b>Alt + Home</b>
The last line of a column	<b>Alt + End</b>
The previous column	<b>Alt + Left Arrow</b>
The next column	<b>Alt + Right Arrow</b>





## Formatting text

---

In WordPerfect, you can use a variety of formatting tools to control the look of text.

In this section, you'll learn about

- modifying font settings
- copying the format of text

### Modifying font settings

You can apply formatting to text to change the font and its attributes, such as style, size, and color.

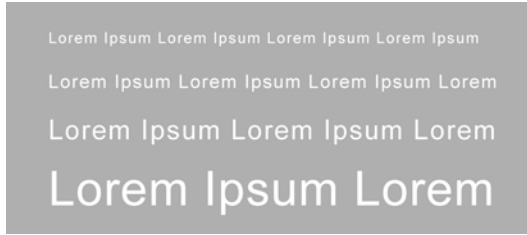
You can also apply relative font sizes, which allows you to format text relative to the specified font size. Suppose you want to add a heading to a document that has a 12-point paragraph font. If you select the heading text and specify a large relative font size, the text displays proportionately larger than the 12-point font.



*This is an example of different fonts.*

Using Corel RealTime Preview lets you view text fonts and sizes before you apply them. For example, you can view text as it will display in various fonts before choosing which is the most suitable. If you do not want to preview fonts and their sizes, you can disable Corel RealTime Preview.

WordPerfect lets you format text using recent font settings, including the font and its size. You can also change the default font and font size for the active document or for all documents.



*This is an example of different font sizes.*

## To change the font

- 1 Click in the document.
- 2 Click **Format** ▶ **Font**.
- 3 Click the **Font** tab.
- 4 Choose a font from the **Face** list.


### You can also


---

Change the font size	Choose a font size from the <b>Size</b> list box.
Change the relative font size	Click <b>Relative size</b> , and click a font size.
Change the font color	Open the <b>Color</b> picker, and click a color.

---



You can also change the font color by clicking the **Font color**  button on the property bar, and clicking a color.

You can also change the underline font style by opening the **Underline**  picker on the property bar and clicking an underline style.

## To change the font appearance

- 1 Select the text you want to modify.
- 2 Click **Format** ▶ **Font**.
- 3 Click the **Font** tab.
- 4 In the **Appearance** area, enable one or more of the following check boxes:
  - **Bold** — Applies bold formatting to the selected text
  - **Italic** — Applies italic formatting to the selected text
  - **Underline** — Applies a single underline to the selected text

- **Outline** — Outlines the selected text
- **Shadow** — Applies a shadow to the selected text
- **Small caps** — Applies small capitals to the selected text
- **Redline** — Applies the color red to the selected text
- **Strikeout** — Applies a line through the selected text
- **Hidden** — Applies the hidden format to the selected text

## To change the font using Corel RealTime Preview

- 1 Click in a document.
- 2 Open the **Font face** list box on the property bar, and point to a font. Changes to the font display in the font face preview window.
- 3 Choose a font from the **Font face** list box.



You can change the font size using Corel RealTime Preview by opening the **Font size** list box on the property bar, viewing the font sizes in the font size preview window, and choosing a font size.


## To disable Corel RealTime Preview

- 1 Click **Tools** ► **Settings**.
- 2 Click the **Display** icon.
- 3 Click the **Document** tab.
- 4 In the **Show** area, disable the **RealTime Preview** check box.



Corel RealTime Preview is enabled by default.

## To reuse a recent font

- 1 Select the text you want to format. If the **Fonts** toolbar is not displayed, click **View** ► **Toolbars**. In the **Toolbars** dialog box, enable the **Fonts** check box.
- 2 Click the **QuickFonts**  button on the font toolbar, and choose a font from the list.



The **QuickFonts** list displays the 10 most recently used fonts.

## To change the default font and font size

- 1 Click **File** ▶ **Document** ▶ **Default font**.
- 2 Choose a font from the **Face** list.
- 3 Choose a font size from the **Size** list box.

If you want to change the default font and font size for all new documents, click **Settings**, and click **Set as default for all documents**.



You must install a printer before you can change the default font.

If you specify a default printer font and distribute the file to others, the file may not display or print correctly if their printer doesn't have the specified default font.



You can view the available attributes for each font by clicking the plus sign (+) to the left of a font in the **Face** list.

## Copying the format of text

You can copy the format of text and apply it to other text in a document. If you want to copy selected text, then formatting attributes, such as font, font size, and font style, are all copied. If you want to copy the heading in a paragraph, the paragraph style as well as the font and its attributes are copied.

When you copy the format of text, you automatically create a text style. Changing text that has been formatted using a text style also changes other text in the document that uses that style. For information about text styles, see “Applying and editing text styles” in the online Help.

## To copy the format of text


- 1 Click in the text whose format you want to copy.
- 2 Click **Format** ▶ **QuickFormat**.
- 3 Enable one of the following options:
  - **Selected characters** — copies the format of the font and its attributes
  - **Headings** — copies the format of the paragraph and its styles, and the font and its attributes
- 4 Click **OK**.

5 Drag the **QuickFormat** paintbrush pointer over the text to which you want to copy the format.

6 Click **Format ▶ QuickFormat**.

**QuickFormat** is disabled when no check mark displays beside the **QuickFormat** menu command.



You can also enable or disable **QuickFormat** by clicking the **QuickFormat**  button.







## Formatting paragraphs

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WordPerfect allows you to control the look of documents by formatting paragraphs. By changing the paragraph formatting, including justification, tab stops, and line spacing, you can control the placement of paragraphs on a page.

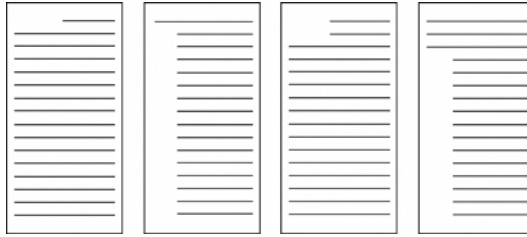
In this section, you'll learn about

- indenting text
- justifying text
- changing the spacing between lines and paragraphs
- adding tab stops
- changing the alignment of tab stops
- moving tab stops
- removing and restoring tab stops

### Indenting text

Indenting arranges text on a page by moving one or more lines to the left or the right of the paragraph margin. You can indent a line or paragraph manually or you can indent lines or paragraphs using the ruler or automatically.

To move the first line of a paragraph farther to the left than subsequent lines, you can apply a hanging indent. To indent an entire paragraph one tab stop from both the left and right margins, you can apply a double indent. A double indent is often used to format lengthy quotations.



*These are examples of indenting text.*

## To apply a single indent to text

### To apply a hanging or double indent

- 1 Click at the beginning of a paragraph.
- 2 Click **Format** ► **Paragraph**, and click one of the following:
  - **Hanging indent** — indents all but the first line in the paragraph
  - **Double indent** — indents the paragraph equally from both margins



You can also apply a hanging indent by clicking at the beginning of any line in a paragraph, except the first line, and pressing **Tab**.

### To remove an indent

- 1 Click at the beginning of a line of text.
- 2 Press **Shift** + **Tab**.

## Justifying text

You can justify text in a document. Doing so aligns the text horizontally between the left and right margins of the page.



*This is an example of a left-justified paragraph (1), a right-justified paragraph (2), a center-aligned paragraph (3), a fully justified paragraph (4), and a fully justified paragraph that includes the last line (5).*


## To justify text

- 1 Click in a paragraph.
- 2 Click **Format** ► **Justification**, and click one of the following:
  - **Left** — aligns text evenly with the left margin
  - **Right** — aligns text evenly with the right margin
  - **Center** — centers text between the right and left margins
  - **Full** — aligns text, excluding the last line, along both the right and left margins
  - **All** — aligns text, including the last line, along both the right and left margins



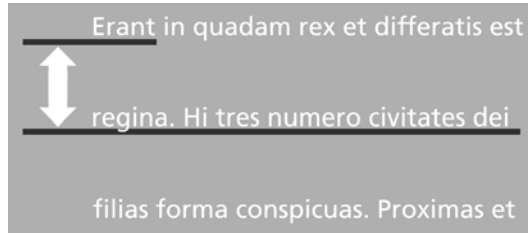
Justification is applied to all text from the cursor location forward. If you want to apply justification to a word, line, or paragraph, you must first select the text.



You can also justify text by clicking the **Justification**  picker on the property bar and clicking a justification.

## Changing the spacing between lines and paragraphs

The space between lines, or the amount of white space that appears between the bottom of one line and the top of the next line, is referred to as leading.



*This is an example of changing spacing between lines.*

You can change the leading by changing the line spacing and changing the line height.



*This is an example of changing the line height.*

You can also control the amount of space between paragraphs.

### To adjust the leading

- 1 Click in a paragraph.
- 2 Click **Format** ▶ **Typesetting** ▶ **Word/Letter spacing**.
- 3 Enable the **Adjust leading** check box.
- 4 Type a value in the **Between lines** box.  
A positive value increases the leading; a negative value decreases it.

### To change the line spacing

- 1 Click in a paragraph.
- 2 Click **Format** ▶ **Line** ▶ **Spacing**.
- 3 Type a value in the **Spacing** box.



You can also change the line spacing of selected text.

## To change the line height

- 1 Click in the line of text where you want the line height change to begin.  
If you want to limit the line height change to a specific section of text, select the text.
- 2 Click **Format** ▶ **Line** ▶ **Height**.
- 3 Enable one of the following options:
  - **Automatic** — defines the line height according to the font being used
  - **Fixed** — lets you specify the height of the line regardless of the font being used
  - **At least** — lets you specify the minimum height of the line



Line height is determined by multiplying the current line height by the number you specify.



You can also change the line height of selected text.

## To change the space between paragraphs

- 1 Click in a paragraph.
- 2 Click **Format** ▶ **Paragraph** ▶ **Format**.
- 3 In the **Spacing between paragraphs** area, enable one of the following options:
  - **Number of lines** — inserts the number of lines you specify
  - **Distance in points** — inserts the spacing you specify measured in points



There are 72 points in 1 inch.


## Adding tab stops

Tab stops let you determine where the cursor moves to when you tab forward or tab back in a document. You can add tab stops to a document using exact measurements or using the ruler. You can also copy a tab stop using the ruler or add tab stops at evenly spaced intervals.

## To add a tab stop using exact measurements

- 1 Click a paragraph.
- 2 Click **Format** ► **Line** ► **Tab set**.
- 3 Choose a tab type from the **Tab type** list box.
- 4 Type a value in the **Tab position** box.
- 5 Enable one of the following options:
  - **From left margin (relative)** — measures the distance of the tab stop relative to the left margin. When the left margin changes, the tab stop adjusts accordingly.
  - **From left edge of paper (absolute)** — measures the distance of the tab stop from the left edge of the page. When the left margin changes, the tab stop remains fixed.
- 6 Click **Set**.

## To add a tab stop using the ruler

- 1 Click a paragraph.
- 2 Click the **Tab** button , and choose a tab style.
- 3 On the tab bar, which displays under the ruler, click where you want to add a tab stop.



For the tab bar to appear, the ruler must be displayed.



## To copy a tab stop using the ruler

- 1 Click a paragraph.
- 2 Hold down **Ctrl**, and drag the tab stop to another position on the ruler.

## To add tab stops at evenly spaced intervals

- 1 Click a paragraph.
- 2 Click **Format** ► **Line** ► **Tab set**.
- 3 Click **Clear all**.
- 4 Enable the **Repeat every** check box, and type a value in the box.
- 5 Click **Set**.



When you add a tab stop, the **Margin**  icon is displayed in the left margin. Clicking the **Margin**  icon displays a ruler with the settings for the paragraph.

For information about displaying the margin icon, see “To hide or display nonprinting items” in the online Help.



You can also set tab stop intervals by double-clicking a tab stop on the ruler.

## Changing the alignment of tab stops

When using a tab stop, you can specify the tab alignment, which is useful when you want to arrange a column of text in a specific way, such as right-justified or left-justified. You can also specify a decimal alignment. For example, you can align a column of numbers at the decimal point. Tab alignment is also used to create dot leaders. For more information about dot leaders, see “Inserting leaders and specifying leader characters” in the online Help.

### To change the alignment of a tab stop

- 1 Click a paragraph.
- 2 Click **Format** ▶ **Line** ▶ **Tab set**.
- 3 Choose a tab type from the **Tab type** list box.
- 4 Click **Set**.



You can also change the alignment of a tab stop by double-clicking the tab stop on the ruler, choosing a tab type from the **Tab type** list box, and clicking **Set**.

### To specify a decimal alignment

- 1 Click a paragraph.
- 2 Click **Format** ▶ **Line** ▶ **Tab set**.
- 3 Choose **Decimal** from the **Tab type** list box.
- 4 In the **Decimal alignment** area, type a character in the **Character to align on** box.

- 5 Click Set.

## Moving tab stops

WordPerfect lets you move a tab stop. You can position a tab stop relative to the left margin or from the left edge of a page. You can also move a tab stop or multiple tab stops. As you move a tab stop, you can make it automatically align to the ruler gridlines; this is referred to as snapping.

### To move a tab stop

- 1 Click in a paragraph.
- 2 Drag the tab stop to a new position on the ruler.



You can also change the position of a tab stop by double-clicking the tab stop on the ruler.

### To move multiple tab stops

- 1 Click in a paragraph.
- 2 Hold down **Shift** and drag across the tab stops on the tab bar to select them.
- 3 Drag the tab stops to a new position.

### To make a tab stop snap to ruler gridlines

- 1 Click **Tools** ► **Settings**.
- 2 Click **Display**.
- 3 In the **Display settings** dialog box, click the **Ruler** tab.
- 4 Enable the **Tabs snap to ruler grid** check box.

## Removing and restoring tab stops

You can remove one tab stop or multiple tab stops. If you've modified the tab stops, you can restore the default tab settings.



## To remove a tab stop

- 1 Click a paragraph.
- 2 Click **Format** ▶ **Line** ▶ **Tab set**.
- 3 Click one of the following:
  - **Clear** — clears the first tab stop to the left edge of the ruler
  - **Clear all** — clears all tab stops
- 4 Click **Set**.



You can remove a tab stop by dragging it off the ruler.

You can also remove all tab stops by right-clicking a tab stop, and clicking **Clear all tabs**.

## To restore the default tab settings

- Right-click a paragraph, and click **Default tab settings**.





## Editing documents

---

After you create a document, you can edit it by using a variety of methods.

In this section, you'll learn about

- finding and replacing text
- cutting, copying, and pasting text and graphics
- copying and pasting text from a Web browser
- moving text and graphics
- reviewing documents
- routing documents
- comparing documents
- controlling document comparisons

### Finding and replacing text

WordPerfect lets you find and replace text. You can search for words, phrases, or individual characters in a document. Once the text is found, you can replace some or all occurrences of the text with other text, or you can delete the text.

You can search for text that is displayed in a specific font or case. You can also find and replace forms of a word. For example, you can replace forms of the word “entry” with the word “insertion.” Therefore, if the plural form, “entries,” is found, it is replaced with the word “insertions.” Furthermore, you can search for occurrences of words that are whole words, and not part of a larger word. For example, if you do a default search for the word “sum,” you will find “sum,” “summer,” and “summit.” If you do a whole-word search for the word “sum,” you will find only occurrences of the word “sum.”

### To find and replace text

- 1 Click **Edit** ► **Find and replace**.
- 2 In the **Find** box, type the text you want to search for.

- 3 Type the replacement text in the **Replace with** box.
- 4 Click one of the following:
  - **Find next** — finds the next occurrence of the search text
  - **Find prev** — finds the previous occurrence of the search text
  - **Replace** — finds and replaces the next occurrence of the search text
  - **Replace all** — finds and replaces all occurrences of the search text

### You can also

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Find the next occurrence of the search text	Press <b>Ctrl + Alt + N</b> .
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Find the previous occurrence of the search text	Press <b>Ctrl + Alt + P</b> .
---	-------------------------------

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You can delete all occurrences of a text string by typing the text you want to delete in the **Find** box and leaving the **Replace with** box empty.

You can search for a word or phrase you searched for previously by choosing the word or phrase from the **Find** list box.

### To find text in a specific font

- 1 Click **Edit** ► **Find and replace**.
- 2 In the **Find** box, type the text you want to find.
- 3 Click **Match** ► **Font**.
- 4 Enable the **Font** check box.
- 5 Choose a font from the **Font** list box.
- 6 Click one of the following:
  - **Find next** — finds the next occurrence of the search text
  - **Find prev** — finds the previous occurrence of the search text

### You can also

---

Search for a font style	Choose a font style from the <b>Font style</b> list box.
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---

Search for a specific point size	Enable the <b>Point size</b> check box. Type a point size in the <b>Point size</b> box.
----------------------------------	---

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## You can also

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Search for specific font attributes

In the **Attributes** area, enable one or more of the attribute check boxes.

---

### To find and replace case-specific text

- 1 Click **Edit** ▶ **Find and replace**.
- 2 Click **Match** ▶ **Case**.
- 3 In the **Find** box, type the text you want to find.
- 4 Type the replacement text in the **Replace with** box.
- 5 Click one of the following:
  - **Find next** — finds the next occurrence of the search text
  - **Find prev** — finds the previous occurrence of the search text
  - **Replace** — finds and replaces the next occurrence of the search text
  - **Replace all** — finds and replaces all occurrences of the search text

### To find and replace a form of a word

- 1 Click **Edit** ▶ **Find and replace**.
- 2 Click **Type** ▶ **Word forms**.
- 3 In the **Find** box, type the word you want to find.
- 4 Type the replacement word in the **Replace with** box.
- 5 Click one of the following:
  - **Find next** — finds the next occurrence of the word
  - **Find prev** — finds the previous occurrence of the word
  - **Replace** — finds and replaces the next occurrence of the word
  - **Replace all** — finds and replaces all occurrences of the word

### To find and replace a whole word

- 1 Click **Edit** ▶ **Find and replace**.
- 2 Click **Match** ▶ **Whole word**.
- 3 In the **Find** box, type the word you want to find.
- 4 Type the replacement word in the **Replace with** box.
- 5 Click one of the following:

- **Find next** — finds the next occurrence of the word
- **Find prev** — finds the previous occurrence of the word
- **Replace** — finds and replaces the next occurrence of the word
- **Replace all** — finds and replaces all occurrences of the word

## Cutting, copying, and pasting text and graphics

You can cut or copy text or graphics and paste them to a new location in a document.

When you cut or copy information, it is stored on the Clipboard. You can paste it in the active document, in another document, or in another application.




Clipboard contents are available only until you cut or copy something else, or until you quit Windows. However, instead of replacing the information already stored, you can append the Clipboard contents so that new information is added to the existing contents.

You can also choose a specific format when you paste information from the Clipboard into WordPerfect. For example, you can copy text from another application as Rich Text Format (.rtf) or as simple text (.txt).

### To cut, copy, and paste text and graphics

To	Do the following
Copy text or graphics to the Clipboard	Select the text or graphic, and click <b>Edit ▶ Copy</b> .
Cut text or graphics and move to the Clipboard	Select the text or graphic, and click <b>Edit ▶ Cut</b> .
Paste text or graphics in a document	Click where you want to insert the text or graphic, and click <b>Edit ▶ Paste</b> .
Add a selection to the current Clipboard contents	Select the text to add to the Clipboard, and click <b>Edit ▶ Append</b> .



You can also copy, cut, or paste text or graphics by clicking **Copy** , **Cut** , or **Paste**  on the toolbar.

You can link copied information to a document by enabling the **Paste link** option. The changes you make to the linked information in the active file are

reflected in the original file. The changes made to the original file also appear in the active file.

### **To paste Clipboard contents in a specified format**

- 1 Select the text or graphic.
- 2 Click **Edit**, and click one of the following:
  - Copy
  - Cut
- 3 Click **Edit** ► **Paste special**.
- 4 Enable the **Paste** option.
- 5 Choose a format from the **As** list.



You can paste text as unformatted by pressing **Ctrl + Alt + V**.

### **Copying and pasting text from a Web browser**

You can copy text from a Web browser and paste it into a WordPerfect document.

#### **To copy and paste text from a Web browser**

- 1 In the Web browser, select the text to copy.
- 2 Click **Edit** ► **Copy**.
- 3 In the WordPerfect document, click where you want to insert the text.
- 4 Right-click, and click **Paste unformatted text**.



You can paste text as unformatted by pressing **Ctrl + Alt + V**.

### **Moving text and graphics**

You can move text and graphics by dragging them within a document or between documents.

## To move text or graphics by dragging within a document

- Select a text or graphic, and drag it to a new position.

## To move text or graphics by dragging to another document

- 1 Click **Window**, and click one of the following:
  - **Tile top to bottom** — arranges the windows so that the documents are displayed above or below one another
  - **Tile side by side** — arranges the windows so that the documents are displayed side by side
- 2 Select the text or graphic, and drag it to the other document.

## Reviewing documents

Using WordPerfect, you can send a document to a reviewer, or multiple reviewers, to add changes or make revisions to the document. These changes and revisions are also referred to as annotations. If you authored the document, you can open it to accept or reject the annotations.

If you send the document to multiple reviewers, the annotations of each reviewer are displayed in a unique color. All revisions are displayed as **strikeout text** ~~strikeout~~, and comments are displayed as **redline text**. However, you can modify the way annotations are displayed. For more information about modifying the display of annotation text, see “Changing the settings for document review and comparison” in the online Help.

### To review a document

- 1 Click **File** ▶ **Document** ▶ **Review**.
- 2 Click **Reviewer**.
- 3 Type your name in the **User name** box.
- 4 Type your initials in the **User initials** box.
- 5 Open the color picker on the feature bar, and click a color. All changes you make to the document are displayed in the color you choose.  
To avoid choosing the same color as another reviewer, view the color selections of other reviewers by choosing their names from the **Reviewer** list box.
- 6 Edit the document.
- 7 Click **File** ▶ **Save**.











## 8 Click Close.



You can use all WordPerfect features except **Sort** to edit a document. Only text editing changes, however, are marked with a color.

You can edit the additions made by previous reviewers; however, you cannot edit or undo the deletions made by previous reviewers.

### To incorporate reviewers' changes

- 1 Click **File** ▶ **Document** ▶ **Review**.
- 2 Click **Author**.
- 3 Choose a reviewer from the **View annotations from** list box.
- 4 Only changes made by the selected reviewer are displayed. To display the changes made by all reviewers, choose **All reviewers** from the **View annotations from** list box.
- 5 Click one of the following:
  - **Go to previous**  — moves to the previous change
  - **Go to next**  — moves to the next change
- 6 Click one of the following:
  - **Show/hide**  — displays or hides margin markers
  - **Display annotations**  — shows the edited text with or without color markings
  - **Insert current annotation**  — incorporates the current annotation
  - **Insert all annotations**  — inserts all annotations
  - **Delete the current annotation**  — deletes the current annotation
  - **Delete all annotations**  — deletes all the annotations in the document
- 7 Save the document.




When moving through the document from change to change, you cannot move through subsections, such as headers, footers, and footnotes.

If you save a reviewed document in another file format — for example, Rich Text Format (.rtf files) — the document will not be in review mode when you open it. The reviewer's remarks will be lost because the added text (red) and the deleted text (strikeout) revert to regular text. Therefore, make sure that all

changes are incorporated before you save the document to a different file format.



You can also incorporate a reviewer's changes in a subdocument by clicking in the subdocument and then clicking the **Next**  button to move from change to change.

## Routing documents

Routing a document allows you to send a document for an online review to several reviewers in a specified order. In this routing process, the document is sent to one reviewer at a time, so that each reviewer sees the changes made by each of the previous reviewers. When you route a document, it is inserted in an e-mail as an attachment. You must have an e-mail client, such as WordPerfect MAIL, installed on your computer for this option to work.

To route a document, you must create a routing slip. The routing slip allows you to specify the recipients of the document and the order in which they will receive the document.

A reviewer who receives a routed document can make changes and revisions to the document. The reviewer can then save the changes, close the document, and send it to the next reviewer listed on the routing slip. Alternatively, a reviewer can wait before sending the document to the next reviewer or can reassign a routed document to another reviewer listed on the routing slip.

### To create a routing slip

- 1 Click **File** ▶ **Document** ▶ **Routing slip**.
- 2 Type a subject name in the **Subject** box.  
The subject name that you type in the box appears in the subject box of the e-mail to be sent.
- 3 Type a message in the **Message** box.  
The text that you type in the **Message** box appears in the message area of the e-mail to be sent.
- 4 Click **Addresses** to add reviewers to the **Reviewers** list box.  
The WordPerfect or Outlook address book opens to allow you to choose the reviewers' e-mail addresses.

## You can also

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Change the e-mail address from which the routing slip is initially sent	In the <b>Author's e-mail address</b> text box, type the e-mail address from which to send the routing slip.
Specify a new default e-mail address	Enable the <b>Store as default address</b> check box.
Move a reviewer up in the routing order	Choose a reviewer from the <b>Reviewers</b> list, and click the <b>Up arrow</b> .
Move a reviewer down in the routing order	Choose a reviewer from the <b>Reviewers</b> list, and click the <b>Down arrow</b> .

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When you create the first routing slip for a document, the e-mail address specified in the environment settings automatically appears in the **Author's e-mail address** text box. If you insert a different e-mail address in the box, the new e-mail address becomes the default address the next time you create a routing slip for the same document. If you enable the **Store as default address** check box, this e-mail address appears every time you create a routing slip.

If you are using WordPerfect MAIL as the e-mail client and you want to add addresses from the WordPerfect MAIL address book, you need to access these addresses through the WordPerfect address book. When you click the **Addresses** button, the WordPerfect address book opens, and the **WordPerfect MAIL** address book item appears in the Tree view pane.

## To review a routed document

- 1 In an e-mail message, double-click the attached document.  
If you want, you can save the document and then open the saved document to review it.
- 2 In the **Reviewer mode options** dialog box, click **Review**.
- 3 Type your name in the **Reviewer** list box.
- 4 Open the color picker on the feature bar, and click a color. All changes you make to the document are displayed in the color you choose.  
To see another reviewer's color selection, choose the reviewer's name from the **Reviewer** list box.

- 5 Edit the document.
- 6 Click Close.



You can edit the additions made by previous reviewers; however, you cannot edit or undo the deletions made by previous reviewers.

### To reassign a routed document


- 1 In the e-mail, double-click the attached document.
- 2 In the **Reviewer mode options** dialog box, click **Reassign**.
- 3 In the **Reassign document review** dialog box, choose a reviewer from the list.
- 4 Click **Send**.

### Comparing documents

You can compare a current version of a document with an earlier version to see what changes have been made. When comparing documents, you can generate a comparison summary and a list of changes. A comparison summary describes the color and the attributes used to display deletions and insertions. It also lists the number of deletions, insertions, and moves that were made. The list of changes details all of the changes made in the document.

When you compare and review a document, the document that contains the comparison markings is opened in review mode. In addition, you can restore a document to the way it was before the comparison. For more information about reviewing documents, see “Reviewing documents” on page 50.

### To compare a document

- 1 Click **File** ▶ **Document** ▶ **Compare**.
- 2 In the **With** box, type the folder and filename of the file you want to compare.  
To browse for the file, click the **Browse**  button.
- 3 In the **Show markings in** area, enable one of the following options:
  - **New document** — displays comparison results in a new document
  - **Current document** — displays comparison results in the active document
- 4 Click **Compare only**.


## To generate a comparison summary

- 1 Click **File** ▶ **Document** ▶ **Compare**.
- 2 Click **Settings** ▶ **Compare only**.
- 3 In the **Document compare settings** dialog box, click the **Options** tab.
- 4 In the **Summary of comparison** area, enable one of the following options:
  - **None** — inserts no comparison summary
  - **Insert at beginning** — inserts the comparison summary at the beginning of the document
  - **Insert at end** — inserts the comparison summary at the end of the document

## To generate a list of changes

- 1 Click **File** ▶ **Document** ▶ **Compare**.
- 2 Click **Settings** ▶ **Compare only**.
- 3 In the **Document compare settings** dialog box, click the **Options** tab.
- 4 In the **List of changes** area, enable one of the following options:
  - **None** — displays no revision list
  - **Show surrounding context** — displays a revision list that details the changes in the context of the document
  - **Show change only** — displays a revision list that includes only the changes made to the document

## To compare and review the differences between documents

- 1 Click **File** ▶ **Document** ▶ **Compare**.
- 2 In the **With** box, type the folder and filename of the file with which you want to compare the active document.  
To browse for the file, click the **Browse**  button.
- 3 In the **Show markings in** area, enable one of the following options:
  - **New document** — displays comparison results in a new document
  - **Current document** — displays comparison results in the active document
- 4 Click **Compare/Review**.

## To restore a document

- 1 Click **File** ▶ **Document** ▶ **Remove markings**.

- 2 Enable one of the following options:
  - **Remove redline markings and strikethrough text** — restores the current document to its condition before the comparison
  - **Remove strikethrough text only** — keeps the markings for added and moved text, but removes markings for deleted text
  - **Remove document compare deletions only** — removes only markings for deleted text
  - **Remove all document compare markings** — removes all markings, insertions, deletions, and moves

## Controlling document comparisons

When comparing documents, you can control how the comparison is done. You can choose to compare document text word by word or character by character. You can also include substructure text in a document comparison. For example, you can include headers, footers, and comments in a comparison. Conversely, you can exclude text from a document comparison.

### To compare document text by word or by character

- 1 Click **File** ▶ **Document** ▶ **Compare**.
- 2 Click **Settings** ▶ **Compare only**.
- 3 In the **Document compare settings** dialog box, click the **Options** tab.
- 4 In the **Marking precision** area, enable one of the following options:
  - **Word** — compares document text word by word
  - **Character** — compares document text character by character



If you plan to review the document after the comparison, you can specify the marking precision — word by word or character by character — by clicking **Settings** ▶ **Compare then review**.

### To include substructure text in a document comparison

- 1 Click **File** ▶ **Document** ▶ **Compare**.
- 2 Click **Settings** ▶ **Compare only**.
- 3 In the **Document compare settings** dialog box, click the **Options** tab.
- 4 In the **Include in comparison** area, enable any the following check boxes:

- **Headers/Footers** — includes headers and footers in a document comparison
- **Comments** — compares information in comments
- **Expand master documents** — expands all subdocuments associated with the file



If you plan to review the document after the comparison, you can specify which text to include in the comparison by clicking **Settings ▶ Compare then review**.

### **To exclude text from a document comparison**

- 1 Click **File ▶ Document ▶ Compare**.
- 2 Click **Settings ▶ Compare only**.
- 3 In the **Document compare settings** dialog box, click the **Options** tab.
- 4 In the **Characters to enclose text to skip in comparisons** box, type a character.



If you plan to review the document after the comparison, you can specify which text to exclude from a document by clicking **Settings ▶ Compare then review**.







## Working with footnotes and endnotes

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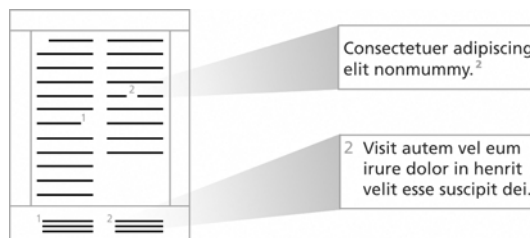
Footnotes and endnotes allow you to add reference information to a document, such as additional notes that accompany a topic or that provide references. Footnotes are displayed at the bottom of a page, while endnotes are found at the end of a document.

In this section, you'll learn about

- inserting footnotes and endnotes
- finding footnotes and endnotes
- modifying the display of footnotes and endnotes on a page

### Inserting footnotes and endnotes

When creating a document, WordPerfect allows you to insert footnotes or endnotes. A footnote is found below the text on a page or at the bottom of a page, whereas an endnote displays at the end of a document. When you insert endnotes or footnotes, a reference number or mark is inserted in the document text. That number or mark is linked to the corresponding information in the endnote or footnote. For more information about modifying footnote and endnote numbering, see “Numbering footnotes and endnotes” in the online Help.



*This is an example of footnotes.*

### To insert a footnote

- 1 Click where you want the footnote reference mark to display.

2 Click **Insert** ► **Footnote/Endnote**.

3 Enable the **Footnote number** option.

If you want to restart the footnote numbering at a specific number, type the number in the **Footnote number** box.

4 Click **Create**.

5 Type the footnote text.


If you want to align the footnotes with the document margins, enable the **Align with document margins** check box.

6 Click **File** ► **Close**.



While working with a footnote, you do not have access to all available WordPress functions until you return to the body of the text.



You can restore a deleted footnote number by clicking the **Note number**  button on the property bar.

## To insert an endnote

1 Click where you want the endnote reference mark to display.

2 Click **Insert** ► **Footnote/Endnote**.

3 Enable the **Endnote number** option.

4 Click **Endnote placement**.

5 Enable the **Insert endnotes at insertion point** option.

6 Click **Create**.

7 Type the endnote text.

If you want to align the endnotes with the document margins, enable the **Align with document margins** check box.


8 Click **File** ► **Close**.



While working with a endnote, you do not have access to all the available WordPress functions until you return to the body of the text.



You can restart the endnote numbering at a specific number by typing the number in the **Endnote number** box. When you enable the **Insert endnotes at insertion point and restart numbering** option, all endnotes up to the number you've specified display on one page, and then a note numbering starts over with 1 on a new page.

You can restore a deleted footnote number by clicking the **Note number**  button on the property bar.

## Finding footnotes and endnotes

WordPerfect lets you find specific footnotes or endnotes in a document. You can also search for footnote and endnote codes while in Reveal Codes. This provides you with a faster way of modifying specific footnote settings. For example, if you want to change the length of a footnote separator line, you can search for the “Footnote Sep Ln” code.

### To find a footnote

- 1 Click **Insert** ▶ **Footnote/Endnote**.
- 2 Enable the **Footnote number** option.
- 3 In the **Footnote number** box, type the number of the footnote you want to find.
- 4 Click **Edit**.

### To find an endnote

- 1 Click **Insert** ▶ **Footnote/Endnote**.
- 2 Enable the **Endnote number** option.
- 3 In the **Endnote number** box, type the number of the endnote you want to find.
- 4 Click **Edit**.

### To find footnote codes

- 1 Press **Alt + F3** to display the **Reveal Codes** window.
- 2 Click **Edit** ▶ **Find and replace**.
- 3 Click **Match** ▶ **Codes**.
- 4 Choose one of the following codes from the **Find codes** list:

- **Footnote** — represents a footnote
- **Footnote Cont Msg** — represents a footnote “continued” message
- **Footnote Min** — represents the minimum vertical space that is available for footnotes at the bottom of a page
- **Footnote Num Dec** — represents the decrease footnote numbering setting for footnotes
- **Footnote Num Disp** — represents footnote number style
- **Footnote Num Each Pg** — represents the restart of footnote numbering on each page
- **Footnote Num Inc** — represents the increase footnote numbering setting for footnotes
- **Footnote Num Meth** — represents the footnote numbering method
- **Footnote Num Set** — specifies new footnote number
- **Footnote Sep Ln** — represents the footnote separator line
- **Footnote Space** — represents the space between footnotes
- **Footnote Txt Pos** — represents footnote text position

### **To find endnote codes**

- 1 Press **Alt + F3** to display the **Reveal Codes** window.
- 2 Click **Edit ▶ Find and replace**.
- 3 Click **Match ▶ Codes**.
- 4 Choose one of the following codes from the **Find codes** list:
  - **Endnote** — represents an endnote
  - **Endnote Min** — represents the minimum amount of space that is available for an endnote at the bottom of a page
  - **Endnote Num Dec** — represents decrease endnote numbering setting for endnotes
  - **Endnote Num Disp** — represents endnote number style
  - **Endnote Num Inc** — represents increase endnote numbering setting for endnotes
  - **Endnote Num Meth** — represents the endnote numbering method
  - **Endnote Num Set** — specifies new endnote number
  - **Endnote Placement** — represents endnote placement
  - **Endnote Space** — represents space between endnotes

## Modifying the display of footnotes and endnotes on a page

WordPerfect lets you modify the way footnotes and endnotes display on a page. You can change the amount of space between footnotes or endnotes. You can also change the position of footnotes on a page. For example, you can display footnotes immediately following the corresponding text on a page or at the bottom of a page. You can also choose to continue footnotes on the following page if there isn't enough room on a page. As well, you can adjust the separator line between document text and footnotes.

### To change the amount of space between footnotes or endnotes

- 1 Click **Insert** ► **Footnote/Endnote**.
- 2 Enable one of the following options:
  - **Footnote number**
  - **Endnote number**
- 3 Click **Options**, and click **Advanced**.
- 4 Type a value in the **Space between notes** box.

### To change the position of footnotes on a page

- 1 Click **Insert** ► **Footnote/Endnote**.
- 2 Enable the **Footnote number** option.
- 3 Click **Options**, and click **Advanced**.
- 4 In the **Position** area, enable one of the following options:
  - **Place notes below text**
  - **Place notes at bottom of page**

### To continue footnotes on the following page

- 1 Click **Insert** ► **Footnote/Endnote**.
- 2 Enable the **Footnote number** option.
- 3 Click **Options**, and click **Advanced**.
- 4 In the **Continued notes** area, type a value in the **Amount of note to keep together** box.

This value specifies the minimum distance allowed for a footnote at the bottom of a page before the note is moved to the next page.

If you want to include a “continued...” message on the last footnote line of a page and the first footnote line of a new page, enable the **Insert (continued...) message** check box.

### To adjust the separator line between document text and footnotes

- 1 Click **Insert** ► **Footnote/Endnote**.
- 2 Enable the **Footnote number** option.
- 3 Click **Options**, and click **Separator**.
- 4 In the **Add space** area, type a value in the **Above line** box.  
This value specifies the amount of white space between the separator line and the document text above it.
- 5 Type a value in the **Below line** box.  
This value specifies the amount of white space between the separator line and the footnote text below it.
- 6 In the **Line format** area, choose one of the following positions for the line from the **Line position** list box:
  - **Left**
  - **Center**
  - **Right**
- 7 Choose a line length from the **Length of line** list box.
- 8 Open the **Line style** picker, and click a line style on the line style palette.

### You can also

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Position the separator line between margins	Choose <b>Full</b> from the <b>Line position</b> list box.
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Specify a specific line position	Choose <b>Set</b> from the <b>Line position</b> list box. Type a value in the <b>From left edge</b> box.
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## Numbering

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WordPerfect allows you to count elements of a document. You can also change the appearance of numbering and use counters to count elements of a document. WordPerfect allows you to number pages and change the appearance of numbering.

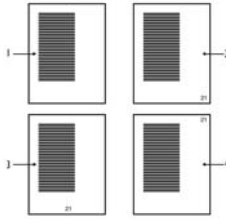
In this section, you'll learn about

- numbering pages
- changing the appearance of page numbers

### Numbering pages

WordPerfect allows you to insert page numbers in a document and to choose where to position page numbers on a page. When you begin page numbering, you can also specify which number to begin with. For example, you may want the first page of a document to be labeled page 3 instead of page 1.

You can also insert secondary page numbers, which allow you to start a new page numbering scheme in a document. For example, suppose you are creating a document in WordPerfect, but in the middle of the document, you need to add maps that were not created in WordPerfect. The WordPerfect document is 10 pages, but the maps need to be added as pages 7 and 8. To accomplish this, you can start page numbering at 1 at the beginning of the document and insert a secondary page number, number 9, on the document's page 7. This would allow for the addition of the maps without disrupting the page numbering.



*These are examples of various page numbering options: 1) no page number, 2) page number in the bottom-right corner, 3) page number at the bottom center, and 4) page number in the top-right corner.*

## To insert page numbers

- 1 Click **Format** ▶ **Page** ▶ **Numbering**.
- 2 From the **Position** list box, choose a position for the page numbers.
- 3 From the **Page numbering format** list, choose a format for the page numbers.

## To specify an alternate starting page

- 1 Click **Format** ▶ **Page** ▶ **Numbering**.
- 2 Click **Set value**.
- 3 In the **Values** dialog box, click the **Page** tab.
- 4 Type a new page number in the **Set page number** box.
- 5 Enable one of the following options:
  - **Always keep number the same** — ensures that the number remains the same when the document is edited
  - **Let number change as pages are added or deleted** — lets the number change as the document is edited



When you merge a multiple-page form document, you can restart the page numbering for each merged record by enabling the **Always keep number the same** option.

## To insert a secondary page number

- 1 Click **Format** ▶ **Page** ▶ **Insert page number**.
- 2 Choose **Secondary page** from the list.



- 3 Click **Value/Adjust**.
- 4 In the **Values** dialog box, click the **Secondary** tab.
- 5 Choose a numbering format from the **Secondary page number method** list box.
- 6 Type a value in the **Set secondary page number** box.
- 7 Click **Insert**.

## Changing the appearance of page numbers

You can change the font size and style, which includes attributes, such as bold or italic, of page numbers. In addition, you can also create custom page numbering formats. For example, you can add the name of a document or a chapter number to a page number.

If you no longer need the custom format, you can delete it. However, you cannot delete the default page numbering formats provided with WordPerfect.

### To change the font attributes of page numbers

- 1 On a page, click where you want the font change to begin.
- 2 Click **Format** ▶ **Page** ▶ **Numbering**.
- 3 Click **Font**.
- 4 In the **Page numbering font** dialog box, choose a font from the **Face** list.
- 5 Choose a font size from the **Size** list box.

### You can also

Change page number style	In the <b>Appearance</b> area, enable one or more check boxes.
Change page number color	Open the color picker, and click a color.
Change page number shading	Type a value in the <b>Shading</b> box.

### To customize a page number format

- 1 Click **Format** ▶ **Page** ▶ **Numbering**.
- 2 Click **Custom format**.
- 3 In the **Custom page numbering** dialog box, delete the text that displays in the **Custom page numbering format (numbering codes with text)** box.

- 4 Choose a number format from one of the following lists:
  - Page
  - Total pgs
  - Chapter
  - Volume
  - Secondary pg
- 5 Click **Insert in format**.
- 6 Repeat steps 4 and 5 until the **Custom page numbering format (numbering codes with text)** box contains the numbers you want.
- 7 In the **Custom page numbering format (numbering codes with text)** box, type the text that you want to display with the number codes.

#### Examples

- If you wanted to display the name of a document, Snowboarding 101, with the chapter number and page number, you would type Snowboarding 101 beside the number codes in the **Custom page numbering format (numbering codes with text)** box. The text in the box would appear as: Snowboarding 101 [Chpt #] [Page #].
- If you wanted to include the words Chapter and Page in the customized format, you would type Snowboarding 101, Chapter, and Page beside the number codes in the **Custom page numbering format (numbering codes with text)** box. The text in the box would appear as: Snowboarding 101 Chapter [Chpt #] Page [Page #].



The five most recently used formats display at the top of the **Page numbering format** list box so that you can quickly apply them to a document.

For each custom format you create, you can choose only one type of number from each list box.

### To delete a page numbering format

- 1 Click **Format** ▶ **Page** ▶ **Numbering**.
- 2 Choose a format from the **Page numbering format** list box.
- 3 Press **Delete**.



## Printing

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WordPerfect allows you to print a variety of documents, including envelopes and labels.

In this section, you'll learn about

- setting up a printer
- setting up a print job
- previewing a print job
- printing documents
- controlling a print job
- printing double-sided pages
- printing document sections and comments
- printing file details
- printing envelopes and labels
- printing graphics
- laying out a print job
- saving print settings
- using printer commands
- printing to a file
- sending faxes

For more information about printing, see “Reference: Printing” on page 93.

### Setting up a printer

If you have access to different printers, you can set them up in the application so you can print to any of them, and, before printing a file, you can choose the printer you want use. Once you install one or more printers, you can configure them in a number of ways. You can also select a printer as the default printer for WordPerfect. In addition, you can change printer properties and reformat documents for the default printer.

For more information about installing a printer, refer to the Windows documentation. In addition, many printer settings are printer-specific; therefore, not all printer settings may be available for your printer. Consult your printer manual for more information.

You can also disable printer metrics. Printer metrics are used to determine line endings. If you disable printer metrics, printer fonts will not be visible in the list of fonts.

### To add a printer

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, click **Printers**.
- 3 In the **Printers and faxes** or **Printers** dialog box, double-click the **Add printer** icon.
- 4 Follow the steps in the **Add printer** wizard.

### To select a printer

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, choose a printer from the **Name** list box.

### To change the application default printer

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, choose the printer you want as the default from the **Name** list box.
- 3 Click **Edit settings**.
- 4 From the **Named settings** dialog box, choose **Application default** from the **Name for current settings** list box.
- 5 Click **Save**.



If you disabled the **Reformat documents** for the **WordPerfect default printer** on open check box in the **Environment settings** dialog box, WordPerfect ignores the default printer settings and retrieves the settings for the application default printer with which the document was formatted.

By enabling both the **Use printer properties from currently selected printer** check box and the **Retrieve properties from printer each time setting is retrieved** option, the settings from the application default printer

are automatically updated every time you choose **Application default** setting. This works only for the printer saved as the application default printer.

### To reformat documents for the default printer

- 1 Click **Tools** ► **Settings**.
- 2 Click **Environment**.
- 3 In the **Environment settings** dialog box, click the **General** tab.
- 4 Enable the **Reformat documents for the WordPerfect default printer on open check box**.



When you disable the **Reformat documents for the WordPerfect default printer on open check box**, WordPerfect looks for the printer with which the document was formatted. If that printer is not available, WordPerfect reformats the document for the current printer if necessary.

### To change printer properties

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, choose the printer for which you want to change the properties from the **Name** list box.
- 3 Click **Properties**.
- 4 Change the printer properties.



WordPerfect no longer uses WordPerfect printer drivers (.prn files). When you retrieve documents created with old printer drivers, documents are reformatted for the Windows printer that is selected.

If you choose a paper source, enable collating, or specify the number of copies to print directly in the printer's properties dialog box, the settings are detected by WordPerfect.



You can also specify the paper source by clicking the **Paper/Quality** tab and choosing a paper source from the **Paper source** list box.

## To disable printer metrics

- 1 Click **Tools** ► **Settings**.
- 2 Click **Convert**.
- 3 In the **Convert settings** dialog box, click the **Compatibility** tab.
- 4 In the **Options** area, enable the **Do not format document using print metrics** check box.

## Setting up a print job

You can set the printing orientation to landscape or portrait. In addition, you can print documents in reverse order. You can also specify where paper is fed into the printer.

Before printing, you must choose and properly configure the appropriate printing device driver. To find out how best to set up the printing device driver, consult the manufacturer's documentation for the printing device, the Windows documentation, or the service bureau that will print the work.

## To set landscape or portrait orientation

- 1 Click **File** ► **Page setup**.
- 2 In the **Orientation** area, enable one of the following options:
  - **Portrait** — prints text and graphics on a page whose height is greater than its width
  - **Landscape** — prints text and graphics on a page whose width is greater than its height

## To print document pages in reverse order

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, enable the **Print in reverse order** check box from the **Copies** area.

## To specify where paper is fed into the printer

- 1 Click **File** ► **Print**.
- 2 Click the **Advanced** tab.

- 3 In the **Advanced options** area, choose one of the following options from the **Paper feed list box**:
  - **Left** — specifies that the paper is being inserted at the left of the printer
  - **Center** — specifies that the paper is being inserted at the center of the printer
  - **Right** — specifies that the paper is being inserted at the right of the printer

## Previewing a print job


Documents sometimes print differently than they appear on the screen. You can, however, view a document the way it would print, without having to print it. You can also increase or decrease the zoom level while previewing a print job. In addition, you can edit text, adjust margins, and print a document.

### To preview a print job

- Click **File ▶ Print preview**.  
A check mark beside the **Print preview** command indicates that the print job is in Print Preview mode.



You can close the preview window by clicking **File ▶ Print preview**.

You can also preview a print job by clicking the **Mini preview**  button in the **Print** dialog box.

### To edit text in Print Preview mode

- 1 In Print Preview mode, click the beginning of the text you want to edit.
- 2 Click **View ▶ Zoom**.
- 3 Enable the 150% option.
- 4 Click **OK**.
- 5 Edit the text.



You can revert to the default Print Preview zoom level by clicking **View ▶ Zoom**, and typing 52 in the **Other** box.

## To increase or decrease the zoom level while previewing a print job

- 1 Click **File** ► **Print preview**.
- 2 Click the **Zoom** picker on the toolbar, and click a zoom option.

## To adjust margins in Print Preview mode

- 1 Click the paragraph or page where you want the margin changes to start.  
Adjustments to margins apply to the line in which the cursor is located and all subsequent lines.
- 2 Click **Format** ► **Margins**.
- 3 Click the **Page setup** tab.
- 4 In the **Document margins** area, type values in the following boxes:
  - **Left**
  - **Right**
  - **Top**
  - **Bottom**

### You can also

---

Set all margins equal to the last margin value edited

In the **Document margins** area, click **Equal**.

---

Set all margins to the minimum size allowed by the current printer

In the **Document margins** area, click **Minimum**.

---



Most printers have an area around the edge of the page where they cannot print. WordPerfect does not allow smaller margins than your printer can accommodate.



If you want to change the margins for specified text, select the text.

## To print from Print Preview

- 1 In Print Preview mode, click the **Print** button on the property bar.
- 2 Click **Print**.



## Printing documents

In addition to printing a file, you can print multiple copies of a file and print a document saved on disk or on a network drive.

### To print a document

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, choose a printer from the **Name** box.
- 3 In the **Print range** area, enable one of the following options:
  - **Full document** — prints the entire file
  - **Current page** — prints the page where the cursor is located
  - **Pages** — prints the pages specified in the page box
  - **Selected text** — prints the selected text in the document (available only if text is selected)
  - **Document summary** — prints only the document summary (available only if there is a document summary)

If you enables the **Pages** option, type the pages you want to print in the **Pages** box.

A hyphen (-) between numbers defines a range of sequential pages (for example, 1-5 prints pages 1 to 5). A comma (,) between numbers defines a series of non-sequential pages (for example, 1, 5 prints pages 1 and 5 only). Any combination of hyphens and commas is supported (for example, 1-3, 5, 7, 10-12 prints the following pages: 1, 2, 3, 5, 7, 10, 11, and 12).

- 4 Click **Print**.



For information about printing specific pages, see “Printing multiple pages” on page 93.

If there is no document summary created for the document you are using, the **Document summary** option is grayed. For information about creating document summaries, see “Using document summaries” in the online Help.

### To print multiple copies

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, type the number of copies you want to print in the **Number of copies** box.

If you want the copies collated, enable the **Collate** option.

- 3 Click **Print**.

### **To print a document saved on disk or on a network drive**

- 1 Click **File** ► **Print**.
- 2 Click the **Advanced** tab.
- 3 Enable the **Document on disk** check box.
- 4 Click **Browse**.
- 5 In the **Open file** dialog box, choose the drive and folder where the document is stored.
- 6 Double-click the document name.
- 7 Click **Print**.

### **Controlling a print job**

Once you have created a print history and submitted a print job, you can control the print job.

You can view the status of print jobs, so that you know where they are in the print queue and whether they are progressing normally.

In addition, you can view the history of print jobs sent to the printer during your current session. Print jobs display in the history list in the order they were sent to the printer, with the most recent job at the top.

You can also pause print jobs, although on network printers you can only pause your own print jobs. You can resume printing a paused print job.

You can cancel a print job.

### **To view the status or history of a print job**

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, click **Status**.



If you cannot view the history, make sure the **Hide completed jobs** command is disabled. In the **Print history and status** dialog box, click **Display**. The

absence of a check mark next to the **Hide completed jobs** command indicates that the command is disabled.

### **To pause a print job**

- 1 Click **File** ▶ **Print**.
- 2 On the **Main** page, click **Status**.
- 3 In the **Print history and status** dialog box, choose a file from the list.
- 4 Click **Document** ▶ **Pause printing**.

### **To resume a print job**

- 1 Click **File** ▶ **Print**.
- 2 On the **Main** page, click **Status**.
- 3 In the **Print history and status** dialog box, choose a document from the list.
- 4 Click **Printer** ▶ **System printers**.
- 5 In the **Printers and faxes** or **Printers** dialog box, double-click the active printer.
- 6 Click **Document** ▶ **Resume**.

### **To cancel a print job**

- 1 Click **File** ▶ **Print**.
- 2 On the **Main** page, click **Status**.
- 3 On the **Print** page, click **Status**.
- 4 In the **Print history and status** dialog box, choose a document from the list.
- 5 Click **Document** ▶ **Cancel printing**.



On a network printer, you can cancel only your own print jobs.

You can cancel the job in the Windows print queue, in your network print queue, or at your printer. But if your printer has a large memory buffer, printing may continue for a few moments after you cancel the print job. For more information about each of these options, see the respective product documentation.

## Printing double-sided pages

If your printer supports printing on both sides of a page, you can print double-sided directly from the application. If your printer doesn't support double-sided printing, you can still print double-sided manually.

If a file contains printing codes specifying that it is to be printed double-sided, but you want to print single-sided, you can override the codes.

You can also print a document in a booklet style. When you divide pages to print in a booklet style (with pages folded in half), you can print with the pages numbered and ordered automatically.

### To print double-sided pages automatically

- 1 Click **File** ► **Print**.

Make sure that the printer you want to use is displayed in the **Name** list box. If it is not, choose the correct printer.

- 2 Click the **Layout** tab.
- 3 In the **Two-sided printing** area, enable one of the following **Automatic (printer supports two-sided printing)** options:
  - **Flip on long edge** — prints the document for binding the long edge of the page (for example, a book)
  - **Flip on short edge** — prints the document for binding the short edge of the page (for example, a flip chart or tablet)
- 4 Click **Print**.

### To print double-sided pages manually

- 1 Click **File** ► **Print**.

Make sure that the printer you want to use is displayed in the **Name** list box. If it is not, choose the correct printer.

- 2 Click the **Layout** tab.
- 3 In the **Two-sided printing** area, enable one of the following **Manual (two steps)** options:
  - **Step 1: print odd pages**
  - **Step 2: print even pages**

If you are printing the second side of the document, enable the option not used for the first side of the document.

- 4 Click **Print**.
- 5 When printing is complete, turn the pages over and reload them in the paper tray.
- 6 Repeat steps 1 to 4.



Before printing, you may want to print a double-sided test page.

Some printer manufacturers discourage reinserting a page into the printer if it has been used for printing. Please refer to your printer documentation for more information.

### **To override two-sided printing codes**

- 1 Click **File** ► **Print**.
- 2 Click the **Layout** tab.
- 3 In the **Two-sided printing** area, enable the **Off** option.

### **To print a booklet**

- 1 Click **File** ► **Print**.
- 2 Click the **Layout** tab.
- 3 In the **Two-sided printing** area, enable the **Use document settings** option.
- 4 Enable the **Print as booklet** check box.
- 5 Click **Print**.



The booklet option is available only when the document has divided pages.

In order to print a booklet properly, the physical page must be subdivided into two logical pages. For information about dividing pages, see “Specifying single-sided or double-sided pages for a document” in the online Help.

### **Printing document sections and comments**

WordPerfect allows you to print sections of a document, such as specific volumes or chapters. Additionally, you can print comments that were inserted in the document. For more information about comments, see “Adding, editing, and deleting comments” in the online Help.

## To print sections of a document

- 1 Click **File** ► **Print**.
- 2 Click the **Advanced** tab.
- 3 Type a number or a combination of numbers in any of the following list boxes:
  - **Page(s)/Label(s)** — prints the specified pages
  - **Secondary pages** — prints the specified secondary pages
  - **Chapters** — prints the specified pages in the specified chapters
  - **Volumes** — prints the specified pages in the specified volumes
- 4 Click **Print**.



The **Volumes** setting takes precedence over all other settings, followed by chapters, secondary pages, and then page(s)/label(s). For example, if you type 2 in the **Volumes** box, only pages and chapters within volume 2 will print, even if you have specified pages and chapters that are located in other parts of the document.

For more information about printing pages in sections, see “Printing sections” on page 94.



You can click the down arrow in the **Secondary pages**, **Chapters**, or **Volumes** list boxes to see a list of range patterns. Click the pattern you want, delete the supplied page numbers, and type the pages you want. You can also type a page range yourself if you are familiar with the patterns.

## To print a comment

- 1 Click immediately after the comment.
- 2 Click **Insert** ► **Comment** ► **Edit**.
- 3 Click **File** ► **Print**.



Any comments that have been converted to document text will print when the document is printed.

## Printing file details

You can print file information for a file, such as the file path, at the bottom of the page. In addition, you can show crop/fold marks when you print a file, so that you can clearly identify the edges of the printed area for such purposes as using a paper cutter.

In addition, you can print documents with codes displayed. Documents will print as they display in Reveal Codes view. This is useful for analyzing the document formatting. For more information on displaying Reveal Codes, see “Using Reveal Codes” on page 16.

### To print file information

- 1 Click **File** ► **Print**.
- 2 Click the **Layout** tab.
- 3 In the **Details** area, enable the **Print file information** check box.
- 4 Click **Print**.



By default, the file path is printed. You can add information by typing in the **Print file information** list box. The information you add overwrites the file path and cannot exceed 168 characters.

### To print crop/fold marks

- 1 Click **File** ► **Print**.
- 2 Click the **Layout** tab.
- 3 In the **Details** area, enable the **Show crop/fold marks** check box.
- 4 Click **Print**.

### To print codes in a document

- 1 Click **File** ► **Print**.
- 2 Click the **Advanced** tab.
- 3 In the **Advanced options** area, enable the **Print Reveal Codes** check box.



When you print codes in a document, the printed document does not contain any information other than the codes and the text. For example, graphics and file information are not printed.

For information on displaying Reveal Codes, see “Using Reveal Codes” on page 16.

## Printing envelopes and labels

To print on different sizes of paper, you must select a page size definition so the printer can format and print a document as you want. For information about creating page size definitions, see “Choosing page size and orientation” on page 20.

You can print envelopes in WordPerfect. WordPerfect allows you to print different sizes of envelopes. For information about creating envelopes, see “Creating and editing labels” in the online Help.


You can select a label size. You can also print labels.

For more information about printing labels, see “Printing labels” on page 95.

### To print an envelope

- 1 Click the page of a document that is set up as an envelope.
- 2 Click **File** ▶ **Print**.
- 3 Click the **Main** tab.
- 4 Click **Print**.



You can also print an envelope by clicking the **Print current envelope**  button on the property bar.

### To select a label size

- 1 Click the page where you want labels to begin.
- 2 Click **Format** ▶ **Labels**.
- 3 In the **List labels for** area, enable one of the following options:
  - **Laser printed** — if you are using a laser printer
  - **Tractor-fed** — if you are using a tractor-fed printer



- **Both** — if you are using a tractor-fed laser printer
- 4 Choose a label definition from the **Labels** list.
  - 5 Click **Select**.

## To print a label

- 1 Click **File** ► **Print**.
- 2 Click the **Advanced** tab.
- 3 In the **Page(s)/Label(s)** list box, type the number of each label or a range of labels.  
For example, to print label 3, type **3**; to print labels 3 and 8, type **3, 8**; to print label 3 through the end of the document, type **3-**.
- 4 Click **Print**.



The screen changes so that the first label is displayed and the rest of the document window is shaded. As you fill the labels with text, more label “pages” display in the window.

Labels that reach the edge of the sheet may not print correctly on printers with a wide nonprinting zone. You must adjust the label size to account for the printer’s nonprinting zone. Also, printing the same label on different printers may give different results.

## Printing graphics

The appearance of the graphics you print is determined partly by a process called dithering, which combines several differently colored pixels to create a new color or shade. With WordPerfect, you can change the dither method, the dither source, and halftone options for printing graphics. For more information about dithering, see “Dithering methods” on page 95.

### To change the dither method used for printing graphics

- 1 Right-click a graphic, and click **Image tools**.
- 2 Click **Edit attributes**.
- 3 In the **Image settings** dialog box, click **Print parameters**.
- 4 In the **Dither method** area, enable one of the following options:

- **Error diffusion** — prints using a random pattern of dots, which provides superior blending and image detail in bitmap images
- **Ordered dither** — prints using an ordered pattern of dots, which works well with both bitmap and vector images
- **Halftoning** — prints using evenly spaced dots of variable diameter, which provides sharper image detail with bitmap images



Some dither method options are available only from certain printers.

### To change the dither source used for printing graphics

- 1 Right-click a graphic, click **Image tools**.
- 2 Click **Edit attributes**.
- 3 In the **Image settings** dialog box, click **Print parameters**.
- 4 In the **Dither source** area, enable one of the following options:
  - **WordPerfect**
  - **Printer**



You should use the printer's settings as the dither source, which are enabled by default, unless these settings provide poor printing results.

### To change a graphic's halftone options

- 1 Right-click a graphic, and click **Image tools**.
- 2 Click **Edit attributes**.
- 3 In the **Image settings** dialog box, click **Print parameters**.
- 4 In the **Dither method** area, enable the **Halftoning** option.
- 5 In the **Halftone options** area, type a value in any of the following boxes:
  - **Angle** — changes the angle of the line screening
  - **Lines per inch** — changes the number of lines per inch in the halftone option



Either option may be unavailable, depending on the printer driver selected. Halftone options are available only for PostScript printers.

## Laying out a print job

You have different options for laying out a print job. For example, you can scale a print job, so that the printed area on the page is smaller or larger than normal. When scaling, you can choose to maintain the aspect ratio, so that the page height and width increase or decrease proportionally and the output is not distorted.

You can scale a print job, so that the printed area on the page is smaller or larger than normal. When scaling, you can choose to maintain the aspect ratio, so that the page height and width increase or decrease proportionally and the output is not distorted.

You can also adjust a print job to fit the output page by specifying the output orientation and margins.

You can tile a print job, so that portions of each page are printed on separate sheets of paper. You can then assemble the pages into one large sheet. This is useful for printing documents, such as banners, that are larger than the printer paper.

You can also print a document in thumbnail format. Thumbnails are miniature pictures of individual pages. Several thumbnails are printed on each piece of printer paper.

If you need greater control when printing, you can specify advanced printing options such as printing in color or printing text as graphics.

### To scale a print job

- 1 Click **File** ► **Print**.
- 2 Click the **Layout** tab.
- 3 Enable the **Scale/Tiling** option.
- 4 In the **Size** area, type a value in the **Width** box.  
If you do not want to maintain the aspect ratio, disable the **Maintain aspect ratio** check box, and type a value in the **Length** box.
- 5 Click **Print**.



If you enlarge a document by more than 100%, the document will be printed on multiple pages. The **# of tiles** box shows the number of pages that will be used when you print the document.

### To adjust a print job to fit the selected page

- 1 Click **File** ► **Print**.

- 2 Click the **Layout** tab.
- 3 Enable the **Fit to output page** option.
- 4 Click **Output page**.
- 5 In the **Page setup** dialog box, choose a page definition from the list.
- 6 In the **Orientation** area, enable one of the following options:
  - **Portrait** — prints text and graphics on a page whose height is greater than its width
  - **Landscape** — prints text and graphics on a page whose width is greater than its height
- 7 In the **Document margins** area, type values in the following boxes:
  - **Left**
  - **Right**
  - **Top**
  - **Bottom**
- 8 Click **OK**.
- 9 Click **Print**.

### **To tile a print job**

- 1 Click **File** ▶ **Print**.
- 2 Click the **Layout** tab.
- 3 Enable the **Scale/Tiling** option.
- 4 Enable the **Print tiled pages** check box.
- 5 In the **# of tiles** area, type values in the following boxes:
  - **Row**
  - **Column**
- 6 Click **Print**.



If the **# of tiles** column box is grayed, disable the **Maintain aspect ratio** check box.

You can specify the size of the page you are tiling by clicking the **Output page** button.

## To print a document in thumbnail format

- 1 Click **File** ► **Print**.
- 2 Click the **Layout** tab.
- 3 Enable the **Thumbnails** option.
- 4 Type a value in the **Thumbnail** boxes, to specify the number of thumbnails.
- 5 In the **Page ordering** area, enable one of the following options:
  - **Down** — prints thumbnails consecutively in columns
  - **Across** — prints thumbnails consecutively in rows
- 6 Enable any of the following check boxes:
  - **Show borders** — prints page borders around each thumbnail
  - **Show index** — prints the page number for each thumbnail
- 7 Click **Print**.

## To adjust the advanced print options

- 1 Click **File** ► **Print**.
- 2 Click the **Advanced** tab.
- 3 Enable any of the following check boxes:
  - **Print in color** — prints file in color
  - **Print text only** — prints only the text of a document
  - **Print text as graphics** — prints text as graphics rather than as fonts downloaded to the printer. This option can also be useful if you are having trouble printing reversed text (white text on a black background).
  - **Use graphic transparency** — allows you to apply a transparency for a graphic if the printer used does not provide support for a transparency
  - **Keep print history** — keeps a record of print jobs
  - **Reset number of copies each time** — resets the number of copies after each print job is complete



The **Use graphic transparency** option is enabled by default.

The **Print in color** check box may be enabled by default when you choose a color printer.

If you have a color printer selected, but the **Print in color** check box is grayed, click **Properties** on the **Main** page, and make sure that the color settings are correct for your printer.

## Saving print settings

You can save print settings so you can retrieve them and apply them to other documents. Print settings are made up of printing properties such as the number of copies to print or printing text as graphics. You may require different print settings for different types of documents or printers. For example, you may use one for printing letters and another for printing envelopes.

By default, the properties are retrieved from the printer you have selected and then the printer settings are applied. The default settings are in effect until you change them or you close the file. You can, however, save a selected printer's settings and specify not to retrieve the settings from the printer each time you apply the settings. Therefore, if the printer's settings are changed, the settings you saved do not change.

If you no longer need the settings, you can delete them. You can also restore the factory application default settings.

### To save print settings

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, choose a printer from the **Name** list box.
- 3 Choose the printing options you want to save from the **Main**, **Layout**, and **Advanced** pages.
- 4 On the **Main** page, click **Edit settings**.
- 5 In the **Settings to save** list, enable the check boxes next to the settings you want to save.  
If you disable a setting's check box, the setting is not saved.
- 6 Type a name for the settings in the **Name for current settings** list box.
- 7 Disable the **Use printer properties from currently selected printer** check box.
- 8 Click **Save**.

### To automatically detect and save a printer's settings

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, choose a printer from the **Name** list box.
- 3 Click **Edit settings**.
- 4 In the **Edit settings** dialog box, type a name for the settings in the **Name for current settings** list box.

- 5 Enable the **Use printer properties from currently selected printer** check box.
- 6 Enable the **Save current printer properties with setting** option.

When you enable the **Save current printer properties with setting** option, the current printer properties are retrieved before saving, but they are not retrieved from the printer every time the setting is retrieved. Therefore, if the printer's settings change, the settings you save do not change.

- 7 Click **Save**.



If you disable any or all of the following check boxes: **Number of copies**, **Collate**, **Two-sided printing**, or **Print in color**, the settings are not retrieved from the printer and the settings specified in the **Print** dialog box are not saved. In order for the settings to be retrieved from the printer, the printer must have the specified settings available.

If you disable a setting's check box in the **Settings to save** list, the setting is not saved.

### To retrieve print settings

- 1 Click **File** ► **Print**.
- 2 Click the **Main** tab.
- 3 From the **Settings** list box, choose the saved settings you want to retrieve.



If you are in the **Edit settings** dialog box, you can retrieve saved settings by choosing the settings from the **Name for current settings** list box and clicking **Retrieve**.

### To delete print settings

- 1 Click **File** ► **Print**.
- 2 Click the **Main** tab.
- 3 From the **Settings** list box, choose the settings you want to delete.
- 4 Click **Edit settings**.
- 5 Click **Delete**.



You can't delete the **Application default** settings. You can, however, restore the **Application default** factory settings. For more information about restoring the **Application default** settings, see “To restore the application default print settings” on page 90.

## To restore the application default print settings

- 1 Click **File** ▶ **Print**.
- 2 Click the **Main** tab.
- 3 From the **Settings** list box, choose **Application default**.
- 4 Click **Edit settings**.
- 5 Click **Restore**.

## Using printer commands

You can control your printer using printer commands. Printer commands vary according to the printer installed. Check your printer documentation for information about printer commands to let you use the special functions of your printer.

You can insert printer commands into a document from a printer command file. For more information about printer commands, see “Printer commands” on page 96.

WordPerfect allows you to insert a code that pauses the printer at the cursor.

After you send a printer command to the printer, you can reset the printer (using another printer command) to the printer's default values to restore normal printer functions. For more information about your printer's default values, see the printer manual.

## To insert printer commands into a document from a printer command file

- 1 Click where you want to insert the printer command.
- 2 Click **Format** ▶ **Typesetting** ▶ **Printer command**.
- 3 In the **Printer command** dialog box, enable the **Printer command filename** option.
- 4 Click **Browse**.
- 5 Choose the drive and folder where the printer command file is stored.



- 6 Double-click the printer command filename.

### To pause the printer at the cursor

- 1 Click where you want to pause the printer.
- 2 Click **Format** ▶ **Typesetting** ▶ **Printer command**.
- 3 Enable the **Pause printer** check box.

### To reset the printer

- 1 Click where you want to insert the printer command.
- 2 Click **Format** ▶ **Typesetting** ▶ **Printer command**.
- 3 In the **Printer command** dialog box, enable the **Command** option.
- 4 In the **Command** box, type the printer's default values to insert in the document.

## Printing to a file

You can print to a file instead of to a printer. This is useful if you don't have a printer attached to your computer, or if you want to print the document on a printer other than the one attached to your computer.

For more information about printing files to disk, see "Printing to files" on page 96.

### To print to a file

- 1 Click **File** ▶ **Print**.
- 2 On the **Main** page, choose a printer from the **Name** list box.
- 3 Enable the **Print to file** check box.
- 4 Click **Print**.
- 5 In the **Print to file** dialog box, choose the drive and folder where you want to save the file.
- 6 Type the name for the file in the **File name** box.
- 7 Click **Save**.



When you print to a file, you can print directly from DOS to the printer it was formatted for. For example, if the file you printed to is named LETTER, saved

to C:\, and the computer you are using is printing to LPT1, type `copy/b c:\letter` at a DOS prompt, then press **Enter**. You can also print the file using the DOS Print command. See the DOS reference manual for more information.

## **Sending faxes**

If the fax driver for your modem is installed, you can fax a file to others. For information about installing fax drivers, consult the documentation included with your fax program. Before you can send a fax, you must select a fax driver.

When you send a fax, you can choose to fax the entire file or fax only specific pages or sections.

You can monitor the progress of a fax and view a list of the faxes sent during the current session. You can pause a fax. When you pause a fax, any other faxes in the list continue to transmit.

### **To send a fax**

- 1 Click **Send to** ► **Fax**.
- 2 On the **Main** page, choose a fax driver from the **Name** list box.
- 3 In the **Print range** area, enable one of the following options:
  - **Full document** — sends the entire document
  - **Current page** — sends the page where the cursor is located
  - **Pages** — sends the range of pages specified in the page box
  - **Selected text** — sends the selected text in the document (only available if text is selected)
  - **Document summary** — sends only the document summary (only available if a summary is created)
- 4 Click **Fax**.

Your fax program should open to guide you through the faxing process.

### **To view the status of a fax**

- 1 Click **File** ► **Print**.
- 2 On the **Main** page, click **Status**.

## To pause a fax

- 1 Click **File** ▶ **Print**.
- 2 On the **Main** page, click **Status**.
- 3 In the **Print history and status** dialog box, choose a fax from the document list.
- 4 Click **Document** ▶ **Pause printing**.

A check mark beside the **Pause printing** command indicates the fax is paused.

## You can also

---

Resume sending a fax	Choose a fax from the document list. Click <b>Document</b> ▶ <b>Pause printing</b> .
Cancel a fax	Choose a fax from the document list. Click <b>Document</b> ▶ <b>Cancel printing</b> .

---



Fax jobs display in the order they were sent, with the current job at the top of the list.

## Reference: Printing

This topic provides additional information about printing multiple pages, printing sections, printing labels, dithering methods, printer commands, and printing WordPerfect files to a disk.

## Printing multiple pages

Some examples for printing multiple pages are listed in the table below.

To print	Type
Pages 3, 5, and 8	3,5,8
Pages 3 and 8	3,8
Page 3 through the end of the document	3-
The beginning of the document through page 3	-3
Pages 1 through 3 and 8	1-3,8

---

You must type the page numbers in numerical order. For example, if you type 10, 1, 2, only page 10 will print. You can also print pages in reverse order. For more information about printing pages in reverse order, see “To print document pages in reverse order” on page 72.

## Printing sections

You can specify the current page, chapter, or volume number in a document and then print specific pages from each section.

For example, suppose a document has sections and page numbers as listed in the table below.

Section	Pages
Preface	i-vii
Chapter 1	1-12
Chapter 2	1-20
Chapter 3	1-10
Index	i-iii

Some examples for printing sections of this document are listed in the table below.



If no number is specified in the **Volumes**, **Chapters**, and **Secondary pages** list boxes, the first page of the document matching the page number (in Roman or Arabic) is printed.

A hyphen (-) between numbers defines a range of sequential pages (for example, 1-5 prints pages 1 to 5). A comma (,) between numbers defines a series of non-sequential pages (for example, 1, 5 prints pages 1 and 5 only). Any combination of hyphens and commas is supported (for example, 1-3, 5, 7, 10-12 prints the following pages: 1, 2, 3, 5, 7, 10, 11, and 12). A colon between numbers defines a specific page number, where the first number indicates the chapter, and the second indicates the page (for example, 2:3 prints chapter 2, page 3).

For more information about numbering pages, see “Inserting chapter, volume, and page total numbers” in the online Help.

## Printing labels

Labels are set up in WordPerfect so that you can print to portions of a page. Essentially, label printing is set up in the same way as divided pages. The sheet or roll of labels is called the physical page, and each individual label is called a logical page.

WordPerfect includes many label definitions that are commonly used or that match commercially available labels. When you want to print labels or similar kinds of projects, browse the list to see if there is one that meets your needs.

The default labels file for the United States, Canada, and other countries that use Imperial measurements is **Avery labels EN.LAB**, where EN is the two-letter language code (such as “EN” for English). The default labels file for countries that use the metric system is **Avery labels A4.LAB**. You can print the document with the label definition on another computer, but you cannot edit the definition itself.

Because the printer information is in the printer driver, the same document on a different computer will not necessarily have the same printer information. This could affect where information prints at the margin.

## Dithering methods

Dithering places pixels with specific colors or values relative to other pixels of a specific color. The relationship of one colored pixel to another creates the appearance of additional colors that do not exist in the color palette.

With WordPerfect, you can control both the dithering method and the dithering source. Provided your printer supports these options, you can:

- choose one of three color or grayscale blending methods (error diffusion, ordered dither, or halftone)
- have dithering applied by WordPerfect or by your printer

Error diffusion scatters pixels irregularly, making edges and colors softer. Ordered dithering approximates color blends using fixed dot patterns; as a result, solid colors are emphasized and edges appear harder.

The halftone option is especially useful if you are making photocopies, since it can give your original image sharper detail. If you choose halftone dithering, you can further refine your selection, increasing the lines per inch (lpi) setting to increase image

sharpness and reduce gray shading. You can use the dither source to specify where the bitmap or vector image is converted into the final format for printing. The image can be converted by WordPerfect or the printer. If you are using a PostScript printer, you can also specify the angle of line screening.

## **Printer commands**

Printer commands vary according to the printer installed. Type printer commands using the syntax documented in your printer manual. To include a decimal value for a control code or character, enclose that value in angle brackets (such as <27> for ESC).

WordPerfect does not check that printer commands are valid. You will know that a command in the document or printer command file is invalid or incorrect only if the document fails to print correctly. If the text within a printer command is printed, this means that the printer does not recognize it as a printer command. Check your printer manual to be sure you have entered the command correctly.

## **Printing to files**

If you are planning to send the file to a service bureau for printing, you can print it to a file and then deliver the file to the service bureau on a disk or as an e-mail attachment. The file can then be printed from another computer, whether or not that computer has a copy of WordPerfect Office installed.

Printing files to disk creates a PostScript file when you have a PostScript printer installed. PostScript is a page description language used to send instructions to a PostScript device about how to print each page. All the elements in a print job (for example, curves and text) are represented by lines of PostScript code that the printing device uses to produce the document.

PostScript is not the only method for sending instructions to a printing device, and some printing devices are not compatible with PostScript. However, there are several functions that are unavailable if you are not using the PostScript printing device language. For example, without PostScript, you cannot adjust color separations and halftone screens.



## Merging documents

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When you merge documents, you combine a form document and a data source. The merge produces varying copies of the form document, each containing information from a specific record in the data source.

In this section, you'll learn about

- creating data for a merge
- working with form documents for a merge
- associating merge files
- performing a merge
- converting merge files
- sorting, viewing, and finding data in data files
- editing merge data files
- selecting specific data for merges
- merging with address books
- changing merge options
- using merge commands
- merge programming commands
- working with levels, loops, and merge variables
- working with merge expressions
- expression terms

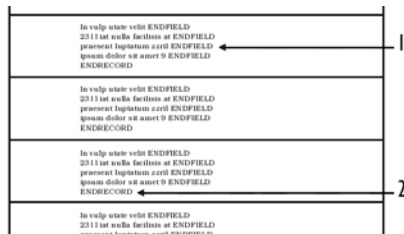
You can program a merge by adding merge commands. For more information, see “Reference: The Merge toolbar and programming commands” on page 184.

### Creating data for a merge

When you merge documents, you produce varying copies of a form document. Each copy contains specific information from a record in a data source, such as a data file, an address book, or keyboard input.

To use a WordPerfect data file as the data source, you can create either a data text file or a data table file. In both types of data files, information is organized into records and fields. For example, a record may include a name, address, telephone number, and other contact information. Each item within the record, such as name or address, is recognized as a field. It is recommended that you use no more than 512 fields per record.

When you create a data text file, each field is marked by the ENDFIELD code and each record by the ENDRECORD code.



*This is an example of a data text file containing 1) ENDFIELD codes and 2) ENDRECORD codes.*

When you create a data table file, fields and records are arranged in columns and rows. Each column contains a field. Each row contains a record.

Involp	Involp/utare	Esse/Mok/site	Crassequat
Involp Utare/vrit Fugiat	3631 Utare Erit	Involp Utat	Involp B3k 396
Defeat Augue	Fugiat nulla 11-03 Erat Luptatum	Spem Dolor 11 Hicsum 16153	Hicsum
Dolor Utare	23 Erat Admitt	Quis Nostrud	Veniam Quis
Crasse Citer	Erat Lupta 9	12011 Involp 2	Fugiat
Involp	Involp/utare	Esse/Mok/site	Crassequat

*This is an example of a data table file containing 1) records, 2) fields, and 3) field names.*

You can retrieve data from other file formats to use as data files in WordPerfect. For example, you can retrieve and convert a database file, a spreadsheet file, an ODBC data source, or a text file. For information about converting files, see “Opening and previewing files” in the online Help.

You can also use an address book as a merge data source. For information, see “Merging with address books” on page 117.

When you create a data file, WordPerfect automatically inserts a **Merge** toolbar into the merge data file.



For more information about the **Merge** toolbar, see “Using the Merge toolbar” on page 184.

## To create a data file for a merge

- 1 Click **Tools** ▶ **Merge**.
- 2 In the **Merge** dialog box, click **Data source** ▶ **Create data file**.  
If there is text in the active document, enable one of the following options in the **Data file source** dialog box:
  - **Use file in the active window** — uses the active document
  - **New document window** — creates a new document
- 3 Click **OK**.
- 4 In the **Create data file** dialog box, type the name of a field in the **Name a field** box.  
For example, if you are creating data for a form letter, you might include fields such as name, address, city, province, postal code, phone number, and e-mail address.  
To create a data table file, enable the **Format records in a table** check box.
- 5 Click **Add**.
- 6 To organize a selected field, click any of the following:
  - **Replace** — replaces the name of the selected field
  - **Delete** — deletes the selected field
  - **Move up** — moves the selected field up in the **Fields used in merge** list
  - **Move down** — moves the selected field down in the **Fields used in merge** list
- 7 When you are satisfied with the field names and arrangement for your data file, click **OK**.
- 8 In the **Quick data entry** dialog box, type information for each field that you have created.
- 9 Click **New record** to add the completed record to your data file. Repeat steps 8 and 9 to continue adding records to your data file. Click **Close**, and click **Yes**.

### You can also

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Number the fields in an empty data file

Click **OK** in the **Create data file** dialog box.  
Specify the number of fields in the **Number of fields in each record** box.

---



It is recommended that you use no more than 512 fields per record.



To add a line to a field, press **Ctrl + Enter**.

Press **Tab** to move to the next field.

## Working with form documents for a merge

A form document provides the pattern and layout for a merged document. It can contain text, formatting, graphics, and merge commands. You create form documents the same way you create regular documents; however, you insert merge commands which are replaced by information from a data source during the merge. For more information about inserting merge commands, see “Using merge commands” on page 122.



*This is an example of a form document containing 1) FIELD codes where the name and address of the recipient are inserted and 2) text for a letter.*

At the top of the document window, WordPerfect inserts the **Merge** toolbar to give you greater control over a merge. For more information about the **Merge** toolbar, see “Using the Merge toolbar” on page 184.

WordPerfect lets you create a form document that you can personalize during a keyboard merge. A keyboard merge lets you enter information into the form document

each time you need to send it. For more information about the **KEYBOARD** command, see “Merge programming commands” on page 125. You also can create a form document for labels and merged text that is oriented sideways.

If you do not want to create a new series of merged documents, you can send all of the merged data to a table. After you perform the merge, all of the merged output will be formatted into a single table with each column representing a field.

## To create a form document for a merge

- 1 Click **Tools** ▶ **Merge**.
- 2 In the **Merge** dialog box, click **Form document** ▶ **Create form document**.  
If there is text in the active document, enable one of the following options in the **Data file source** dialog box:
  - **Use file in active window** — uses the active document
  - **New document window** — creates a new document
- 3 Click **OK**.
- 4 In the **Associate form and data** dialog box, enable one of the following:
  - **Associate a data file** — specifies the path and filename for the file
  - **Associate an address book** — specifies an address book
  - **Associate an ODBC data source** — lets you select the ODBC source to use
  - **No association** — does not associate any data file
- 5 Click **OK**.
- 6 Type text, apply formatting, and insert merge commands in the form document.  
You can now begin inserting fields in the form document.



For information about inserting merge commands, see “To insert a merge command” on page 123.

For information about inserting fields, see “To insert a field in a form document for a merge” on page 101.

## To insert a field in a form document for a merge

- 1 Click **Insert Field** on the **Merge** toolbar.
- 2 Click in the form document where you want data to be filled in from a data source.
- 3 In the **Insert field name and number** dialog box, choose a field from the **Field names** list.

You can keep the **Insert field name and number** dialog box open and continue to add information and formatting to the form document.

- 4 Click **Insert**.

### **To create a form document for labels**

- 1 Click **Tools** ▶ **Merge**.
- 2 In the **Merge** dialog box, click **Form document** ▶ **Create form document**.  
If you have typed in the current document, enable one of the following options in the **Data file source** dialog box:
  - **Use file in active window** — uses the active document
  - **New document window** — creates a new document
- 3 In the **Associate form and data** dialog box, enable the **Associate an address book** option, and choose an address book from the list box.
- 4 Click **OK**.
- 5 On the WordPerfect menu bar, click **Format** ▶ **Labels**.
- 6 In the **List labels for** area, enable one of the following label options:
  - **Laser printed** — displays laser label options
  - **Tractor-fed** — displays tractor-fed label options
  - **Both** — displays laser and tractor-fed label options
- 7 Choose a label style from the **Labels** list, and click **Select**.
- 8 Insert fields in the form document.



For information about inserting fields, see “To insert a field in a form document for a merge” on page 101.

You can merge selected records from an address book. For information, see “To merge selected records from an address book” on page 118.

### **To create a sideways text form document**

- 1 Click **Tools** ▶ **Merge**.
- 2 In the **Merge** dialog box, click **Form document** ▶ **Create form document**.  
If there is text in the active document, enable one of the following options in the **Data file source** dialog box:
  - **Use file in active window** — uses the active document

- **New document window** — creates a new document
- 3 Click **OK**.
  - 4 In the **Associate form and data** dialog box, enable one of the following options:
    - **Associate a data file** — specifies the path and filename for the associated data file
    - **Associate an address book** — specifies an address book
    - **Associate an ODBC data source** — lets you select the ODBC source
    - **No association** — does not associate any data file
  - 5 Click **OK**.
  - 6 On the WordPerfect menu bar, click **Insert** ▶ **Text box**.
  - 7 Insert fields in the new text box, and click **Close**.
  - 8 Right-click the text box, and click **Content**.
  - 9 Enable a rotation option in the **Rotate text counterclockwise** area, and click **OK**.



For information about inserting fields, see “To insert a field in a form document for a merge” on page 101.

## **To create a form document for a keyboard merge**

- 1 Click **Tools** ▶ **Merge**.
- 2 In the **Merge** dialog box, click **Form document** ▶ **Create form document**.  
If there is text in the active document, enable one of the following options in the **Data file source** dialog box:
  - **Use file in active window** — uses the active document
  - **New document window** — creates a new document
- 3 Click **OK**.
- 4 In the **Associate form and data** dialog box, enable one of the following options:
  - **Associate a data file** — specifies a path and filename for the associated data file
  - **Associate an address book** — specifies an address book
  - **Associate an ODBC data source** — lets you select the ODBC source
  - **No association** — does not associate any data file
- 5 Click **OK**.
- 6 Add text and formatting, and insert fields in the form document.
- 7 Click where you want to insert a keyboard prompt in the form document.

- 8 On the **Merge** toolbar, click **Insert merge code**, and choose **Keyboard**.
- 9 In the **Insert merge code** dialog box, type a user prompt for the information to be entered and click **OK**.

### To create a table for a merge

- 1 Click **Tools** ▶ **Merge**.
- 2 In the **Merge** dialog box, click **Form document** ▶ **Create form document**.  
If there is text in the active document, enable one of the following options in the **Data file source** dialog box:
  - **Use file in active window** — uses the active document
  - **New document window** — creates a new document
- 3 In the **Associate form and data** dialog box, enable one of the following options and click **OK**:
  - **Associate a data file** — specifies the path and filename for the associated data file
  - **Associate an address book** — specifies an address book
  - **Associate an ODBC data source** — lets you select an ODBC source
  - **No association** — does not associate any data file
- 4 On the WordPerfect menu bar, click **Table** ▶ **Create** and in the **Create table** dialog box, type the specified values in the following boxes:
  - **Columns** — number of columns
  - **Rows** — 2
- 5 Click **Create**, and type a heading in each cell of the first row.
- 6 Right-click the table, click **Format**, and on the **Table** tab, enable the **Insert new rows automatically** check box, and click **OK**.
- 7 Insert fields in the second row of the table, and click **Close**.
- 8 Click at the end of the last cell in the second row, and on the **Merge** toolbar, click **Insert merge code** and choose **More**.
- 9 In the **Insert merge codes** dialog box, choose **REPEATROW** from the **Merge codes** list, click **Insert**, and click **Close**.



After merging, the table expands one row for each record in the associated data file.



Press **Tab** to move to the next cell.

## Associating merge files

Before you can merge documents, you must link a data source filename to a form document. This is called associating a data source. You can associate a data source with a form document, or you can associate a form document with a data file, such as an ODBC data source. The association is always stored in the form document.

If the data source changes, you can associate a different data file. You can also go to an associated form document from its data file or to an associated data file from its form document.

### To associate a data file with a form document

- 1 Open a data file.
- 2 Click **Go to form** on the **Merge** toolbar.
- 3 In the **Associate** dialog box, click one of the following:
  - **Select** — associates an existing form document
  - **Create** — creates a new form document



The association is stored in the form document.

### To associate a form document with a data source

- 1 Open a form document that has no association with a data source.
- 2 Click **Go to data** on the **Merge** toolbar.
- 3 Click one of the following:
  - **Select** — associates a data file
  - **Create** — creates and names a new data file or form file
  - **Address book** — associates an address book
  - **ODBC** — associates an ODBC data source



For information about associating an ODBC data source, see “To associate a form document with an ODBC data source” on page 106.

## To associate a form document with an ODBC data source

- 1 Open a form document that has no association with a data source.
- 2 Click **Go to data** on the **Merge** toolbar.
- 3 Click **ODBC**.  
If prompted, log in to the database.
- 4 Choose a location from the **Data source** list box.
- 5 From the **Table list** box, choose a table in the database that contains the merge data.



For more information about logging in to an ODBC database, see the online Help for the Microsoft® SQL Server™ ODBC driver.

## To go to the associated data file

- 1 Open a form document.
- 2 On the **Merge** toolbar, click **Go to data**.



If there is no associated data file, you can select an existing data file or create a new one. For information about associating a data source, see “To associate a form document with a data source” on page 105. For information about creating a data file, see “To create a data file for a merge” on page 99.

## To go to the associated form document

- 1 Open a data file.
- 2 On the **Merge** toolbar, click **Go to form**.



The associated form document must be open.  
The association is stored in the form document.

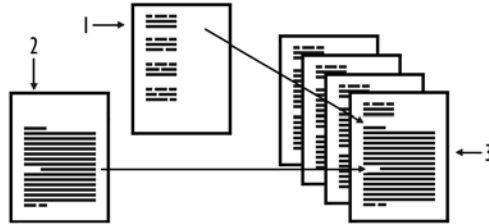
## To change the associated data source

- 1 Open a form document.
- 2 Click **Insert field** on the **Merge** toolbar.
- 3 Click **Data source**, and browse to locate a data file.



## Performing a merge

When you merge documents, you combine a form document and a data source. WordPerfect provides a variety of output options for the merged documents. For example, you can save it to disk, print it, or add it to the active document.



*This is an example of 1) a data source document, 2) a form document, and 3) merged documents.*

You can perform a keyboard merge and add information at the time of the merge. When you perform the keyboard merge, WordPerfect pauses the merge as specified in the form document and waits for you to enter information from the keyboard.

You can create envelopes as you merge a form document (such as a letter), or you can create merged envelopes on their own. An envelope is created for each record selected in the data source. For more information about working with envelopes, see “Creating and editing envelopes” in the online Help.

You can also send each merged document as e-mail.

Please note that it is recommended that you use no more than 512 fields per record.

## To perform a merge

- 1 Click **Tools** ► **Merge**.
- 2 In the **Merge** dialog box, click **Form document**, and choose the location of the form file to merge.
- 3 Click **Data source**, and choose the location of the data file to merge.
- 4 Click **Output**, and choose one of the following:
  - **Current document**
  - **New document**
  - **Printer**
- 5 Click **Merge**.

## You can also

---

Stop a merge in progress	Press <b>Esc</b> .
Save the merged file to disk	Click <b>Output</b> ► <b>File on disk</b> . Choose the folder, drive, and where you want to save the file. Type a filename in the <b>Filename</b> list box. Click <b>Select</b> .

---



You can also perform a keyboard merge by clicking **Merge** on the **Merge** toolbar. For more information about using the **Merge** toolbar, see “Using the Merge toolbar” on page 184.

## To merge to envelopes

- 1 Click **Tools** ► **Merge**.
- 2 Click **Form document**, and choose the location of the form document.  
If you are merging envelopes only, click **Current document** as the location of the form file.
- 3 Click **Data source**, and choose the location of the data file.
- 4 Click **Envelopes**.
- 5 On the **Merge** toolbar, click **Insert Field** and insert fields in the form document.
- 6 Click **Close**.
- 7 Click **Continue merge** on the **Merge** toolbar.
- 8 Click **Output**, and choose a location for the merged file.
- 9 Click **Merge**.



The merged envelopes are placed at the end of the merged file.

If there is an existing envelope for this document, you can edit, cancel, or define the envelope. For more information about creating envelopes, see “Creating and editing envelopes” in the online Help.

## To perform a keyboard merge

- 1 Open a form or data file containing the **KEYBOARD** merge command.

- 2 Click **Tools** ► **Merge**.
- 3 Click **Form document**, and choose **Current document**.
- 4 Click **Data source**, and choose the location of the data file.
- 5 Click **Output**, and choose a location for the merged file.
- 6 Click **Merge**.
- 7 When the merge pauses at the **KEYBOARD** command, type the information as prompted.
- 8 On the **Merge** toolbar, click **Continue**.

### You can also

---

Skip a record	Review the data in the <b>Next record</b> list box on the <b>Merge</b> toolbar. Click <b>Skip next record</b> .
Stop a keyboard merge	Click <b>Stop</b> on the <b>Merge</b> toolbar.

---



To continue the merge to the end of the active record and ignore all other merge commands, click **Quit** on the **Merge** toolbar.

### To merge to e-mail

- 1 Click **Tools** ► **Merge**.
- 2 Click **Form document**, and choose the location of the form file to merge.
- 3 Click **Data source**, and choose the location of the data file to merge.
- 4 Click **Output**, and choose **E-mail**.
- 5 Choose the field containing the e-mail address from the **Select field name of e-mail address** list box.
- 6 In the **Subject line** box, type the subject line for the merged e-mail message.
- 7 Click **OK**.
- 8 Click **Merge**.
- 9 Choose a profile from the **Profile name** list box.

## Converting merge files

You can convert form documents and data files to regular WordPerfect documents. When a file is converted, it is no longer recognized as a form document or a data file for a merge, and the **Merge** toolbar is removed. For information about the **Merge** toolbar, see “Using the Merge toolbar” on page 184. You can also convert a table to a data text file.

When you use a data file that is not formatted for a merge, WordPerfect imports and converts it for the merge. You can use the file one time and not save it as a merge file, or you can save the file in WordPerfect format so that you can use it again.

You can also import data in other forms, such as a spreadsheet, database, or text file, into a data text file for a merge. For more information, see “To link or embed spreadsheet data as regular text”, “To link or embed a database as regular text”, and “To link or embed a delimited text file” in the online Help.

It is recommended that you use no more than 512 fields per record.

### To convert a form document or data file to a regular document

- 1 Open a data file or a form document.
- 2 On the **Merge** toolbar, click **Options**, and choose **Remove merge bar**.

One of the following dialog boxes displays:

- **The file will not be recognized as a merge file** — indicates that the active file will not be recognized as a merge form document or merge data file
- **Data file association will be lost** — indicates that the active file will not be recognized as a merge form document and will not be associated with any data file



After the **Merge** toolbar has been removed, you cannot click **Undo** to display it again. You need to re-create the merge file.

### To convert a table to a data text file for a merge

- 1 Select a table.
- 2 Press **Backspace**.
- 3 Enable the **Convert table contents** option.
- 4 Click **OK**.

- 5 Enable the **Convert text to merge data file (.dat)** option.

If you want to convert the cells in the first row to field names, enable the **Use text as first row as field names** check box.

## Sorting, viewing, and finding data in data files

You can sort a data file. Using the Quick data entry feature in WordPerfect, you can scroll through the records and fields in a data file to view them. You can also find records that contain specific text.

### To sort a data file

- 1 On the **Merge** toolbar, click **Options**, and choose **Sort**.
- 2 Choose a criterion from the **Sort by** box.
- 3 Click **Sort**.

The table is sorted alphabetically or numerically in ascending order based on the first cell in each row.



For more information about sorting records, see “Working with records” in the online Help.

### To view records in a data file using Quick data entry

- 1 Click **Quick entry** on the **Merge** toolbar.
- 2 Click one of the following:
  - **First**
  - **Previous**
  - **Next**
  - **Last**
- 3 Click **Close**.

### To view a field in a data file using Quick data entry

- 1 Click **Quick entry** on the **Merge** toolbar.
- 2 Click any of the following:
  - **Next field** — moves the cursor to the next field
  - **Previous field** — moves the cursor to the previous field

## To find text in a data file using Quick data entry

- 1 Click **Quick entry** on the **Merge** toolbar.
- 2 Click **Find**, and type the text to match in the **Find** box.
- 3 Click one of the following:
  - **Find next** — moves to the next record containing the text specified
  - **Find previous** — moves to the previous record containing the text specified



Depending on which record is displayed, **Find next** or **Find previous** may be grayed.

If no record is found, the first record in the data file displays.

## Editing merge data files

A data file organizes data for a merge into fields and records and can be formatted as either a data text file or a data table file. In a data table file, information is organized in a table. Each column of the table contains a field, and each row contains a record. You can add and delete columns and rows from a data table.

In a data text file, fields are separated by an **ENDFIELD** code. Records are separated by an **ENDRECORD** code and a hard page break. WordPerfect lets you add fields to and delete fields from records. You can also add field names and records to data text files.

Using **Quick data entry**, you can add and delete fields or records in both data text files and data table files. You can also edit the contents of fields in records.

It is recommended that you use no more than 512 fields per record.

## To add a column to a data table

- 1 Click in a column next to where you want to add a new column.
- 2 On the **Merge** toolbar, click **Column**, and choose **Insert**.
- 3 Type the name of the new field in the **Field name** box.
- 4 Click one of the following:
  - **Before current field** — inserts the new field before the selected column
  - **After current field** — inserts the new field after the selected column
  - **After last field** — inserts the new field as the last column in the table



It is recommended that you use no more than 512 fields per record.

### To delete a column from a data table

- 1 Click in a column.
- 2 Click **Column** on the **Merge** toolbar.
- 3 Choose **Delete**.

### To add a row to a data table

- 1 Click in a row next to where you want to add a new row.
- 2 On the **Merge** toolbar, click **Row**, and choose **Insert**.
- 3 Click one of the following:
  - Add row above current row
  - Add row below current row
  - Add row to end of table

### To delete a row from a data table

- 1 Click in a row.
- 2 On the **Merge** toolbar, click **Row** and choose **Delete**.

### To add or delete a field from a data text file record

To	Do the following
Add a field	Click where you want to add the field. Type data, and click <b>End field</b> on the <b>Merge</b> toolbar.
Delete a field	Select the text and the <b>ENDFIELD</b> merge code. Press <b>Delete</b> .



It is recommended that you use no more than 512 fields per record.

## To add or delete a field name from a data text file

To	Do the following
Add a field name	Click where you want to add a field. The cursor must be within the parentheses of the <b>Fieldnames</b> code. Type the new field name followed by a semicolon.
Delete a field name	Click within the parentheses of the <b>Fieldnames</b> code. Select the field name and following semicolon. Press <b>Delete</b> .



A semicolon, but no spaces, separates each field name.

You need to manually add or delete fields from records. For information, see “To add or delete a field from a data text file record” on page 113.

It is recommended that you use no more than 512 fields per record.

## To add a record to a data text file

- 1 Type the text for the first field.
- 2 Click **End field** on the **Merge** toolbar.
- 3 Click after the last **ENDFIELD** code of the record.
- 4 Click **End record** on the **Merge** toolbar.

### You can also

Delete a record from a data text file	Select the record, including the <b>ENDFIELD</b> and <b>ENDRECORD</b> codes and the hard page break at the end of the record. Press <b>Delete</b> .
Print a data text file	Click <b>Tools</b> ► <b>Merge</b> . On the <b>Merge</b> toolbar, click <b>Options</b> , and choose <b>Print</b> .

## To add a field to a data file using Quick data entry

- 1 Click **Quick Entry** on the **Merge** toolbar.
- 2 Click **Field names**.



- 3 Type the field name in the **Field name** box.
- 4 Click one of the following:
  - **Add** — adds the new field after the selected field
  - **Add before** — adds the new field before the selected field

### You can also

---

Replace a field name in a data file	Choose a field from the <b>Fields used in merge</b> list box. Click <b>Replace</b> .
-------------------------------------	--

Delete a field from a data file	Choose a field from the <b>Fields used in merge</b> list box. Click <b>Delete</b> .
---------------------------------	---



If you replace a field name, information in that field will be deleted from each record in the data file. For example, if you replace “Address” with “Street Address,” all data in the “Address” field in all records will be deleted.

If you delete a field name, information in that field will be deleted from each record in the data file.

It is recommended that you use no more than 512 fields per record.

### To add a record to a data file using Quick data entry

- 1 Click **Quick entry** on the **Merge** toolbar.
- 2 Click **New record**.
- 3 Type the data for a field.
- 4 Click **Close**.

### You can also

---

Delete the displayed record	Click <b>Delete record</b> .
-----------------------------	------------------------------



Press **Enter** to move to the next field.

### To edit fields using Quick data entry

- 1 Click **Quick entry** on the **Merge** toolbar.
- 2 Click in the field you want to edit.

If you want to edit dimmed fields, enable the **Allow editing of dimmed fields** check box.

### 3 Type text.



If you edit fields with functions, the functions are deleted.

For information about finding data in a data file, see “Sorting, viewing, and finding data in data files” on page 111.

## Selecting specific data for merges

When you merge documents, you produce varying copies of the form document. Each copy contains specific information from a record in the data source. If you do not want to merge all the records in a data source, you can limit a merge to certain records in the data file by marking a range of records that you want to merge or by specifying conditions for records.

It is recommended that you use no more than 512 fields per record.

### To mark records for a merge

- 1 Click **Tools** ► **Merge**.
- 2 In the **Merge** dialog box, click **Form document**, and choose the location of the form file.
- 3 Click **Data source**, and choose the location of the data file.
- 4 Click **Records**.
- 5 Enable the **Mark records** option in the **Selection method** area.
- 6 Type the range of records to display in the **Display records from** boxes.
- 7 Choose the first field to display in the **First field to display** box.
- 8 Click **Update record list**.
- 9 Click **OK**.

### You can also

---

Mark individual records	Enable the records in the <b>Record list</b> box.
-------------------------	---

---

Select all records	Click <b>Mark all records in list</b> .
--------------------	---

---

## You can also

---

Clear all marked records

Click **Unmark all records in list**.

---

## To specify conditions for a merge

- 1 Click **Tools** ► **Merge**.
- 2 Click **Merge**.
- 3 Click **Form document**, and choose the location of the form file.
- 4 Click **Data source**, and choose the location of the data file.
- 5 Click **Records**.
- 6 Enable the **Specify conditions** option in the **Selection method** area.
- 7 Select a field from the **Field** list box.
- 8 Type the selection criteria in the **Condition** text boxes.  
If you want to see examples of selection criteria, click **Example**.
- 9 Click **OK**.

## You can also

---

Choose a range of records

Enable the **Record number range** check box. In the **From** box, type the first record in the range. In the **To** box, type the last number in the range.

---

Reset conditions

Click **Clear all**.

---

## Merging with address books

When you use an address book as the data source for a merge, you do not have to create a data file. You can merge all records or select specific records from an address book and merge them directly to letters, envelopes, labels, or form documents. By default, WordPerfect lets you access Directory Server, MAPI, and Windows address books through the Microsoft Outlook address book. For more information about using Microsoft Outlook, see “Using Microsoft Outlook address books in WordPerfect” in the online Help.

You can also create a merge data file by using the records in an address book. WordPerfect lets you create a data file by using all records or selected ones. When you merge information from an address book, the records are interpreted as a merge data file at the time of the merge. If you want to save address book information as a merge data file, you can use the **adrs2mrg.wcm** macro included with WordPerfect. For more information about macros, see “Recordings, macros, and automation features” on page 191.

You can merge envelopes with a form document by using an address book. You can also insert address book records as labels.

It is recommended that you use no more than 512 fields per record.

### To merge using an address book

- 1 In a form document, click **Tools ▶ Merge**.
- 2 Click **Data source**. Choose **Address book**, and choose an address book from the enabled list box.
- 3 Click **Output**, and choose a format for the merged file.
- 4 Click **Merge**.



If you have selected records from an address book before starting the merge, those are the records that merge unless you specify others.

### To merge selected records from an address book

- 1 Click **Tools ▶ Merge**.
- 2 Click **Form document**, and choose the location of the form document.
- 3 Click **Data source**, choose **Address book**, and choose an address book from the list box.
- 4 Click **Records**.
- 5 Hold down **Ctrl**, click each entry to use, and click **OK**.
- 6 In the **Format address** dialog box, click **OK**.
- 7 Click **Output**, and choose a format for the merged file.
- 8 Click **Merge**.

## To create a merge data file from an address book

- 1 Click **Tools** ▶ **Macro** ▶ **Play**.
- 2 Choose `adrs2mrg.wcm`.
- 3 Click **Play**.
- 4 Enable the **All records from address book** option.
- 5 Choose an address book from the **Select address book** list box.
- 6 Click **OK**.

## To create a merge data file from selected address book records

- 1 Click **Tools** ▶ **Macro** ▶ **Play**.
- 2 Choose `adrs2mrg.wcm`, and click **Play**.
- 3 Enable the **Selected records** option.
- 4 Click **Select records**, and click **OK**.
- 5 In the list of categories, double-click the type of address book, and click an address book.
- 6 Hold down **Ctrl**, click each entry you want to use, and click **Insert**.
- 7 In the **Format address** dialog box, click **OK**.
- 8 In the **Address book to merge** dialog box, click **OK**.



If the `adrs2mrg.wcm` macro is not listed, you need to install it.

## To merge envelopes and a form document with an address book

- 1 Click **Tools** ▶ **Merge**.
- 2 Click **Data source**, choose **Address book**, and choose an address book from the list box.
- 3 Click **Envelopes**.

If there is an existing envelope for this document, you can edit, cancel, or define the envelope.

- 4 Click where you want to insert a field.
- 5 Click **Insert field** on the **Merge** toolbar, choose a field, and click **Insert**.
- 6 Click **Close**.

- 7 Click **Continue** on the **Merge** toolbar.
- 8 Click **Form document**, and choose the location of the form file.
- 9 Click **Output**, choose the location for the merged file, and click **Merge**.

### You can also

Merge only envelopes using an address book	Open a blank form document.
Print envelopes using an address book	Click <b>Output</b> , and choose <b>Printer</b> . Click <b>Merge</b> .
Reset envelope, form, and data options	Click <b>Reset</b> in the <b>Merge</b> dialog box.



When you merge envelopes with an address book, you cannot add graphics to the envelope. Only the return address, the recipient's address, and a bar code can be used. You can add extra text, such as "Air Mail," below the return address or above the recipient's address. The extra text prints in the same font as the addresses. For more information about creating envelopes, see "Creating and editing envelopes" in the online Help.

The merged envelopes are placed at the end of the merged file.

### To insert an address book record as a label

- 1 In a new document window, click **Tools** ► **Merge**.  
If you have typed in the document, enable the **New document window** option in the **Create merge file** dialog box.
- 2 In the **Associate form and data** dialog box, enable the **Associate an address book** option, and choose an address book from the list box.
- 3 Click **Format** ► **Labels** on the WordPerfect menu bar.
- 4 In the **List labels for** area, enable one of the following label options:
  - **Laser printed** — displays laser label options
  - **Tractor-fed** — displays tractor-fed label options
  - **Both** — displays both laser and tractor-fed label options
- 5 Choose a label format from the **Labels** list, and click **Select**.
- 6 Click where you want to insert the address label.
- 7 Click **Tools** ► **Address book**.
- 8 Choose an address, and click **Insert**.

9 In the **Format address** dialog box, choose a format from the **Format** list box.

## Changing merge options

When you perform a merge, you combine a form document with a data source to form a new set of documents. You can change the default file extensions for merge forms and data files.

Merge options can be changed. For example, you can specify the number of copies to produce for each merged document. WordPerfect lets you separate each merged record with a page break and insert a blank line for each empty field. You can also reset all of the options to the default.

### To specify an extension for merge filenames

- 1 Click **Tools** ► **Settings**.
- 2 Double-click **Files**.
- 3 In the **Files settings** dialog box, click the **Merge/Macro** tab.
- 4 Disable the following check boxes:
  - **Use default form file extension on open and save**
  - **Use default data file extension on open and save**
- 5 Type an extension in the following boxes:
  - **Use default form file extension on open and save** — specifies the file extension for form files. The default is **.frm**.
  - **Use default data file extension on open and save** — specifies the file extension for data files. The default is **.dat**.

### To change merge options

<b>To</b>	<b>Do the following</b>
Specify the number of copies for each merged record	Click <b>Tools</b> ► <b>Merge</b> . Click <b>Options</b> . Type a value in the <b>Number of copies for each record</b> box.
Separate merged documents with a page break	Click <b>Tools</b> ► <b>Merge</b> . Click <b>Options</b> . Enable the <b>Separate each merged document with a page break</b> check box.

To	Do the following
Insert a blank line for an empty field	Click <b>Tools</b> ► <b>Merge</b> . Click <b>Options</b> . Choose <b>Leave blank line</b> from the <b>If field is empty in data source</b> list box.
Remove a blank line representing an empty field	Click <b>Tools</b> ► <b>Merge</b> . Click <b>Options</b> . Choose <b>Remove blank line</b> in the <b>If field is empty in data source</b> list box.
Reset merge options to the default	Click <b>Tools</b> ► <b>Merge</b> . Click <b>Reset</b> .



If **Reset** is disabled in the **Perform merge** dialog box, all options (envelope, form, and data) are set to the default.

## Using merge commands

Merge commands (or merge codes) help you customize and automate a merge. Merge commands instruct WordPerfect how to combine data sources and form documents. Like macro commands, they resemble programming languages in the use of a language (syntax), variables, and logical operations.

```

FIELD(dolor)
blandit praesent luptatum wisi
azril. Delenit augue dui.
CODES (
  IF(FIELD(veniam) !=0)
    NESTDATA(aliqui.vel)
    NESTFORM(tation.sed)
  ELSE
    NESTFORM(accumsan.eum)
  ENDIF
)
Iriure,

```

*Merge codes are displayed in red and the text you type is displayed in black.*

You can customize a merge by inserting merge commands. For example, if you add the **DATE** command to a letter, WordPerfect will replace the **{DATE}** code with the current date. You can also delete, display, or hide merge commands.



WordPerfect performs a specific function for each merge command. Some codes are accessible as buttons on the **Merge** toolbar. Other merge commands require careful placement and the correct use of parameters and other commands.

The POSTNET command can be inserted into a form document. A POSTNET bar code is a postal symbol used for addresses in the United States. WordPerfect inserts the POSTNET bar code for the specified ZIP code. You can insert the same POSTNET bar code for all of the records in a merge, or you can insert a different code for each record in a data file.

### To insert a merge command

- 1 On the **Merge** toolbar, click **Insert merge code**, and click **More**.
- 2 Click where you want to insert a merge code.
- 3 Choose a merge code from the **Merge codes** list box.
- 4 Click **Insert**.

If prompted, type parameters, and click **OK**.



For more information, see “Reference: The Merge toolbar and programming commands” on page 184.

### To delete a merge command

- 1 Click at the beginning or end of a merge command.
- 2 Press **Delete**.



When you delete merge commands, WordPerfect will remove the code and parentheses, leaving prompts and parameters.

### To display or hide a merge command

- 1 Click **Tools** ▶ **Settings**.
- 2 Click **Display**.
- 3 In the **Display settings** dialog box, click the **Merge** tab.
- 4 Enable one of the following options:
  - **Display merge codes** — displays the merge commands
  - **Display merge codes as markers** — displays command markers only

- **Hide merge codes** — does not display commands



You can also click **Options** on the **Merge** toolbar to display or hide merge codes.

### **To display or hide a merge command for a keyboard merge**

- 1 Click **Tools** ► **Merge**.
- 2 Click **Options**.
- 3 Choose one of the following options from the **Display merge codes** list box:
  - **Show codes** — displays the merge commands
  - **Hide codes** — does not display commands
  - **Show as markers** — displays command markers only

### **To merge a single POSTNET bar command in a form document**

- 1 On the **Merge** toolbar, click **Insert merge code**, and click **More**.
- 2 Click where you want to insert the **POSTNET** bar command.
- 3 Choose **POSTNET(string)** from the **Merge codes** list box.
- 4 Click **Insert**.
- 5 Type the ZIP code between the parentheses of the **POSTNET** command.
- 6 Click **Close**.

### **To insert a merge field for a POSTNET bar command**

- 1 Click **Insert merge code**, and click **More** on the **Merge** toolbar.
- 2 Click where you want to insert the **POSTNET** bar code.
- 3 Choose **POSTNET(string)** from the **Insert merge codes** list box.
- 4 Click **Insert**.
- 5 Click between the parentheses of the **POSTNET** command.
- 6 Click **Insert field** on the **Merge** toolbar.
- 7 In the **Field names** box, choose the field containing the ZIP code.
- 8 Click **Insert and close**.



To choose a field, you must have associated a data source with the form document. If not, you can type the name of the field, making sure that it matches the field name in the data source. For information about data sources, see “Associating merge files” on page 105. For information about form documents, see “Working with form documents for a merge” on page 100.

## Merge programming commands

WordPerfect merge programming commands let you program a merge. Many commands are similar to those in other programming languages. The following commands can be used in merge. For more information about each command, click on the command name to link to the command’s Help topic. For information on merging, see “Merging documents” on page 97.

ASSIGN(var;expr)

ASSIGNLOCAL(var;expr)

BEEP

BREAK

CALL(label)

CANCELOFF

CANCELON

CAPS(expr)

CASEOF(expr[;...;expr])

CHAINDATA(filename)

CHAINFORM(filename)

CHAINMACRO(macroname)

CHAR(var[;prompt][;title])

CODES(merge codes)

COMMENT(comment)

CONTINUE

CTON(character)

DATE  
DEFAULT  
DISPLAYSTOP  
DOCUMENT(filename)  
ELSE  
EMBEDMACRO(macro statements)  
ENDFIELD  
ENDFOR  
ENDIF  
ENDRECORD  
ENDSWITCH  
ENDWHILE  
FIELD(field)  
FIELDNAMES(name1;...;nameN)  
FIRSTCAP(expr)  
FOREACH(var;expr1;...;exprN)  
FORNEXT(var;start;stop[;step])  
GETSTRING(var[;prompt][;title])  
GO(label)  
IF(expr)  
IFBLANK(field)  
IFEXISTS(var)  
IFNOTBLANK(field)  
INSERT(text)  
KEYBOARD([prompt])  
LABEL(label)  
LOOK(var)

MRGCMND(merge codes)  
NESTDATA(filename)  
NESTFORM(filename)  
NESTMACRO(macroname)  
NEXT  
NEXTRECORD  
NTOC(number)  
ONCANCEL(action)  
ONERROR(action)  
PAGEOFF  
PAGEON  
POSTNET(string)  
PRINT  
PROCESSOFF  
PROCESSION  
PROMPT(message)  
QUIT  
REPEATROW  
RETURN  
RETURNCANCEL  
RETURNERROR  
REWRITE  
STATUSPROMPT(message)  
STEPOFF  
STEPON  
STOP  
STRLEN(expr)

STRPOS(expr;subexpr)  
SUBSTDATA(filename)  
SUBSTFORM(filename)  
SUBSTR(expr;start;length)  
SWITCH(expr)  
SYSTEM(sysvar)  
TOLOWER(expr)  
TOUPPER(expr)  
VARIABLE(var)  
WAIT(10ths second)  
WHILE(expr)

### **ASSIGN(var;expr)**

Use **ASSIGN** to assign the value returned by expr to the global variable var. You do not need to enclose the expression in quotes.

Expressions are evaluated, and the result is assigned to the variable.

Non-numeric characters and expressions that cannot be evaluated numerically are treated as strings.

After a value has been assigned to a variable, the variable command **VARIABLE(var)** can be placed anywhere you would normally place the variable contents. To erase a variable (remove it from memory), leave the expr argument empty. For example, you could use the command **ASSIGN(Fred;)** to erase a variable named Fred. When you erase a variable, it no longer “exists.” For information, see “**IFEXISTS(var)**” on page 148.

To assign a local variable, see “**ASSIGNLOCAL(var;expr)**” on page 169.

In the following example, the variable Fred is first assigned a value, then an expression, then a string.

```
CODES(  
ASSIGN(Fred;3)
```

Assign 3 to variable Fred.

ASSIGN(Fred;VARIABLE(Fred)\*2)

Multiply old value of variable Fred by 2; assign the result (6) as the new value of variable Fred.

ASSIGN(Fred;WordPerfect)

Assign the string "WordPerfect" to variable Fred.

VARIABLE(Fred)

Return the value of the variable to the document.

)

## **BEEP**

Use **BEEP** to cause your computer to beep. This command is often useful in combination with **CHAR**, **KEYBOARD**, **PROMPT**, **STATUSPROMPT**, and **GETSTRING**, which prompt the user. You can also use it to signal various points of the merge, such as the end of a lengthy process.

The following example sounds a beep at each keyboard pause. The user enters the requested information, then clicks **Continue** on the **Merge** toolbar or presses **Alt + Enter** (**ENDFIELD**) to continue to the next prompt.

MEMO

To: BEEP KEYBOARD(Enter To information)

From: BEEP KEYBOARD(Enter From information)

Date: DATE

Subject: BEEP KEYBOARD(Enter Subject information)

## **BREAK**

Use **BREAK** to exit from a loop before it would normally end. The location of the command and the type of file it is in determine how it functions.

The rules that govern how **BREAK** functions are listed below.

Each of the following rules assumes that the previous rules do not hold.

- If **BREAK** is encountered within a **FORNEXT** or **WHILE** structure, execution moves to the end of the structure (just after the **ENDFOR** or **ENDWHILE**). If

these structures are nested, execution moves after the **ENDFOR** or **ENDWHILE** command of the current level.

- If **BREAK** is encountered in a nested file, execution returns to the parent file.
- If **BREAK** is encountered in a form file, the merge moves to the top of the form file and continues with the next data record.
- If **BREAK** is encountered in a data file, the merge is terminated.

The following example uses **BREAK** to exit an infinite loop when the correct number is guessed.

```
CODES(  
ASSIGN(Actual Number;SUBSTR(SYSTEM(random);3;1))  
WHILE(1)  
CHAR(Guess;Guess a number between 0 - 9?;Guessing Game)  
IF(VARIABLE(Guess)=VARIABLE(Actual Number))  
BEEP  
PROMPT(Correct, the number was VARIABLE(Actual Number))  
WAIT(30)  
BREAK  
ELSE  
PROMPT(Sorry, the number wasn't VARIABLE(Guess))  
WAIT(10)  
ENDIF  
ENDWHILE  
)
```

### **CALL(label)**

Use **CALL** to transfer execution to the label subroutine. When execution of the subroutine is completed (when a **RETURN** is encountered in the subroutine), execution returns to the command following **CALL**. For more information about subroutines and labels, see “Levels” on page 170.



The example below is a form file that creates a data file. The Info subroutine is called to get the information for each record.

**GETSTRING** prompts the user to enter information and assigns the information to a variable. **MRGCMND** places the necessary merge codes into the data file being created.

When no name is entered for variable name, that variable is erased.

**IFEXISTS** then returns a false (0), and **QUIT** is executed, ending the merge.

```
CODES(
MRGCMND(FIELDNAMES(Name;Address;City;State;ZIP)ENDRECORD
=====
)
WHILE(1)
CALL(Info)
VARIABLE(name)MRGCMND(ENDFIELD)
VARIABLE(address)MRGCMND(ENDFIELD)
VARIABLE(city)MRGCMND(ENDFIELD)
VARIABLE(state)MRGCMND(ENDFIELD)
VARIABLE(zip)MRGCMND(ENDFIELD)
MRGCMND(ENDRECORD)
=====
ENDWHILE
LABEL(Info)
GETSTRING(name;Enter Name or choose Cancel to Quit;Name)
IFEXISTS(name)
ELSE
QUIT
ENDIF
GETSTRING(address;Enter Address;Address)
GETSTRING(city;Enter City;City)
```

```
GETSTRING(state;Enter State;State)
GETSTRING(zip;Enter ZIP Code;ZIP Code)
RETURN
)
```

## **CANCELOFF**

Use **CANCELOFF** to stop the **Esc** key from performing its normal function. **CANCELOFF** is useful to prevent a user from stopping a merge by pressing **Esc**.

```
CANCELOFF
```

- (During this part of the merge, pressing **Cancel** does not end the merge.)

```
CANCELON
```

- (During this part of the merge, pressing **Cancel** does not end the merge.)

## **CANCELON**

Use **CANCELON** to enable the **Esc** key after it has been disabled with the **CANCELOFF** command.

For an example of **CANCELON**, see “**CANCELOFF**” on page 132.

## **CAPS(expr)**

Use **CAPS** to capitalize the first character of each word in the returned expression *expr*.

To change all letters in a returned expression to uppercase or lowercase, see “**TOUPPER(expr)**” on page 168 or “**TOLOWER(expr)**” on page 168. To capitalize only the first letter of the first word, see “**FIRSTCAP(expr)**” on page 144.

In the example below, **CAPS** capitalizes the first letter of each word in the name, address, and city variables. **TOUPPER** capitalizes both letters of the state abbreviation. **FIRSTCAP** capitalizes the first letter of the first word in the comments string. **TOLOWER** ensures that the merge will continue if either an uppercase or a lowercase “y” is assigned to **VARIABLE(char)**.

```
CODES(
```

```
LABEL(info)
```

```
GETSTRING(name;Enter Name;Name)
```

```

ASSIGN(name;CAPS(VARIABLE(name)))
GETSTRING(address;Enter Address;Address)
ASSIGN(address;CAPS(VARIABLE(address)))
GETSTRING(city;Enter City;City)
ASSIGN(city;CAPS(VARIABLE(city)))
GETSTRING(state;Enter state abbreviation;State)
ASSIGN(state;TOUPPER(VARIABLE(state)))
GETSTRING(zip;Enter ZIP code;ZIP)
GETSTRING(comments;Enter comments;Additional Comments)
ASSIGN(comments;FIRSTCAP(VARIABLE(comments)))
VARIABLE(name)
VARIABLE(address)
VARIABLE(city) VARIABLE(state) VARIABLE(zip)
VARIABLE(comments)
=====
CODES(
CHAR(char;Do Another Record?;Continue (Y/N)?)
IF(TOLOWER(VARIABLE(char)) = y)
  GO(info)
ENDIF
)

```

### **CASEOF(expr[;...;expr])**

Use **CASEOF** when using the **SWITCH** command. When you use **CASEOF**, you can enter multiple merge expressions within the parentheses.

For examples of **CASEOF**, see “**SWITCH(expr)**” on page 166 and “**FORNEXT(var;start;stop[;step])**” on page 144.

## **CHAINDATA(filename)**

Use **CHAINDATA** to begin using records from the named data file, when the end of the current data file is reached. This command is especially useful if you have broken a large data file into several smaller files. If you insert **CHAINDATA** in the smaller data files, they will act like one data file.

The following example shows how a large data file has been broken into two smaller files. When you specify the first small file as the data file in a merge, the records of the second small file will be used as soon as those in the first small file are completed.

### **First Small File:**

```
FIELDNAMES(name;status) ENDRECORD
```

```
=====
```

```
PROCESSON CHAINDATA(file2)PROCESOFF COMMENT(
```

The **PROCESS** commands ensure that the **CHAINDATA** command executes.

The merge stores the **CHAINDATA** command and filename, then executes it when the current data file has ended.)

```
JoseENDFIELD
```

```
StaffENDFIELD
```

```
ENDRECORD
```

```
=====
```

- (additional records)

```
=====
```

```
BarbaraENDFIELD
```

```
ProfessionalENDFIELD
```

```
ENDRECORD
```

### **Second Small File (named FILE2 in the default directory):**

```
FIELDNAMES(name;status)
```

```
ENDRECORD
```

```
=====
```

JulieENDFIELD

Part-timeENDFIELD

ENDRECORD

=====

- (additional records)

=====

ShojiENDFIELD

Leave of AbsenceENDFIELD

ENDRECORD

=====

### **CHAINFORM(filename)**

Use **CHAINFORM** to continue the merge with an additional form file after all records have been merged with the current form file.

The following example uses **CHAINFORM** to merge an envelope form file with the current data file.

CHAINFORM(envelope.frm)

- (body of form file)

### **CHAINMACRO(macroname)**

Use **CHAINMACRO** to start the named macro at the end of the merge, if the merge terminates normally. You can place **CHAINMACRO** anywhere in the form file.

Only the last macro chained during the merge is executed.

In the following example, the chained macro **print.wcm** executes when the merge is complete.

CHAINMACRO(print)

COMMENT(Chain the macro PRINT.WCM when the merge is complete.)

DATE

Dear FIELD(Name),

- (rest of the letter)

Sincerely,

Chris Smith

### **CHAR(var[;prompt][;title])**

Use **CHAR** to prompt the user to input a single character. **CHAR** prompts you with a message and waits until you press a single key.

The pressed key is assigned to the specified variable var. “Prompt” is the information displayed in the dialog box telling the user what to do.

“Title” is the title of the dialog box created during the merge.

For an example of **CHAR**, see “CTON(character)” on page 137.

### **CODES(merge codes)**

Use **CODES** to enter merge codes and have the merge ignore any formatting or text you might add. The merge carries out all the merge commands inside the **CODES** parentheses but ignores any text or formatting (such as hard returns). To enter text or formatting inside the **CODES** parentheses, use the **INSERT** command.

The following example shows a code that pauses the merge at each record and lets you choose which records you want to merge.

```
CODES(  
LABEL(top)  
ASSIGN(field;FIELD(1))  
EMBEDMACRO(  
PERSIST(fld)  
PROMPT(“Which name would you like to merge? ”;“ OK to merge “+field+”?”;2)  
PAUSE  
ENDPROMPT  
)  
IF(VARIABLE(fld)=2)
```

```

INSERT(FIELD(1))
INSERT(FIELD(2))
INSERT(FIELD(3))
=====
ENDIF
NEXTRECORD
GO(top)
)

```

For another example of **CODES**, see “**CTON(character)**” on page 137.

### **COMMENT(comment)**

Use **COMMENT** to include comments that will make the merge easier to understand. Merge ignores everything between the **COMMENT** parentheses.

For an example of **COMMENT**, see “**CTON(character)**” on page 137.

### **CONTINUE**

Use **CONTINUE** at the end of a **CASEOF** statement to execute the commands in the next **CASEOF** statement.

For examples of **CONTINUE**, see “**SWITCH(expr)**” on page 166 and “**FORNEXT(var;start;stop[;step])**” on page 144.

### **CTON(character)**

Use **CTON** (Character to number) to convert a character (any character in the WordPerfect character sets) to a unique number (its WordPerfect “key value”). **CTON** performs the inverse (opposite) function of **NTOC**. You can use the key value to calculate the WordPerfect character set value.

#### **To calculate the character set value for a given character**

- 1 Use **CTON** to obtain the key value.
- 2 Divide the key value by 256.

The quotient is the number of the WordPerfect character set (0–12).

The remainder is the character number in the character set (0–255).

The following example calculates the character set value for a character. Because all the variables are local, this file could be nested within another file and would not change any of the original file's variables, even if they have the same name. The comments in the first part of this merge do not need to be in a **COMMENT** command, because they are within the **CODES** command. The final comment must be in a **COMMENT** command, or it will be inserted in the merged document.

```
CODES(  
  ASSIGNLOCAL(char;0)  
  Initialize a local variable named char.  
  CHAR(char;Type a character;Display Character Set Value)  
  Assign input to the variable char.  
  ASSIGNLOCAL(set;CTON(VARIABLE(char))/256)  
  Assign quotient to a variable named set.  
  ASSIGNLOCAL(num;CTON(VARIABLE(char))%256)  
  Assign remainder to a variable named num.  
)  
VARIABLE(set),VARIABLE(num)  
COMMENT(Write out the character set value.)
```

## DATE

Use **DATE** to insert the current date in merged documents, as formatted in the Date format feature. The merged file will contain the current date as indicated by your computer's internal clock.

For an example of **DATE**, see “BEEP” on page 129.

## DEFAULT

Use **DEFAULT** with the **SWITCH** command to cover all cases not covered by **CASEOF**. When the expression being tested is different from all the **CASEOF** expressions, the merge executes **DEFAULT**.

For examples of **DEFAULT**, see “SWITCH(expr)” on page 166 and “FORNEXT(var;start;stop[;step])” on page 144.



## **DISPLAYSTOP**

Use **DISPLAYSTOP** to stop the display of text after a **KEYBOARD** command. For example, after a **KEYBOARD** command, the merge displays as many as 1000 characters ahead. **DISPLAYSTOP** placed in text after **KEYBOARD** stops the text from displaying from that point on.

DATE

FIELD(name)

FIELD(address)

FIELD(city)

Dear FIELD(name):

It has come to our attention that your bill has not been paid. Please send us \$KEYBOARD(Enter how much they owe us — Press **Alt + Enter** or choose Continue when done), which is the balance of your unpaid account.DISPLAYSTOP

If the balance of your account is not paid in KEYBOARD(Enter how many days — Press **Alt + Enter** or choose Continue when done) days, we will be forced to take legal action.DISPLAYSTOP

If you have already made arrangements to settle your account, please disregard this notice.

The rest of the letter after **DISPLAYSTOP** does not display on the screen while the user is prompted to type information at the keyboard.

This removes distracting information from the screen, so users can focus their attention on the area where they are to enter information.

## **DOCUMENT(filename)**

Use **DOCUMENT** to insert the named document into the merged document at the **DOCUMENT** command. The document is not processed as a merge file, so any merge commands in the inserted document are included in the file but not executed. This command is commonly used for inserting variable paragraphs in contracts and similar documents (often called document assembly) or for building a form or data file.

In the following example, **DOCUMENT** inserts the document called **oneroom.mrg** in the merged document if the variable **rooms** is equal to 1, or it inserts the document **tworooms.mrg** if the variable **rooms** is not equal to 1.

```
CODES(  
CHAR(rooms;Enter the number of rooms (1 or 2); Number of Rooms)  
IF(VARIABLE(rooms)=1)  
DOCUMENT(c:\mrgfiles\oneroom.mrg)  
ELSE  
DOCUMENT(c:\mrgfiles\tworooms.mrg)  
ENDIF  
)
```

## **ELSE**

Use **ELSE** with **IF**, **IFBLANK**, **IFEXISTS**, **IFNOTBLANK**, and **ENDIF**. **ELSE** marks the beginning of the commands that execute should the **IF** value be zero (false).

**ELSE** is not a required part of an **IF** statement. It should be used when there are certain steps that need to be performed only when the **IF** value is zero (false).

Commands that appear after **ENDIF** execute whether or not the **IF** value is true.

For an example of **ELSE**, see “**DOCUMENT(filename)**” on page 139.

## **EMBEDMACRO(macro statements)**

Use **EMBEDMACRO** to embed macro commands within a merge. You can enter any macro command inside the **EMBEDMACRO** parentheses. The macro commands are compiled the first time they are encountered during the merge.

For an example of **EMBEDMACRO**, see “**CODES(merge codes)**” on page 136.

## **ENDFIELD**

Use **ENDFIELD** to signal the end of a field in a data file. A hard return [HRt] is automatically inserted with this command to make the file easier to read.

When you insert this command, the number of the field where the cursor is currently located displays at the bottom of the window. If you use **FIELDNAMES**, the name of the field appears instead of the number.

Records in the following data file have three fields:

International ExportingENDFIELD

(801) 555-4421ENDFIELD

George WileyENDFIELD

ENDRECORD

=====

Tradewinds, Inc.ENDFIELD

(409) 555-3567ENDFIELD

Susan EscherENDFIELD

ENDRECORD

=====

## **ENDFOR**

Use **ENDFOR** to signal the end of **FORNEXT** and **FOREACH** loops.

For an example of **ENDFOR**, see “**FORNEXT**(var;start;stop[;step])” on page 144.

## **ENDIF**

Use **ENDIF** to mark the end of an **IF** structure. **ENDIF** is used with **IF**, **IFBLANK**, **IFEXISTS**, **IFNOTBLANK**, and **ELSE**.

For an example of **ENDIF**, see “**DOCUMENT**(filename)” on page 139.

## **ENDRECORD**

Use **ENDRECORD** to signal the end of a record in a data file. A hard page break is inserted automatically with this command to make the file easier to read.

When you insert this command, the number of the field where the cursor is currently located displays at the bottom of the window. If you use **FIELDNAMES**, the name of the field appears instead of the number.

For examples of **ENDRECORD**, see “**ENDFIELD**” on page 140 and “**FIELDNAMES**(name1;...;nameN)” on page 142.

## **ENDSWITCH**

Use **ENDSWITCH** to end a **SWITCH** statement.

For an example of **ENDSWITCH**, see “**SWITCH(expr)**” on page 166.

## **ENDWHILE**

Use **ENDWHILE** to signal the end of a **WHILE** loop.

For an example of **ENDWHILE**, see “**NEXTRECORD**” on page 153.

## **FIELD(field)**

Use **FIELD** to insert the contents of the named (or numbered) field in the merged document or in another merge command.

In the following example, the contents of the name and address fields are inserted in the letter.

**FIELD(name)**

**FIELD(address)**

Dear **FIELD(name)**:

For additional examples of **FIELD**, see “**DISPLAYSTOP**” on page 139.

## **FIELDNAMES(name1;...;nameN)**

Use **FIELDNAMES** to declare the names and order of the fields in a data file. Using this command in the data file allows you to reference the fields by name in a form file, which is usually easier than remembering the order of the fields and referencing them by number.

WordPerfect places **FIELDNAMES** at the top of the data file. It must be located at the top of the file to work correctly. If records have more fields than those declared in **FIELDNAMES**, additional fields are numbered. When initially inserted, the command and field names are all on one line. You may find it easier to read if you put each field name on a separate line, as in the example below. A hard page code **{HPg}** is automatically inserted when you insert **ENDRECORD**.

After you insert this command, the name or number of the field where the cursor is currently located displays on the status bar at the bottom of the window.

In the following example, the first three fields of each record are named using **FIELDNAMES**. The additional fields are not named and are therefore numbered Field 4, Field 5, and so on.

FIELDNAMES(

company;

phone;

contact;

)ENDRECORD

=====

International ExportingENDFIELD

(801) 555-4421ENDFIELD

George WileyENDFIELD

FurnitureENDFIELD

45ENDFIELD

\$1.5 millionENDFIELD

ENDRECORD

=====

Tradewinds, Inc.ENDFIELD

(409) 555-3567ENDFIELD

Susan EscherENDFIELD

MemorabiliaENDFIELD

200ENDFIELD

\$2.0 millionENDFIELD

ENDRECORD

=====

For another example of **FIELDNAMES**, see “CHAINDATA(filename)” on page 134.

## **FIRSTCAP(expr)**

Use **FIRSTCAP** to capitalize the first letter of the first word in the returned expression `expr`.

For an example of **FIRSTCAP**, see “**CAPS(expr)**” on page 132.

## **FOREACH(var;expr1;...;exprN)**

Use **FOREACH** to assign a list of items to one variable `var`. The merge then executes the subsequent commands for each `expr` listed in **FOREACH**, changing `var` to the next value at the end of each loop.

For example, the following codes assign different days of the week to the variable `weekday` until it matches the field `day`.

```
FOREACH(weekday;Monday;Tuesday;Wednesday;Thursday;Friday)
IF(VARIABLE(weekday)=FIELD(day))
    BREAK
ENDIF
ENDFOR
```

## **FORNEXT(var;start;stop[;step])**

Use **FORNEXT** to execute a series of commands a certain number of times. The commands between **FORNEXT** and **ENDFOR** are executed once for each value of `var` between `start` and `stop` inclusive, as incremented by `step`.

The `start`, `stop`, and `step` values can be entered in the command as expressions, variables, or other commands. Each expression, variable, or command is evaluated, and the resulting value is assigned to the variable. The `step` value is optional; its default value is 1 (or -1, if `stop` is less than `start`).

In any **FORNEXT** loop, **ENDFOR** must be used to determine the end of the series of commands included in the loop. **ENDFOR** sends execution to the top of the loop for the next iteration. You can also use **NEXT** to send execution to the next iteration, but you must still include **ENDFOR** to mark the end of the loop.

**FORNEXT** initializes the variable with the `start` value. If the variable has not been assigned, it is defined as a local variable. You do not need to pre-assign the variable.

Each subsequent time **FORNEXT** is executed (at the top of the loop), the variable is incremented by the step value.

The example below uses a **FORNEXT** loop to apply a **SWITCH** statement once for each character in the sentence that is entered.

```
CODES(  
GETSTRING(sentence;Type a sentence;Sentence To Be Evaluated)  
ASSIGN(vowels;0)  
ASSIGN(consonants;0)  
ASSIGN(misc;0)  
FORNEXT(i;1;STRLEN(VARIABLE(sentence));)  
  SWITCH(TOLOWER(SUBSTR(VARIABLE(sentence);VARIABLE(i);1)))  
    CASEOF(a;e;i;o;u)  
      ASSIGN(vowels;VARIABLE(vowels)+1)  
    CASEOF(b;c;d)  
      CONTINUE  
    CASEOF(f;g;h;)  
      CONTINUE  
    CASEOF(j;k;l;m;n)  
      CONTINUE  
    CASEOF(p;q;r;s;t)  
      CONTINUE  
    CASEOF(v;w;x;y;z)  
      ASSIGN(consonants;VARIABLE(consonants)+1)  
    DEFAULT  
      ASSIGN(misc;VARIABLE(misc)+1)  
  ENDSWITCH  
ENDFOR
```

)

There were:

VARIABLE(vowels) vowels,

VARIABLE(consonants) consonants, and

VARIABLE(misc) other characters.

### **GETSTRING(var[;prompt][;title])**

Use **GETSTRING** to prompt the user by displaying a dialog box.

Information returned by the dialog box is assigned to the variable var.

“Prompt” is the information displayed in the dialog box telling the user what to do.

“Title” is the title of the dialog box created during the merge.

For an example of **GETSTRING**, see “CAPS(expr)” on page 132.

### **GO(label)**

Use **GO** to transfer execution to the location in the merge file indicated by label. It is used in conjunction with **LABEL**, which marks the place to which execution is transferred.

**GO** is useful when you want to skip a part of your merge or transfer control to another part based on a condition. Unlike **CALL**, **GO** does not require the merge to return to that point of execution.

For an example of **GO**, see “CAPS(expr)” on page 132.

### **IF(expr)**

Use **IF** to execute a set of commands only if a certain condition exists.

If the condition exists (expr is evaluated to be true), the commands between the **IF** and **ENDIF** are executed. If an **ELSE** is included, the commands between the **IF** and **ELSE** are executed if the expression is true; otherwise, the commands between the **ELSE** and **ENDIF** are executed.

The expr argument is usually a logical expression. An expression is true if it is evaluated as a non-zero number. For example, when the expression  $4=4$  is evaluated, the result is



-1 (which corresponds to true). The value is false if it results in a 0 or contains nothing at all.

An **IF** statement always begins with **IF** and ends with **ENDIF**. If you want certain commands to execute only when the value is not true, use **ELSE**.

For an example of **IF**, see “DOCUMENT(filename)” on page 139.

### **IFBLANK(field)**

Use **IFBLANK** to execute a set of commands if the indicated field is blank. Be sure to end the set of commands to be executed with an **ENDIF** command. See also “**IFNOTBLANK(field)**” on page 148.

In the following example, the data file records have a Title field and a Name field. The merge determines if the Title field of the current record is blank. If it is blank, only the name is inserted in the merged document. Otherwise, the merge inserts the title before the name.

```
CODES(
```

```
IFBLANK(title)
```

```
    If the Title field is blank in this record,
```

```
INSERT(FIELD(name))
```

```
    Write out just the Name.
```

```
ELSE
```

```
    Otherwise,
```

```
INSERT(FIELD(title) FIELD(name))
```

```
    Write the Title before the Name.
```

```
ENDIF
```

```
    End of IFBLANK statement.
```

```
)
```

## **IFEXISTS(var)**

Use **IFEXISTS** to check if the indicated variable has been defined. If it has, the commands following **IFEXISTS** are executed. Like other **IF** statements, **IFEXISTS** requires an **ENDIF** and can use an **ELSE** command.

The following commands could be placed at the end of any form file.

They cancel the merge if any key is pressed.

LOOK(Key)

IFEXISTS(Key)

STOP

ENDIF

## **IFNOTBLANK(field)**

Use **IFNOTBLANK** to execute a set of commands if the indicated field is not blank. Be sure to end the set of commands to be executed with an **ENDIF** command. See also “**IFBLANK(field)**” on page 147.

In the following example, the data merge file records have a Title field and a Name field. The merge determines if the Title field of the current record is blank. If it is not, the title is inserted before the name. Otherwise, the merge inserts only the name.

CODES(

IFNOTBLANK(title)

    If the Title field is not blank in this record,

    INSERT(FIELD(title) FIELD(name))

    Write the Title before the Name.

ELSE

    Otherwise,

    INSERT(FIELD(name))

    Write out only the Name.

ENDIF

    End of IFNOTBLANK statement.

)

## **INSERT(text)**

Use **INSERT** to enter text or formatting inside a **CODES** command.

For example, the merge will not recognize a hard return inside the **CODES** parentheses. To make the merge return a hard return, use **INSERT**, then press hard return.

For examples of **INSERT**, see “**IFNOTBLANK(field)**” on page 148 and “**NESTMACRO(macroname)**” on page 151.

## **KEYBOARD([prompt])**

Use **KEYBOARD** to pause an executing merge so the user can enter information from the keyboard. As many as 1,000 characters of the form file are displayed. Merge codes are displayed using the current display setting. The merge continues when you click **Continue** on the **Merge** toolbar or press **Alt + Enter (ENDFIELD)**.

While an executing merge is paused at **KEYBOARD**, you can execute **QUIT**, **NEXTRECORD**, or **STOP** from the keyboard.

In the following example, the **KEYBOARD** commands pause to let you enter the “From:,” “To:,” and “Subject:” text as the merge is executed.

MEMO

To: BEEP KEYBOARD(Enter To information)

From: BEEP KEYBOARD(Enter From information)

Date: DATE

Subject: BEEP KEYBOARD(Enter Subject information)

If **KEYBOARD** is executed within another merge command, a dialog box displays with the indicated prompt. You cannot execute commands from the keyboard, but any text entered at the prompt is inserted into the merged document.

## **LABEL(label)**

Use **LABEL** to mark a place in the merge file. Execution can be sent directly to the label from any place in the merge file. **CALL** and **GO** are used to send execution to the label.

The label name distinguishes one label from another. Label names can be as many as 30 characters long, including spaces. Different labels in the same merge file must have different names. If a name is duplicated, the first one is used, and the other is ignored.

Do not assign a label and a local variable the same name, or the merge may not function properly.

For examples of **LABEL**, see “**CALL(label)**” on page 130 and “**CAPS(expr)**” on page 132.

### **LOOK(var)**

Use **LOOK** to determine if a key has been pressed. If it has, that key is assigned to the variable; it is not executed. If no key has been pressed, the variable is deleted; execution continues without stopping.

For an example of **LOOK**, see “**IFEXISTS(var)**” on page 148.

### **MRGCMND(merge codes)**

Use **MRGCMND** to insert text, codes, and commands in the document being created by the merge. Any text, codes, or merge commands that appear between the **MRGCMND** parentheses are sent directly to the merged document without the commands being interpreted or executed.

For an example of **MRGCMND**, see “**CALL(label)**” on page 130.

### **NESTDATA(filename)**

Use **NESTDATA** to interrupt the use of the current data file and switch to another data file during the merge. The parent data file then continues only when the merge on the nested data file has been completed. You can nest data files as many as 10 levels deep. For information, see “Levels” on page 170.

If you nest from within one data file to another, be careful to avoid infinite loops. Use **CANCEL** or **BREAK** to terminate the loop.

When you nest a data file, the switch to that file occurs immediately.

When you chain data files, the switch to the new data file is made when the end of the current data file is reached. For more information, see “**CHAINDATA(filename)**” on page 134.

For an example of **NESTDATA**, see “**NESTFORM(filename)**” on page 151.

## **NESTFORM(filename)**

Use **NESTFORM** to turn control of the merge over to another form file. When the commands in the nested file have been executed, control returns to the original form file, where execution resumes after **NESTFORM**. For information on how to change the data file, see “**NESTDATA(filename)**” on page 150.

You can nest form files as many as 10 levels deep. Using **NESTFORM** without specifying a filename is the same as using **SUBSTFORM** with the current form filename as the argument. In this case, **NESTFORM** does not use one of the 10 nest levels. For more information, see “Levels” on page 170.

**FIELD(name),**

It has been a pleasure serving you this year.

**CODES(**

**IF(FIELD(balance)!=0)**

**NESTDATA(transact.dat)**

**NESTFORM(invoice.frm)**

**ENDIF**

**)**

Sincerely,

## **NESTMACRO(macroname)**

Use **NESTMACRO** to execute the named macro during a merge.

When the macro is finished, the merge continues with the code following **NESTMACRO**.

Macros created in earlier versions of WordPerfect (before version 6.x) will need to be converted.

The following example nests a macro that computes the interest on an account balance.

**CODES(**

**ASSIGN(balance;FIELD(balance))**

**NESTMACRO(calcint)**

**INSERT(Interest on this balance is VARIABLE(interest))**

)

## **NEXT**

Use **NEXT** to execute the next iteration of a **FORNEXT**, **FOREACH**, or **WHILE** loop. Usually, the **ENDFOR** or **ENDWHILE** that ends the loop sends execution to the next iteration. However, you can use **NEXT** to send execution to the next iteration from anywhere within the loop. For example, you may use nested **IF** statements as part of the loop. Then, when a certain condition is true, execution will skip the rest of the commands in the loop and go to the next iteration. In this case, you would use **NEXT** at the point where you want the next iteration to begin.

Even if you use **NEXT** in a loop, you must still use an **ENDFOR** or **ENDWHILE** to mark the end of the loop.

The following merge writes \*\*\*\*\*@@@@@.

CODES(  
FORNEXT(i;1;15;1)

Repeat the loop 15 times, starting at 1, ending at 15, in increments of 1.

IF(VARIABLE(i)10)

If variable i is greater than 10,

INSERT(@)

write an @,

NEXT

and skip to the next iteration of this FORNEXT loop.

ENDIF

INSERT(\*)

Write an \* each time the loop is completed.

ENDFOR

)

## NEXTRECORD

Use **NEXTRECORD** to move the record pointer in the data file to the next record. If it does not find the next record, it ends the merge or returns the merge to the previous data file if the data file was nested.

While an executing merge is paused at **KEYBOARD**, you can execute **NEXTRECORD** from the keyboard.

In this example, the data file is searched until the variable company name matches the company field in the data file. When a match is found, the contents of the amount field for that record in the data file are written to the merged document.

```
CODES(  
  WHILE(VARIABLE(Company Name)!=FIELD(Company))  
    NEXTRECORD  
  ENDWHILE  
)  
FIELD(Amount)
```

## NTOC(number)

Use **NTOC** (Number to character) to convert a WordPerfect key value or character set number to its character equivalent. It performs the inverse function of **CTON**. For example, the **NTOC** of 294 is Ç.

### To calculate the key value for a given character set value

- Multiply the character set number by 256, then add the number of the character.

For example, “Ç” is character number 38 in Character Set 1.

Multiply 256 times 1 (256), then add 38 (294). The **NTOC** of 294 is Ç.

**NTOC** will return nothing if you enter a number that is not equivalent to a character.

The following example prompts for a number, then returns the character equivalent.

```
GETSTRING(num;Enter a key value number;)  
NTOC(VARIABLE(num))
```

## **ONCANCEL(action)**

Use **ONCANCEL** to specify what the merge does if you press **Esc** (Cancel) or if a **RETURNCANCEL** has been returned by a subroutine, a nested macro, or a nested merge. When a Cancel occurs, the merge performs the default action (**STOP**) if it has not already encountered the **ONCANCEL** command. For this reason, it is a good idea to place the command before a Cancel can occur, otherwise execution will terminate when **Esc** is pressed. If no action is specified in **ONCANCEL**, the Cancel is ignored, and execution continues as if there has been no Cancel.

Valid actions available with this command are

- **BREAK**
- **CALL**
- **GO**
- **QUIT**
- **RETURN**
- **RETURNCANCEL**
- **RETURNERROR**
- **STOP**

When **Esc** is pressed, the last **ONCANCEL** command encountered in the file is executed.

**ONCANCEL** is local to the file in which it is encountered. It cannot be used from other files. For example, a data file cannot use **ONCANCEL** from a form file.

In the following example, if you press **Esc** during the merge, the end subroutine is executed.

```
CODES(
```

```
ONCANCEL(GO(end))
```

If **Esc** is pressed during the merge, execute the **End** subroutine.

- (commands in form file)

```
STOP
```

```
LABEL(end)
```

Beginning of **End** subroutine.



PROMPT(Merge canceled prematurely.)

Send notification message.

WAIT(40)

Display message for 4 seconds.

STOP

Terminate execution.

)

For another example of **ONCANCEL**, see “**RETURNCANCEL**” on page 160.

### **ONERROR(action)**

Use **ONERROR** to tell WordPerfect what to do if an error is detected in merge execution or if a **RETURNERROR** has been returned by a subroutine or nested macro or merge.

Inserting **ONERROR** without an action causes the merge to ignore the error and continue execution when possible.

The errors that can be trapped with this command are

- File not found
- Print queue errors
- End of file condition returned by a **NEXTRECORD**

If you chain a file that does not exist or is not found, the error condition is not generated until the merge tries to execute the chained file (that is, at the end of the current merge file). For more information, see also “**CHAINDATA(filename)**” on page 134, “**CHAINFORM(filename)**” on page 135, and “**CHAINMACRO(macroname)**” on page 135.

The default action is **STOP**. For a list of other possible actions, see “**ONCANCEL(action)**” on page 154.

**ONERROR** is local to the file in which it is encountered. It cannot be seen from other files. For example, a data file cannot use **ONERROR** from a form file.

In the following example, a new form file is nested. **ONERROR** specifies that subroutine error be executed if the file is not found when the merge tries to nest it.

```
CODES( ONERROR(GO(error))
```

If an error is generated, execute the Error subroutine.

- (more merge commands)

NESTFORM(invoice.frm)

- (more merge commands)

STOP

LABEL(error)

If the file was not found when the merge tried to nest it,  
execution moves here.

PROMPT(File not found. Move INVOICE.FRM to default directory and start merge  
again.)

Send a message to the user.

WAIT(15)

Display the message for 1.5 seconds.

STOP

Terminate execution.

)

For another example of **ONERROR**, see “**RETURNERROR**” on page 161.

## **PAGEOFF**

Use **PAGEOFF** to eliminate the hard page code [HPg] between copies of the form file in the merged document. Use **PAGEON** to begin inserting hard page codes again after you have used **PAGEOFF**.

**PAGEON** and **PAGEOFF** are global to the merge; they may be included in any form or data file and are in effect for all the files in the merge until the opposite command is encountered. **PAGEOFF** and **PAGEON** override the options set in the **Merge Run** dialog box.

These commands are useful for merging labels or for including multiple records in a document. You can also use **PAGEOFF** with **PRINT** to eliminate blank pages between copies of the merged document when merging to the printer.

For an example of **PAGEOFF**, see “**PAGEON**” on page 157.

## **PAGEON**

Use **PAGEON** to reinstate the use of hard page codes between copies of the form file in the merged document. See also “**PAGEOFF**” on page 156.

In the example below, the nested form file, **list.pf**, creates a list of players on a given team. The final result of the merge is a list of the players on each team, one team per page.

**CODES(**

**ASSIGN(team;FIELD(team))**

Assign the current field to a global variable so that the nested form file can use it.

**INSERT(These people are on Team FIELD(team):)**

**PAGEOFF**

This command prevents the insertion of a hard page between iterations of the nested form file.

**NESTFORM(list.frm)**

This form file produces a list using the Name field of all records whose Team field matches the current Team variable.

**PAGEON**

This command restores the use of page breaks to allow one team list per page.

)

## **POSTNET(string)**

Use **POSTNET** to insert a **POSTNET** bar code into a form file for letters, envelopes, or labels. For the string parameter, you can type the bar code digits or enter a field for the digits.

The following is a sample form file for an envelope including the return address and a **POSTNET** bar code:

JASPER DEAN

2745 CHARLES DU DRE PKWY

MADISON WI 53725-9876

POSTNET(FIELD(zipcode))

FIELD(name)

FIELD(address)

FIELD(city/state) FIELD(zipcode)

When this form file is merged, the mailing address will return a different name, address, city/state, and bar code for each record.

## **PRINT**

Use **PRINT** to send the current merged text to the printer. Once the text is sent to the printer, it is no longer in the merged document.

When you merge to the printer using this command, the usual page break is still inserted between each iteration of the form file. To eliminate the extra page between each copy, insert **PAGEOFF** before **PRINT** as shown in the example.

The data file to be used with the form file in the following example contains 1,000 records. If you were to merge it to the document window, the resulting document would have 1,000 pages. This merge uses **PRINT** to send each letter to the printer as soon as it is merged.

ABC COMPANY

245 WEST CENTER STREET LONG BEACH CA 90807

DATE

FIELD(name)

FIELD(company)

Dear FIELD(firstname):

Thank you for your inquiry regarding our new product.

- (rest of letter)

Sincerely,

Amy Wilcox

Product Manager

PAGEOFF PRINT

## **PROCESSOFF**

Use **PROCESSOFF** to end a **PROCESSON** command.

For an example of **PROCESSON** and **PROCESSOFF**, see “CHAINDATA(filename)” on page 134.

## **PROCESSON**

Use **PROCESSON** with **PROCESSOFF** in a data merge file to ensure that codes are processed even if they are not in the field or record being processed by the form file.

For an example of **PROCESSON** and **PROCESSOFF**, see “CHAINDATA(filename)” on page 134.

## **PROMPT(message)**

Use **PROMPT** to display a message that gives instructions to the user.

For examples of **PROMPT**, see “ONCANCEL(action)” on page 154 and “ONERROR(action)” on page 155.

## **QUIT**

Use **QUIT** to stop the execution of the merge. For example, while a merge is paused at **KEYBOARD**, you can execute **QUIT** from the keyboard.

In a merge, the rest of the form file after **QUIT** is written out to the resulting merged document before the merge terminates, but any commands after **QUIT** are not executed. If you don't want the rest of the form file written out, use **STOP** instead of **QUIT**.

If **QUIT** is used in a data file, the data file is abandoned at that point.

However, the rest of the form file is written out (but not processed) just as if the command had been encountered in the form file. The merge then terminates.

The following example is a standard memo sent by a personnel department to all employees before their six-month salary review. The merge ends just after the **DATE** command, but the rest of the memo is written out to the resulting merged document.

MEMO

To: KEYBOARD(Enter To information)

From: Kim Charleston, Personnel

Date: DATE QUIT

Subject: Six-month Review Preparation

=====

- (rest of memo)

## **REPEATROW**

Use **REPEATROW** when merging information into a table from a data file. The **REPEATROW** command in a row inserts that row for each record in the data file.

## **RETURN**

Use **RETURN** to mark the end of a subroutine and signal the merge to return from a **CALL** command. **RETURN** must be paired with **CALL**, or an error message displays.

For an example of **RETURN**, see “**CALL**(label)” on page 130.

## **RETURNCANCEL**

Use **RETURNCANCEL** to cause execution to leave the current level and return a Cancel to the next higher level. For more information, see “Levels” on page 170.

In this example, **RETURNCANCEL** is used to return a Cancel from a status checking subroutine.

CODES(  
ONCANCEL(GO(send message))

- (During this part of the merge, if the user presses Cancel,
- execution is transferred to the Send Message label.)

CALL(check status)

- (more merge commands)

STOP

LABEL(check status)

IF(VARIABLE(chk)=0)

```
RETURNCANCEL
ELSE
RETURN
ENDIF
)
```

If the `chk` variable equals `FALSE` (0), then the `ONCANCEL` condition is executed; if it is `TRUE`, then it returns without executing the `ONCANCEL` condition.

## **RETURNERROR**

Use `RETURNERROR` to cause execution to leave the current level and return an error to the next higher level. For more information, see “Levels” on page 170.

In this example, `RETURNERROR` returns an error from a subroutine that nests a form file.

```
CODES(
ONERROR(GO(error))
    If an error is generated, execute the Error subroutine.
    • (more merge commands)
CALL(getfile)
    • (more merge commands)
STOP
LABEL(getfile)
ONERROR(RETURNERROR)
NESTFORM(invoice.frm)
RETURN
LABEL(error)
```

If the file was not found when the merge tried to nest it, execution moves here.

```
PROMPT(File not found. Move INVOICE.FRM to default directory and start merge again.)
```

Send a message to the user.

WAIT(15)

Display the message for 1.5 seconds.

STOP

Terminate execution

)

## **REWRITE**

Use **REWRITE** to rewrite the document window. Since none of the merged document is written to the document window during a merge, you may want to use this command to display what has been merged at a certain point.

In the following example, **REWRITE** is used to view each letter on the screen as it is merged.

ABC COMPANY

245 WEST CENTER STREET LONG BEACH CA 90807

DATE

FIELD(name)

FIELD(company)

Dear FIELD(firstname):

Thank you for your inquiry regarding our new product.

- (rest of the letter)

Sincerely,

Amy Wilcox

Product Manager

REWRITE

## **STATUSPROMPT(message)**

Use **STATUSPROMPT** to display a message. The message is displayed during the merge. The message stays in the message window until it is cleared by another



command that uses the message window, such as another **STATUSPROMPT** or a **KEYBOARD** command.

For example, if you always run two merges one after the other, you could use **STATUSPROMPT** to display the prompt “Merge 1 has been completed” at the end of the first merge.

- (Main body of first form file)

**STATUSPROMPT**(Merge 1 has been completed.)

You could then clear the message window at the end of the second merge by using **STATUSPROMPT** with no parameters.

- (Main body of second form file)

**STATUSPROMPT**()

## **STEPOFF**

Use **STEPOFF** to turn off a single step execution after it has been turned on. See also “**STEPON**” on page 163.

## **STEPON**

Use **STEPON** for debugging merges. It causes the merge to execute one step at a time. Between each step, a message indicates what the next command is. The command executes when the user presses any key. Each character is displayed after it is written out to the resulting document.

You may find it useful to step through merges with Reveal Codes on.

- (This section will execute normally.)

**STEPON**

- (This section will execute one keystroke at a time.)

**STEPOFF**

- (This section will execute normally.)

## **STOP**

Use **STOP** to stop all execution. It is similar to **QUIT**, except that the rest of the form file is not read in. If this command is found in a nested file, execution is not returned to the parent file. Chained files are also not executed.

While an executing merge is paused at **KEYBOARD**, you can execute **STOP** from the keyboard.

For an example of **STOP**, see “**IFEXISTS(var)**” on page 148.

### **STRLEN(expr)**

Use **STRLEN** to determine the length of a variable or of the value returned by an expression. This command is useful for validating or restricting the length of user input.

You can use **FIELD**, **VARIABLE**, text, or complex expressions in the argument **expr**.

For an example of **STRLEN**, see “**SUBSTR(expr;start;length)**” on page 166.

### **STRPOS(expr;subexpr)**

Use **STRPOS** to determine the position of a **subexpr** within an **expr**.

For an example of **STRPOS**, see “**SUBSTR(expr;start;length)**” on page 166.

### **SUBSTDATA(filename)**

Use **SUBSTDATA** to change to the named data file and start with the first record in that file. The merge does not return to the original data file. If you substitute a file that is not found, or no file, an error is returned. You can use **ONERROR** to determine what should happen if this error occurs.

In the following example, two data files are used, each sorted by ZIP code in descending order, so that any records where the ZIP field is blank will be at the end of the file.

**SUBSTDATA** causes the records with no ZIP code to be skipped, and the next data file to be used.

```
CODES(  
  IFBLANK(ZIP)  
  SUBSTDATA(file2.dat)  
  ENDIF  
)
```

## **SUBSTFORM(filename)**

Use **SUBSTFORM** to change to the named form file. **SUBSTFORM** is similar to **NESTFORM** and **CHAINFORM**. The difference is that the named form file is used instead of the current form file from the point of this command on. The merge does not return to the original form file; no commands following this one in the original form file are executed. Local variables in a previous form file are erased.

If you substitute either a file that is not found or no file, an error is returned. You can use **ONERROR** to determine what should happen if this error occurs.

In the following example, the data file has a Days Overdue field. The merge begins using the form file **invoice.frm**, which substitutes a different form file depending on the number in the Days Overdue field.

At the end of each substituted file, the record pointer is moved to the next record, and **invoice.frm** is substituted, so that it will execute again.

```
CODES(  
  ASSIGN(days;FIELD(Days Overdue) DIV 30)  
  SWITCH(VARIABLE(days))  
    CASEOF(0)  
      SUBSTFORM(under30.frm)  
    CASEOF(1)  
      SUBSTFORM(under60.frm)  
    CASEOF(2)  
      SUBSTFORM(under90.frm)  
    DEFAULT  
      SUBSTFORM(90&over.frm)  
  ENDSWITCH  
)
```

In this example, the following code would be placed at the end of each substituted form file.

- (body of file)

```
NEXTRECORD
```

SUBSTFORM(invoice.frm)

### **SUBSTR(expr;start;length)**

Use **SUBSTR** to extract a portion (substring) of the expression specified in the **expr** parameter. You can specify which part of the expression to use with the **start** and **length** parameters. The **start** parameter counts from the left side of the **expr**. The **length** parameter specifies how many characters are included in the substring.

For example, if a form file contains the statement **SUBSTR(think;2;2)**, the substring “hi” is inserted into the merged document. The **start** parameter has the value 2, so the substring begins with the second character in the **expr** parameter (“h.”). The **count** parameter has the value 2, so the substring contains two characters (“h” and “i”).

You can use **FIELD**, **VARIABLE**, text, or complex expressions in the argument **expr**.

In this example, the data file has a name field where the names are stored in the format “Last, First.” **SUBSTR** extracts the first name from the name field. **STRPOS** is used to find the beginning of the first name (2 characters after the start of the comma and space). **STRLEN** is used to find the length of the first name (by subtracting the starting position of the first name from the length of the full name).

CODES(

ASSIGN(start;STRPOS(FIELD(name);,)+2)

ASSIGN(length;STRLEN(FIELD(name))-VARIABLE(start))

ASSIGN(firstname;SUBSTR(FIELD(name);VARIABLE(start);VARIABLE(length)))

VARIABLE(firstname)

)

### **SWITCH(expr)**

Use **SWITCH** with **CASEOF**, **CONTINUE**, **DEFAULT**, and **ENDSWITCH** to evaluate input and execute different functions depending on the input.

The expression in **SWITCH** must match the expression in **CASEOF** exactly. For example, “y” does not match “Y.” If no match is found in the **SWITCH** statement, execution continues after the **SWITCH** statement. You can use **DEFAULT** as the last case in the command to handle all cases that do not match. You can use **CONTINUE** to perform the commands for more than one case.

In the following example, **SWITCH** is used to include certain documents in the merge file based on the value of the class field in a data file. If the class field does not match any of the first three cases, **DEFAULT** is executed, and the file **general.fil** is included in the merged document.

Because each of the other cases ends with **CONTINUE**, the **DEFAULT** case and any cases following the one selected are executed along with the case selected. For example, if the class field contains 2nd, then the files **2ndclass.fil**, **3rdclass.fil**, and **general.fil** would all be included in the merged document for that record.

Dear FIELD(name):

You have chosen to travel FIELD(class) class. This allows you to enjoy the following benefits during your trip:

```
CODES(  
SWITCH(FIELD(class))  
  CASEOF(1st)  
    DOCUMENT(1stclass.fil)  
    CONTINUE  
  CASEOF(2nd)  
    DOCUMENT(2ndclass.fil)  
    CONTINUE  
  CASEOF(3rd)  
    DOCUMENT(3rdclass.fil)  
    CONTINUE  
  DEFAULT  
    DOCUMENT(general.fil)  
ENDSWITCH  
)
```

For another example of **SWITCH**, see “FORNEXT(var;start;stop[:step])” on page 144.

## **SYSTEM(sysvar)**

Use **SYSTEM** to return the value of the given system variable. System variables allow the merge to be aware of the current state of WordPerfect.

In the following example, the merge includes only the first three records of the form file. When the merge reaches the fourth page of the resulting merge document, it stops.

```
CODES(  
IF(SYSTEM(Page)=4)  
  STOP  
ENDIF  
)
```

- (Body of the form file)

System variables are listed on the Parameter Entry dialog box when you choose the **SYSTEM** command.

## **TOLOWER(expr)**

Use **TOLOWER** to lowercase each character in the returned expression *expr*.

For an example of **TOLOWER**, see “CAPS(*expr*)” on page 132.

## **TOUPPER(expr)**

Use **TOUPPER** to uppercase each character in the returned expression *expr*.

For an example of **TOUPPER**, see “CAPS(*expr*)” on page 132.

## **VARIABLE(var)**

Use **VARIABLE** to access the contents of global and local variables. If you have a global and a local variable with the same name, this command accesses the local variable.

There is no way to access global variables while local variables of the same name exist. For an explanation of global and local variables, see “Merge variables” on page 170.

After you assign a value to a variable (using **ASSIGN**(*var*;*expr*) or **ASSIGNLOCAL**(*var*;*expr*)), you can place the **VARIABLE** command anywhere you would normally place the variable contents. You can place it as an argument for another command, as part of an argument for another command, or by itself.

For an example of **VARIABLE**, see “**SUBSTR(expr;start;length)**” on page 166.

### **WAIT(10ths second)**

Use **WAIT** to delay further execution of the merge for the indicated time. This command is useful when you want a message to be displayed for a certain amount of time. The wait time is specified in tenths of a second (20 = 2 seconds).

For an example of **WAIT**, see “**ONCANCEL(action)**” on page 154.

### **WHILE(expr)**

Use **WHILE** to execute commands repeatedly. While the expression **expr** is true, the commands between **WHILE** and **ENDWHILE** are repeatedly executed. This command is like **FORNEXT**, except that it does not increment a value each time through the loop. In order to end the loop, you must use **BREAK** or another command that will force the expression to be evaluated as false. For more information, see “Loops” on page 173.

Remember that if you use a variable in **expr**, the variable must already exist before the **WHILE** command is executed.

For an example of **WHILE**, see “**NEXTRECORD**” on page 153.

### **ASSIGNLOCAL(var;expr)**

Use **ASSIGNLOCAL** to assign the value returned by **expr** to the local variable **var**. Local variables are accessible only to the current file; they are deleted when the merge is finished or the file is exited. See also “**ASSIGN(var;expr)**” on page 128.

For an example of **ASSIGNLOCAL**, see “**CTON(character)**” on page 137.

## **Working with levels, loops, and merge variables**

The following topics provide information about using levels, loops, and merge variables when you program a merge.

Levels

Loops

Merge variables

System variables compared to user defined variables

Global variables compared to local variables

Naming variables

Variable contents

Assigning variables

Executing variables

Variable duration

Operations on variables

## Levels

In a merge document you can have as many as 40 levels of execution per file. **IF** commands do not require a level; they can be nested indefinitely. Each **SWITCH**, **FORNEXT**, or **WHILE** uses one level.

**NESTMACRO**, **NESTFORM**, and **NESTDATA** do not require an execution level, because each nested file has 40 new execution levels.

However, they do require a nesting level. You can nest files 10 levels deep.

Merge uses separate stacks to maintain execution levels and nesting levels.

## Merge variables

A variable represents a place in memory where data is stored. As its name indicates, the data in a variable is changeable. You can use variables to calculate and keep track of text and numeric values that change during a merge.

## System variables vs. user-defined variables

There are two major types of variables in WordPerfect: system variables and user-defined variables. System variables are variables that WordPerfect creates and maintains; they contain information about the current state of the application. You cannot change the names or contents of these variables, but you can use their contents at any given time. System variables are listed in the **Parameter Entry** dialog box when you choose the system command.



User-defined variables are variables that you create. You determine the name and contents of these variables when you assign them. You can also perform operations on them to change their contents. There are two subcategories of user-defined variables: global and local.

## **Global variables compared to local variables**

Global variables are accessible from anywhere inside a merge or a macro. All global merge variables can be read by macros; macro variables can be read by merge commands if the **PERSIST** command is used in the macro.

Local variables are available only in a merge and are stored in a place in memory separate from global variables. They are accessible only from the file in which they are defined. For example, if you create a local variable named `Number` in a form file, the data file or other form files cannot access the information stored in it. When you nest merge files, the local variables in the parent file cannot be used in the nested file.

When you return to the parent file, the local variables in the nested file no longer exist, but the local variables in the parent file are once again accessible.

Local variables take precedence over global variables. For example, suppose you have both a global and a local variable named `Number`. If you try to access the global variable `Number` from inside a file where the local variable `Number` is accessible, you will get the contents of the local variable. The global variable `Number` still exists, but is inaccessible until you are no longer accessing the current merge file.

## **Naming variables**

Variable names can be as many as 30 characters long for both global and local variables. Although you can use the same name for a local and a global variable, you cannot use the same name for any two local variables or any two global variables. You should not use the same name for a local variable and a label.

Variable names are not case sensitive. `Abc`, `AbC`, `ABC`, and `abc` are read as the same variable.

Variables receive their names when they are assigned. For more information, see “Assigning variables” on page 172.

## Variable contents

All user-defined variables can contain text or numbers. A user-defined variable can hold 127 characters.

## Assigning variables

You assign a global variable with **ASSIGN** and a local variable with **ASSIGNLOCAL**. For example, the following two statements assign two different variables, one global and one local:

- `ASSIGN(Number;45)`
- `ASSIGNLOCAL(Number;36)`

**ASSIGN** creates a global variable named `Number` with “45” as its contents. **ASSIGNLOCAL** creates a separate, local variable named `Number` with “36” as its contents. For more information, see “**ASSIGN**(var;expr)” on page 128 and “**ASSIGNLOCAL**(var;expr)” on page 169.

In addition to using **ASSIGN** and **ASSIGNLOCAL**, the following commands also assign variables:

- **CHAR**
- **FOREACH**
- **GETSTRING**
- **LOOK**

The following rules determine whether the variables assigned by **CHAR**, **GETSTRING**, and **LOOK** are local or global in a merge:

- If a local variable with the name used in the command exists, the command assigns the value to the local variable.
- If no local variable with the name used in the command exists, but a global variable by that name does exist, the command assigns the value to the global variable.
- If no variable with the name used in the command exists, a global variable of that name is created and assigned by the command.

**FOR** and **FOREACH** assign variables by the same rules as above, except that if no variable with the name used in the command exists (the third rule), a local variable is created and assigned by the command. This feature allows recursion using **FOR** and **FOREACH** in a merge.

If a variable already exists and you assign new contents to it, the previous contents will be replaced without warning.

## Executing variables

You can execute (write out) a variable anywhere you want its contents to appear. For example, by executing a variable you can do the following:

- Use the contents of the variable as a subroutine
- Insert the contents as text in a document or in the message strings of programming commands
- Provide variable arguments in other programming commands

To execute a variable, use **VARIABLE**. For example, the statement **VARIABLE(Number)** would execute the variable named Number.

## Variable duration

Local variables exist only in the file in which they are defined. Once you quit the file that defined the variables or once the merge ends, the local variables are erased (and the memory assigned to them is released). However, the contents of global variables remain in memory until you exit WordPerfect. To conserve memory, you should use local variables instead of global variables whenever possible.

If you want to erase a variable without exiting a file or exiting WordPerfect, assign nothing to the variable by using the following commands: **ASSIGN(var;)** or **ASSIGNLOCAL(var;)**. These commands empty the variable of its contents and release the memory used by the variable. After you use this command, the variable no longer exists. It is a good idea to empty variables at the beginning of the merge in which they are used (unless the merge assigns new contents to them).

## Operations on variables

All variables can be compared to each other, and user-defined variables can have other operations performed on them. Operations are performed using various programming commands. See “Working with merge expressions” on page 174 and “Merge programming commands” on page 125.

## Loops

Whenever the same commands repeat several times, that section of the merge is called a loop. When you create a loop, it is very important to have a way for the loop to end. If the loop does not have an end, there is no way to stop execution without pressing **Esc** or **Ctrl + Enter**.

There are many types of loops you can create with merge programming commands.

You can use an **IF** structure or you can use **FORNEXT** or **WHILE**. You can also create loops by going to or calling subroutines (with **GO** or **CALL**). The structure you should use for any given loop depends on the task you are trying to accomplish.

## Working with merge expressions

Merge expressions are used to determine values in the **ASSIGN**, **ASSIGNLOCAL**, **CAPS**, **CASEOF**, **CTON**, **FIRSTCAP**, **FOREACH**, **FORNEXT**, **IF**, **NTOC**, **STRLEN**, **STRPOS**, **SUBSTR**, **SWITCH**, **TOLOWER**, **TOUPPER**, and **WHILE** commands. Expressions can perform operations on either numbers or strings.

The following topics explain how to use expressions when you program a merge in WordPerfect:

Numeric expressions

String expressions

Expression evaluation

Operator precedence

String delimiters

Other merge delimiters

### Numeric expressions

Numeric expression values must contain only integers (or variables that contain integers).

You can use signed numbers in expressions. The highest positive number you can use is 2,147,483,647. Numbers higher than that are considered negative in WordPerfect. For information, see “Negative numbers” on page 183. The lowest negative number you can use is -2,147,483,648.

If you try to use an invalid numeric expression, the expression is treated as a text string. Examples of invalid numeric expressions are characters other than numbers and valid operators or expressions that evaluate to numbers outside the numeric limits.

The following is a list of numeric expressions. In this list, the terms n1 and n2 represent number 1 and number 2. Although only a single operator is illustrated in each example

below, you can use several operators as well as parentheses in expressions. For definitions of the operations used in the following table, see “Expression terms” on page 180.

<b>Expression</b>	<b>Operation</b>
NOT n1	Returns the logical (0 or -1) NOT of n1. Examples: NOT 0 is -1. NOT 2 is 0.
!n1	Returns the arithmetic (bitwise) NOT of n1. Examples: !0 is -1. !2 is -3.
-n1	Returns the negative of n1. Example: If variable Num holds 5, - VARIABLE(Num) is -5.
n1+n2	Returns the sum of n1 and n2. Example: 5+4 is 9.
n1-n2	Returns the difference of n1 and n2. Example: 10-1 is 9.
n1*n2	Returns the product of n1 and n2. Example: 6*5 is 30.
n1/n2 or n1 DIV n2	Returns the integer quotient of n1 and n2. Examples: 20/5 is 4. 5 DIV 2 is 2.
n1%n2 or n1 MOD n2	Returns the remainder of the quotient of n1 and n2. Examples: 20%5 is 0. 5 MOD 2 is 1.
n1 AND n2	Returns the logical (0 or -1) AND of n1 and n2. Examples: 0 AND -1 is 0. 3 AND 4 is -1.
n1 & n2	Returns the arithmetic (bitwise) AND of n1 and n2. Examples: 7&4 is 4. 3&4 is 0.
n1 OR n2	Returns the logical (0 or -1) OR of n1 and n2. Examples: 0 OR -1 is -1. 3 OR 4 is -1.

<b>Expression</b>	<b>Operation</b>
$n1   n2$	Returns the arithmetic (bitwise) OR of $n1$ and $n2$ . Examples: $7   4$ is 7. $3   4$ is 7.
$n1 \text{ XOR } n2$	Returns the logical (0 or -1) XOR (exclusive OR) of $n1$ and $n2$ . Examples: $0 \text{ XOR } -1$ is -1. $3 \text{ XOR } 4$ is 0.
$n1 = n2$	Returns a true value (-1) if $n1$ and $n2$ are equal; otherwise, returns a false value (0). Examples: If variable 1 holds 5, then $\text{VARIABLE}(1)=5$ is true, and $\text{VARIABLE}(1)=3$ is false.
$n1 \neq n2$ or $n1 <> n2$	Returns a true value (-1) if $n1$ and $n2$ are not equal; otherwise, returns a false value (0). Examples: If variable 1 holds 5, then $\text{VARIABLE}(1) \neq 3$ is true, and $\text{VARIABLE}(1) <> 5$ is false.
$n1 > n2$	Returns a true value (-1) if $n1$ is greater than $n2$ ; otherwise, returns a false value (0). Examples: $6 > 4$ is true. $4 > 6$ is false.
$n1 < n2$	Returns a true value (-1) if $n1$ is less than $n2$ ; otherwise, returns a false value (0). Examples: $2 < 10$ is true. $10 < 2$ is false.
$n1 \geq n2$	Returns a true value (-1) if $n1$ is greater than or equal to $n2$ ; otherwise, returns a false value (0). Examples: $6 \geq 6$ is true. $4 \geq 6$ is false.
$n1 \leq n2$	Returns a true value (-1) if $n1$ is less than or equal to $n2$ ; otherwise, returns a false value (0). Examples: $2 \leq 2$ is true. $10 \leq 2$ is false.

## Expression evaluation

An expression must be written according to the rules and syntax in this appendix for WordPerfect to evaluate it correctly. The following information will help you create and use expressions.

When an expression is encountered in a command, the expression is evaluated first, and the result of the expression is used to complete the command. For example, in the statement `ASSIGN(1;VARIABLE(1)+1)`, the expression is `VARIABLE(1)+1`.

When the expression is evaluated, the contents of variable 1 are incremented by one. The assignment is then performed, replacing the old contents of variable 1 with the result of the expression.

In several of the expressions, the result of the operation is either true or false. WordPerfect assigns a numeric value to true (-1) and false (0). These values were chosen because they are opposites (numeric complements) of each other. For information, see “Bitwise NOT (!)” on page 182 in “Expression terms” on page 180. WordPerfect interprets any non-zero numeric value as true, but when it assigns a value for true, it assigns -1.

In the following example, the first assignment statement assigns false (0) to variable 1, the second assignment statement assigns true (-1), the logical opposite of false, to variable 1, and the third assignment statement assigns true (-1) to variable 1.

```
ASSIGN(1;5=4)
```

```
ASSIGN(1;NOT VARIABLE(1))
```

```
ASSIGN(1;5!=4)
```

The order in which the various operators are applied in an expression is not simply the order in which they occur. WordPerfect uses an order of precedence that determines which operators are used first, second, and so forth. For example, in the expression  $4+7*8$ , there is a different result depending on whether the addition is performed before or after the multiplication. For more information about the order of evaluation, see “Operator precedence” on page 177.

## Operator precedence

WordPerfect supports expressions with several operators. Therefore, an order of evaluation must be followed. The operator precedence is similar to the precedence for mathematical operators. The following table shows the order in which operators are applied:

1. - (unary minus), + (unary plus), ! (bitwise **NOT**), **NOT** (logical **NOT**)
2. \* (multiply), / (divide), **DIV** (divide), % (mod), **MOD** (mod)
3. - (subtract), + (add)
4. < (less than), > (greater than), = (equal to), != (not equal to), <= (less than or equal to), >= (greater than or equal to) Relational operators also work on strings.
5. & (bitwise **AND**), **AND** (logical **AND**), | (bitwise **OR**), **OR** (logical **OR**), **XOR** (exclusive **OR**)

You can override the operator precedence by placing parentheses around the elements you want evaluated first. Elements inside of parentheses are always evaluated before the elements outside. If parentheses are nested, the innermost parentheses are evaluated first.

In the expression  $4+7*8$ , the multiplication ( $7*8$ ) is performed first, followed by the addition, because multiplication has a higher precedence than addition. The result is 60. To perform the addition first, type  $(4+7)*8$ . In this case, the result is 88.

## String delimiters

A string delimiter is a character that marks the beginning or end of a string. In string operations, quotation marks (") serve as string delimiters. In most cases, string delimiters are not needed. Any expression that cannot be evaluated as a valid numeric expression is considered a string.

However, if you want an expression to remain a string even though it could be evaluated as a numeric expression, surround the expression with quotation marks. For example, if you assign a phone number to a variable, but do not surround the number in quotes, the phone number is evaluated as a numeric expression. For example, the command **ASSIGN**(1;555-1555) assigns the result of subtracting 1555 from 555 (-1000) to variable 1. The command **ASSIGN**(1;"555-1555") assigns the string 555-1555 to variable 1.

## Other merge delimiters

A merge delimiter is a word or character that marks the beginning or end of a parameter or argument. Word delimiters can include such reserved words as **AND**, **OR**, **NOT**.

Semi-colons (;) serve as merge delimiters in merge commands with multiple parameters (**SUBSTR**(expr;start;length). When a semi-colon is encountered during the merge, it is treated as ending the parameter unless the parameter is within quotation marks.



## String expressions

A string is any sequence of one or more characters, including spaces. For example, 245, Strawberry, QB12, Z, and Personal Computer are strings. Quotation marks are not necessary to define strings.

The expressions outlined in the following table are used to compare strings. The terms s1 and s2 represent string 1 and string 2.

Expression	Operation
s1=s2	Returns a true value (-1) if string 1 is identical (including case) to string 2; otherwise, returns a false value (0). Examples: blue=blue is true. blue=BLUE is false.
s1!=s2 or s1<>s2	Returns a true value (-1) if string 1 is not identical (including case) to string 2; otherwise, returns a false value (0). Examples: If variable 1 holds the string "thread," then VARIABLE(1)!=rope is true, and VARIABLE(1)<>thread is false.
s1>s2	Returns a true value (-1) if string 1 is greater than* string 2; otherwise, returns a false value (0). Examples: abcd>aabcd is true. a>A is true.
s1<s2	Returns a true value (-1) if string 1 is less than* string 2; otherwise, returns a false value (0). Examples: aabcd<abcd is true. A<a is true.
s1>=s2	Returns a true value (-1) if string 1 is greater than* or equal to string 2; otherwise, returns a false value (0). Examples: abcd>=abcd is true. a>=A is true.

$s1 <= s2$

Returns a true value (-1) if string 1 is less than\* or equal to string 2; otherwise, returns a false value (0).

Examples:  $abcd <= abcd$  is true.  $A <= a$  is true.

---

\* In a string comparison, the WordPerfect character set values are compared. For information, see “WordPerfect character set values” on page 184.

## Expression terms

The following are technical terms used in the discussion of expressions. Understanding these terms is not essential to performing merges. These definitions are provided for those who are familiar with basic programming concepts.

Bitwise Operation

Bitwise AND (&)

Bitwise NOT (!)

Bitwise OR (|)

Evaluate the Expression

Exclusive OR (XOR)

Logical AND (AND)

Logical NOT (NOT)

Logical OR (OR)

Negative Numbers

WordPerfect character set values

## Bitwise operation

In computer language, numbers are represented as a series of 16 bits. A bit can only have a value of 1 or 0. Each 16-bit series (or column) represents a numeric value (such as 1, 2, 4, 8 and so on). The following table outlines some values and their corresponding bits.

Value	Bits
0	0000000000000000
-1	1111111111111111
-3	1111111111111101
-21	1111111111101011
3	0000000000000011
4	0000000000000100
7	0000000000000111
21	000000000010101
47	000000000101111

A bitwise operation works on one column at a time (starting with the right column) using a single bit from each number. The operation is done 16 times so each bit of each number is operated on.

### Bitwise AND (&)

A bitwise **AND** operation compares the bits of two numbers. When both numbers have a 1 bit in the same position (for example, there is a 1 bit in column 1 [the right column] of the first number and the second number), a 1 is placed in that position in the result. The following table demonstrates the way the expression  $21 \& 47$  is evaluated.

Value	Bits
21	000000000010101
47	000000000101111
$21 \& 47$	000000000000101

The resulting bits represent the number 5, so  $21 \& 47 = 5$ .

## Bitwise NOT (!)

A bitwise **NOT** operation takes the bits of the number and complements them. For example, if the expression is `!0` (0 is 0000000000000000), the resulting value is `-1` (`-1` is 1111111111111111).

## Bitwise OR (|)

A bitwise **OR** operation compares the bits of both numbers. When either number has a 1 bit in the same position (for example, there is a 1 bit in column 1 [the right column] of the first number or the second number), a 1 is placed in that position in the result. For example, the expression `21 | 47` is evaluated as shown in the following table:

Value	Bits
21	000000000010101
47	000000000101111
21   47	000000000111111

The resulting bits represent the number 63, so `21 | 47 = 63`.

## Evaluate the expression

Perform the operation(s) on the expression.

## Exclusive OR (XOR)

A logical **XOR** operation evaluates two expressions and returns a true (`-1`) if one, but not both, of the expressions is true. If both expressions are false or both are true, **XOR** returns a false (`0`). For example, `1 = 1 XOR 2 = 3` is true (`-1`), because only one of the expressions being evaluated is true. `6 > 3 XOR 3 > 1` is false (`0`), because both expressions are true.

## Logical AND (AND)

A logical **AND** operation evaluates two expressions and returns a true (`-1`) if both expressions are true. In all other cases, it returns a false (`0`). For example, `1 = 1 AND 2 = 3` is false (`0`), because one of the expressions being evaluated is false. `6 > 3 AND 3 > 1` is true (`-1`), because both expressions are true.

## Logical NOT (NOT)

A logical NOT operation returns the logical opposite (0 or -1) of the expression. WordPerfect interprets any nonzero numeric value as true, but when it assigns a value for true, it assigns -1. For example, NOT 2 is false (0), because 2 is evaluated as true. NOT 0 is true (-1).

## Logical OR (OR)

A logical OR operation evaluates two expressions and returns a true (-1) if either or both expressions are true. If both expressions are false, it returns a false (0). For example,  $1=1$  OR  $2=3$  is true (-1), because one of the expressions being evaluated is true.

$6 < 3$  OR  $3 < 1$  is false (0), because both expressions are false.

## Negative numbers

In WordPerfect, negative numbers are represented as large positive numbers, from 2,147,483,648 to 4,294,967,295. The number

4,294,967,295 is -1, 4,294,967,294 is -2, and so on. To determine the number WordPerfect uses to represent any given negative number from -1 to -2,147,483,648, use the following formula:

$$4,294,967,296 - |x|$$

where x is the negative number whose equivalent you are trying to find. For example, to find the equivalent of -3,

$$4,294,967,296 - 3 = 4,294,967,293$$

To find the negative number (n) represented by a given equivalent, use this formula:

$$x - 4,294,967,296 = n$$

where x is the equivalent. For example, to find the negative number represented by 4,294,967,293,

$$4,294,967,293 - 4,294,967,296 = -3$$

You can assign variables to be negative numbers by using the minus (-) operator or by using the WordPerfect equivalent. Do not use commas or other punctuation in the equivalent. For example,

ASSIGN(number;-1)

is the same as

ASSIGN(number;4294967295)

For more information about creating numeric expressions, see “Numeric expressions” on page 174.

## WordPerfect character set values

WordPerfect assigns a unique value to each character in each WordPerfect character set. For more information, see the descriptions for the **CTON** and **NTOC** commands under “Merge programming commands” on page 125. This is called the WordPerfect character set value. In a string comparison, the character set values are compared.

For characters in the same character set, one character is considered “less than” another character if the first character comes before the second character. For example, in character set 0, “3” is less than “4” and “A” is less than “a.” For characters in different character sets, the character from the character set with the lower numerical value is considered “less than” the character from the higher numerical character set. For example, any character from character set 2 is less than any character from character set 3.

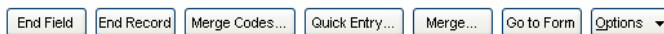
## Reference: The Merge toolbar and programming commands

The **Merge** toolbar displays at the top of the document window when you create a form document or a data file for a merge. You can control a merge and edit merge files by using the **Merge** toolbar.

You can also control a merge by using merge programming commands. The merge commands are similar to codes used in computer programming languages. For example, you need to specify parameters for some commands, and you can create subroutines, a set of commands that can be repeated in a merge.

## Using the Merge toolbar

When you create a form document or a data file for a merge, the **Merge** toolbar displays at the top of the document window.



*This is the Merge toolbar.*

You can control a merge and perform specific merge functions by using the **Merge** toolbar. The **Merge** toolbar is context-sensitive, which means that the buttons available on the **Merge** toolbar change according to the task you are performing. For example, you would see different buttons for performing a keyboard merge and for editing a data table file.

You cannot hide the **Merge** toolbar for a merge form document or merge data file. If it is not visible, then the active file is not a form document or a merge data file.

## Prompting for user input and message display

Several commands are used to display a message for, or request information from, the person running the merge. You can use a message to inform the user of the progress of the merge or you can use a prompt to remind the user of the kind of information needed in a fill-in form.

The following table lists commands displaying a message or prompt and shows how they differ from each other:

<b>Command</b>	<b>Action and user input</b>
PROMPT (followed by WAIT)	Displays message for the duration of the <b>WAIT</b> command; no user input is required.
STATUSPROMPT	Displays message until another message is displayed; no user input is required.
KEYBOARD	Displays message and asks for keyboard input; text is inserted in the document. The user types information and clicks <b>Continue</b> on the <b>Merge</b> toolbar (or presses <b>Alt + Enter</b> ).
GETSTRING	Displays message and asks for keyboard input; text is assigned to a variable. The user types information and presses <b>Enter</b> .
CHAR	Displays message and asks for one-character input; the character is assigned to a variable. The user types one character.

**Command****Action and user input**

LOOK

No message; checks whether a key has been pressed. If a key has been pressed, the key is assigned to a variable; otherwise, the variable is deleted. The user types one character or nothing (merge does not pause for input).

**Reusing commands with subroutines**

You can create a subroutine to call a set of commands which are repeated several times in a merge. You do not need to add them each time. You can add them once, label them as a subroutine, then return to them (or call them) each time you want them to run.

The three commands used to define and call a subroutine are described in the following table.

**Command****Action and user input**

CALL(label)

Stops the merge and directs it to execute the subroutine. The label parameter must match the name of the label.

LABEL(labelname)

Marks the beginning of the subroutine. The **labelname** parameter is a unique name that identifies the subroutine.

RETURN

Marks the end of the subroutine and returns the merge to the line after the **CALL** command. If you do not add the **RETURN** command, the merge will continue in an infinite loop or will not continue correctly.

**Using multiple files and macros in a merge**

A merge can consist of more than one data file or form file, and it can include multiple macros. This may be useful if you want to merge different documents with the same data or if you have multiple data sources to merge. There are three ways to connect merge files: nesting, chaining, and substituting.



## Nesting

Nesting a file or macro is like calling a subroutine. The merge pauses while the nested file or macro runs, then continues after the nested file has finished. This is useful if you use certain procedures frequently in your merges because you can save them in smaller files.

You can have multiple levels of nesting. A merge file can nest a second file or macro, which in turn nests another file, and so on. The three nest commands are described in the following table.

<b>Command</b>	<b>Action and user input</b>
NESTDATA(filename)	Changes to another data source. After that data has been merged with the form file, the merge returns to the first data source. Include a full path with the filename.
NESTFORM(filename)	Pauses the merge and changes to another form file. After that file has merged completely, the original merge continues. Include a full path with the filename.
NESTMACRO(macroname)	Pauses the merge, plays the macro, then continues the merge after the macro ends. You do not need to add a full path or the .wcm filename extension to the name of the macro.

## Chaining

Chaining another file or macro starts that file or macro when the original merge is finished. This is one way to run multiple merges one after the other instead of starting each one manually. Only one chain command is used in a merge file; if there are more than one, the last one is used. The three chain commands are described in the following table.

<b>Command</b>	<b>Action and user input</b>
CHAINDATA(filename)	Merges records from the second file when all records from the first data source have been merged. Include a full path with the filename.

<b>Command</b>	<b>Action and user input</b>
CHAINFORM(filename)	Merges the new form file when the original form file has finished. Include a full path with the filename.
CHAINMACRO(macroname)	Plays the macro after the merge has finished. You do not need to add a full path or the .wcm filename extension to the name of the macro.

## **Substituting**

Substituting another form or data file is another way to change from one merge file to another. However, a substitute command moves the merge immediately to the second file without finishing the original merge file. When this happens, the new merge does not return to the original merge. The two substitute commands are described in the following table.

<b>Command</b>	<b>Action and user input</b>
SUBSTDATA(filename)	Changes to the new data file and begins merging its records. Include a full path with the filename.
SUBSTFORM(filename)	Changes to the new form file and begins executing the merge commands in the file. Include a full path with the filename.

## **Understanding merge code parameters**

Most merge programming codes use parameters (also called arguments). In the following table, parameters are enclosed in parentheses and any optional parameters are enclosed in square brackets. When there are two or more parameters, they are separated with a semicolon.

### **Merge code parameters**

You need to enter the correct parameters and arguments as required for the merge code. The following table lists parameters and their arguments.

<b>Parameter</b>	<b>What you do</b>
(expr);(subexpr)	Enter a number, string, variable, command, expression, or a combination of these
(label)	Enter a unique label name
(var)	Enter a unique variable name
(field)	Enter a unique name or field number
(filename)	Enter a filename, including the full path
(macroname)	Enter a unique macro name; the full path is optional and no <code>.wcm</code> extension is needed.
(title)	Enter the title of the dialog box
(prompt);(message)	Enter information to display on the screen
(comment)	Enter a description of what the merge does; this does not display on screen.





## Recordings, macros, and automation features

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WordPerfect lets you create three types of macros:

- WordPerfect — is stored in the document it applies to or in a macro library file. Create this macro when your task is contained within WordPerfect.
- PerfectScript — is stored with a .wcm filename extension. This macro is useful if you want to interact with other WordPerfect Office applications, such as Quattro Pro and Presentations.
- Visual Basic for Applications (VBA) — lets you develop scripts that are saved in specific projects that use a robust version of the Visual Basic programming language. You can access the VBA editor from WordPerfect.

You can use macros to perform repetitive or complex tasks automatically. A macro performs a series of instructions. For example, you can create a macro that retrieves a file, gives it a new name, and saves it to another format. You can then play the macro to repeat the action.

A macro can consist of keystrokes, programming commands, product commands, and comments. The simplest way to create a macro is to “record” the keystrokes in WordPerfect. You can also write a macro if you want to include non-recordable tasks. (For example, you can define a macro to play until a certain event happens.)

In this section, you’ll learn about:

- using QuickMacros
- recording, saving, and storing macros
- playing macros
- using macros included with WordPerfect
- using toolbars for macros
- using template macros
- editing and deleting template macros
- triggering macros from templates
- customizing WordPerfect macros
- assigning template macros to keystrokes, menus, and toolbars

- associating toolbars with template features
- writing and editing macros by using PerfectScript
- understanding macro commands and syntax
- using macro conventions and formatting macros
- recording macro commands into macros
- inserting codes in macros
- using macros from earlier versions of WordPerfect
- using programming commands in macros
- using parameters in macros
- using variables in PerfectScript
- using the macro command browser
- using macro commands to retrieve information
- using OLE object commands in macros
- compiling macros
- working from the PerfectScript utility
- testing for errors from PerfectScript
- editing and deleting macros
- searching in macros
- integrating with Microsoft Visual Basic for Applications
- using the PerfectScript class to change WordPerfect documents
- working with VBA methods
- accessing and manipulating applications from other applications
- using OLE Automation
- understanding OLE Automation
- using files with DDE Execute from previous versions of WordPerfect
- getting online Help for macros

WordPerfect Office contains a minimal set of macros. To access more macros, visit our OfficeCommunity site on the World Wide Web.

## Using QuickMacros

WordPerfect lets you create QuickMacros. A QuickMacro is a temporary macro that you can record without saving. WordPerfect stores a QuickMacro in your computer's memory for the current WordPerfect session only.

When you record a new QuickMacro, the existing QuickMacro is replaced. You cannot edit a QuickMacro or save it to a template.

### To record a QuickMacro

- 1 Click **Tools** ▶ **Template macro** ▶ **Record**.
- 2 Click **Record** without entering a macro name in the **Name** box.
- 3 Perform the task you are recording.
- 4 Click **Tools** ▶ **Template macro** ▶ **Record** to stop recording the macro.



WordPerfect records both the keyboard and mouse actions you make; however, you must use the keyboard instead of the mouse to position the cursor in the document window.

### To play a QuickMacro

- 1 Click **Tools** ▶ **Template macro** ▶ **Play**.
- 2 Click **Play** without entering a macro name in the **Name** box.

## Recording, saving, and storing macros

Macros automate application tasks. For example, WordPerfect macros automate tasks, such as setting margins, selecting a font, or creating a merge file. Macro tasks consist of instructions, called statements. There are several kinds of statements: assignments, conditions, loops, comments, and commands. For example,

```
MarginLeft (1.0")
```

```
MarginRight (1.0")
```

are WordPerfect commands that set one-inch left and right margins. Each command represents one instruction or statement. The simplest macro consists of only one statement. Complex macros have hundreds of statements. The sequence of statements determines how a macro performs its tasks.

One way to create a macro is to record a task in WordPerfect. When you record a macro, you convert actions into macro commands. These are stored until you need them. Use the fewest number of steps necessary to perform your task.

To include programming commands, or non-recordable actions, you must edit the macro after you record it. For more information about editing macros, see “Editing and deleting macros” on page 230.

You can instruct WordPerfect to pause while playing a macro if you want the macro to stop playing. This can be useful if you want to allow users time to type in text when they run the macro. When you play the macro, it runs until it reaches the **PauseKey** command.

WordPerfect allows you to store macros in any folder, including the default and supplemental macros folders. The default macros folder contains the macros with which WordPerfect was shipped. By default, WordPerfect’s shipping macros are stored in **X:\program files\WordPerfect Office X3\macros\wpwin**, where **X** represents the drive letter. You can use the supplemental macros folder as an additional folder to store macros.

## To record a macro

- 1 Click **Tools** ▶ **Macro** ▶ **Record**.

A check mark beside the **Record** command indicates that the command is enabled.

- 2 Type a name for the macro in the **Filename** box.

- 3 Click **Record**.

- 4 Perform the actions you want to record.

A check mark beside the **Pause** command indicates that the command is enabled.

## You can also

---

Pause recording a macro	Click <b>Tools</b> ▶ <b>Macro</b> ▶ <b>Pause</b> .
-------------------------	--

---

Resume recording a macro	Click <b>Tools</b> ▶ <b>Macro</b> ▶ <b>Pause</b> .
--------------------------	--

---

Stop recording a macro	Click <b>Tools</b> ▶ <b>Macro</b> ▶ <b>Record</b> .
------------------------	---

---





A macro is saved with a **.wcm** filename extension.

If you are recording a new macro, clicking **Edit** ▶ **Undo** will still retain the step that you tried to undo.



## To change the default macros folder

- 1 Click **Tools** ▶ **Settings**.
- 2 Click **Files**.
- 3 Click the **Merge/Macro** tab.
- 4 Click the **Browse**  button in the **Default macro folder** box.  
If you want to change the supplemental macros folder, click the **Browse**  button in the **Supplemental macro folder** box.
- 5 Choose the drive and folder where you want to store the macros.

## Playing macros

WordPerfect allows you to play and pause the play of macros. You can play a macro to repeat the sequence of steps for a task you want to perform. Before you can play a macro, however, it must be compiled with a compiler. For more information, see “Compiling macros” on page 225.

### To play a macro

- 1 Click **Tools** ▶ **Macro** ▶ **Play**.
- 2 Choose the folder where the file is stored.
- 3 Double-click the macro filename.



The **Macro** submenu displays the last nine macros you have played.

A macro you record may not play properly in every situation. Some macros depend on certain options or settings. When a macro cannot play, a message may display, indicating the reason and the line number(s) in the macro you can check.



You can pause or resume playing a macro by clicking **Tools** ▶ **Macro** ▶ **Pause**.

You can play a macro you've used recently by clicking **Tools** ▶ **Macro**, and clicking a macro displayed under the **Macro command** toolbar.

### To play a macro multiple times

- 1 Click **Edit** ▶ **Repeat next action**.

- 2 Type a value in the **Number of times to repeat next action** box.  
If you want WordPerfect to use this value as a default, click **Use as default**.

## Using macros included with WordPerfect

WordPerfect comes with many predefined macros. The macros included with WordPerfect Office can be used as a basis for writing your own macro. For more information, see “Writing and editing macros by using PerfectScript” on page 212.

Many of the macros can be played by clicking buttons on the **Shipping macros** toolbar. For more information, see “Using toolbars for macros” on page 198. For more information about playing macros, see “Playing macros” on page 195.

## Macros included with WordPerfect

<b>Macro</b>	<b>Description</b>
abbrev.wcm	Lets you insert the expanded forms of QuickWords.
adrs2mrg.wcm	Copies the address book (for automated templates) into a merge data file.
allfonts.wcm	Creates a document that lists every font available to the current printer and shows sample text in each font.
checkbox.wcm	Inserts a check box in the document that you can click to add or remove a check mark.
closeall.wcm	Closes all open documents and prompts you to save the modified ones.
ctrlm.wcm	Activates the macro command browser.
cvtdocs13.wcm	Lets you convert multiple documents from another document type to WordPerfect X3 format.
dconvert.wcm	Converts “whole word” drop caps to “number of characters” drop caps for conversion to Microsoft Word.

<b>Macro</b>	<b>Description</b>
endfoot.wcm	Converts endnotes to footnotes in the document or selected text. To run this macro, your cursor must be outside of the footnote or endnote box (that is, your cursor must be in the main body of the page).
expndall.wcm	Expands all QuickWords in the document.
filestmp.wcm	Places the filename and path of the current document in a header or footer.
flipenv.wcm	Creates an envelope rotated 180 degrees (text is upside down). On printers with a large trailing margin, this lets you print the return address 0.25" from the edge.
fontdn.wcm	Decreases the font size of the selected text by 2 points.
fontup.wcm	Increases the font size of the selected text by 2 points.
footend.wcm	Converts footnotes to endnotes in the document or in selected text.
longname.wcm	Changes the name of selected documents from the DOS (8.3) filename to a long filename based on the document summary description.
parabr.k.wcm	Inserts symbols or small graphics as paragraph breaks. The graphics are centered on the blank line between paragraphs.
pleading.wcm	Creates lines and numbers for pleading documents.
prompts.wcm	Helps you create prompts for automated templates.
reverse.wcm	Creates white text on black background (or uses other color combinations) in selected text or table cells.

<b>Macro</b>	<b>Description</b>
saveall.wcm	Prompts you to save open documents.
savetoa.wcm	Saves the current document and makes a copy of it on the diskette in drive A.
tconvert.wcm	Converts WordPerfect 6.0 templates that used the <code>_autofil.wcm</code> macro.
uawp13en.wcm	Used by PerfectExpert. Do not delete this macro from the macros folder.
wp_org.wcm	Creates an organization chart in WordPerfect.
wp_pr.wcm	Sends a WordPerfect outline to Presentations.



In order to run the `footend.wcm` or `endfoot.wcm` macros, your cursor must be outside of the footnote or endnote box (that is, your cursor must be in the main body of the page).

## Using toolbars for macros

WordPerfect has toolbars associated with macros, which you can use to: stop, record, play, and pause macros; insert system variables, product commands, and programming commands; save and compile a macro; insert merge and find and replace codes; change how a macro is saved; or close a macro.

### To view a macro toolbar

- 1 Click **Tools** ► **Settings**.
- 2 Click **Customize**.
- 3 In the **Customize settings** dialog box, click the **Toolbars** tab.
- 4 In the **Available toolbars** list, enable any of the following check boxes:
  - **Macro tools**
  - **Shipping macros**

## To view the Macro toolbar

- Click **Tools** ▶ **Macro** ▶ **Macro toolbar**.

A check mark beside the **Macro toolbar** command indicates that the command is enabled.







To access commands on the **Macro toolbar** or the **Template macro toolbar**, you can press **Alt + Shift** and the letter on the desired button. For example, to access the **Codes** button command, you can press **Alt + Shift + O**.

## To view the Template macro toolbar

- Click **Tools** ▶ **Template macro** ▶ **Template macro toolbar**.

A check mark beside the **Template macro toolbar** command indicates that the command is enabled.

## To use the Macro toolbar

Click	To
Stop 	Stop recording or playing a macro
Record 	Begin recording in the current document
Play 	Play the current macro
Pause 	Pause while recording or playing a macro
Dialog editor	Display the editor for customizing dialog boxes
Commands	Insert system variables, product commands, and programming commands at the cursor
Save & compile	Save and compile the macro
Codes	Insert merge and Find & Replace codes
Options	Change how the macro is saved, close the macro, or hide the <b>Macro toolbar</b>

## Using template macros

WordPerfect lets you add macros to a template. Template macros are macros attached to a template and are saved as part of that template file. They can be played only from that template and are not listed with standard macros.

There are three ways to add a macro to a template: you can add a template macro from another template; add a macro from a macro file stored on disk; or record a template macro from scratch.


You can record macros for specific templates and select specific templates as the default location to which you can record macros. You can only view the macros saved with the current template.

You can play a template macro. WordPerfect includes several templates with macros that are ready to use. You can pause a template macro if you need to interrupt the macro you are playing. You cannot play a template macro until you save and exit the template to which it is attached.

You can pause while playing a template macro. This can be useful if you want to allow users time to type in text when they run the template macro.

### To add a template macro from another template

- 1 Click **File** ► **New from project**.
- 2 Choose a category from the **Category** list box.
- 3 Choose a template from the **Project** list.
- 4 Click **Options** ► **Edit WP template**.
- 5 Click the **Copy/Remove object** button on the **Template** toolbar.
- 6 In the **Copy/Remove template objects** dialog box, choose the template that contains the macro from the **Templates to copy from** list box.
- 7 Choose **Macros** from the **Object type** list box.

If you want to add a macro from a macro file stored on disk, choose **Macros on disk** from the **Object type** list box, click the **Browse**  button in the **Macros on disk** area, and choose the drive and folder in which the macro is stored.

- 8 From the **Source** list box, choose the macro you want to copy.
- 9 Click one of the following:
  - **Copy** — copies only selected items in the **Macros** list
  - **Copy all** — copies all items in the **Macros** list



If the **Template** toolbar is not displayed, click **View ▶ Toolbars**, and enable the **Template** check box.

### To record a template macro from scratch

- 1 Click **Tools ▶ Template macro ▶ Record**.
  - 2 Type the name of the macro in the **Name** box.
  - 3 Click **Location**.
  - 4 Enable one of the following options in the **Macro location** dialog box:
    - **Current template** — specifies the current template to record a template macro to
    - **Default template** — specifies the default template to record a template macro to
- If you want to record a template macro to the enabled location by default, enable the **Use as default** check box.
- 5 Click **OK**.
  - 6 Click **Record**.
  - 7 Perform the task you want to record.

The macros saved with the current template are listed in the **Macros in template** list box.

### You can also

---

Pause a template macro you are recording	Click <b>Tools ▶ Template macro ▶ Pause</b> .
Resume recording a template macro	Click <b>Tools ▶ Template macro ▶ Pause</b> .
Stop recording a template macro	Click <b>Tools ▶ Template macro ▶ Record</b> .
View the macros that are saved with the current template	Click <b>Tools ▶ Template macro ▶ Play</b> .

---



If you are recording a new macro, clicking **Edit ▶ Undo** does not undo the most recent step performed; you will still retain the step that you tried to undo.

### To play a template macro

- 1 Click **File ▶ New from project**.

- 2 Choose a category from the **Category** list box.
- 3 Choose a template from the **Project** list box.
- 4 Click **Create**.
- 5 Click **Tools ▶ Template macro ▶ Play**.
- 6 Choose a macro from the **Macros in template** list.  
The macro name displays in the **Name** box.
- 7 Click **Play**.

### You can also

Pause a template macro	Click <b>Tools ▶ Template macro ▶ Pause</b> .
Resume playing a template macro	Click <b>Tools ▶ Template macro ▶ Pause</b> .
Play a template macro multiple times	Click <b>Edit ▶ Repeat next action</b> , and type a value in the <b>Number of times to repeat next action</b> box.



If you want to use the **Number of times to repeat next action** value as a default, click **Use as default**.

## Editing and deleting template macros

By editing template macros, you can add, edit, or delete macro commands. The same rules of syntax and conventions that apply to macros apply to template macros. For more information, see “Writing and editing macros by using PerfectScript” on page 212, “Compiling macros” on page 225, and “Editing and deleting macros” on page 230.

### To edit a template macro

- 1 Click **File ▶ New from project**.
- 2 Choose a template from the **Project** list.
- 3 Click **Options ▶ Edit WP template**.
- 4 Click **Tools ▶ Template macro ▶ Edit**.
- 5 Choose a template macro from the **Macros in template** box.



- 6 Click **Edit**.
- 7 Edit any macro commands.
- 8 Click **Save & compile** on the **Template macro** toolbar.
- 9 Click **Options ▶ Close macro** on the **Template macro** toolbar.



To display the **Template macro** toolbar, click **Tools ▶ Template macro ▶ Template macro toolbar**.

### To delete a template macro

- 1 Click **Tools ▶ Template macro ▶ Edit**.
- 2 Choose a template macro from the **Macros in template** box.
- 3 Click **Delete**.



You cannot delete template macros that are assigned to a toolbar, keyboard, or menu. WordPerfect deletes template macros from a template when you remove them from a toolbar, keyboard, or menu.

## Triggering macros from templates

You can play a macro as you use a template. For example, if you use a template to create letters, you can set a **PRE PRINT** trigger in the template that runs a spell-check macro. The macro then lets you check the spelling of your letters just before they print.

You can use the following macro triggers.

Trigger	Description
POST CLOSE	Runs in the active window after you close a window.
POST NEW	Runs after you open a window by clicking <b>File ▶ New</b> .
POST OPEN	Runs after you open a window by clicking <b>File ▶ Open</b> .

<b>Trigger</b>	<b>Description</b>
POST PRINT	Runs after you send a print job to the printer.
POST STARTUP	Runs when you start WordPerfect. The macro must be associated with the default template.
POST SWITCH DOC	Runs in the active window after you switch from another window.
POST TABLES	Runs after you create a table structure in a document, but before you enter data in the table.
PRE CLOSE	Runs before you close the active window by clicking <b>File ▶ Close</b> .
PRE NEW	Runs in the active window before you open another window by clicking <b>File ▶ New</b> .
PRE OPEN	Runs in the active window before you open another window by clicking <b>File ▶ Open</b> .
PRE PRINT	Runs after you click <b>File ▶ Print</b> , but before the print job is generated.
PRE SWITCH DOC	Runs in the active window before you switch to another window.
PRE TABLES	Runs after you insert a table by clicking <b>Insert ▶ Table</b> , but before the table structure is created in the current window.

### **Adding the TemplateFill macro command**

The TemplateFill() macro command displays a dialog box that lets you enter template data. This dialog box varies depending on the fields required for the current template. If personal information is not specified, this command first prompts you to specify personal information regardless of what data the current template requires. If the current template does not require data other than personal information, and the personal information has been set, this command updates the personal information in the document without displaying the dialog box. If the current document is not based

on an automated template, and the personal information has been set, this command does nothing.

Only macros that have been added to the template can be used with triggers. A trigger specifies when a macro plays in a template (for example, before you close a document).

Macros on disk cannot be associated with a trigger. Running the Prompt Builder associates the POST NEW trigger with <dofiller>, the feature that runs the Prompts dialog box. If the POST NEW trigger is associated with a template macro, use the TemplateFill() macro command in that template macro to activate the DoFiller feature.

If you want DoFiller to run when you are using a template macro, you need to add the TemplateFill macro command. The position of this command is important because macro execution is generally sequential. For example, if you want to insert a macro in a template that adds a date code to your document, you need to let the macro place the date code prior to your filling out the template prompts.

### To insert a macro trigger in a template

- 1 Click **File** ► **New from project**.
- 2 Choose a template from the **Project** list.
- 3 Click **Options** ► **Edit WP template**.
- 4 Click **Associate** on the **Template** toolbar.
- 5 Enable the **Triggers** option.
- 6 Choose a trigger from the **Items to associate** list.
- 7 From the **Macros** list box, choose the macro you want to associate with the trigger.



Only template macros that you have created in that template or copied to that template display in the **Macros** list box.

### To add the TemplateFill macro command

- 1 Click **Tools** ► **Macro** ► **Edit**.
- 2 Double-click a filename.
- 3 Press **Ctrl + End** to place the cursor at the end of the macro document.
- 4 Press **Enter**.
- 5 Type TemplateFill().

- 6 Click **Save & compile** on the **Template macro** toolbar.
- 7 Choose the drive and folder where you want to save the macro.
- 8 Type the filename in the **Filename** box.
- 9 Click **Options** ► **Close macro** on the **Template macro** toolbar.

## Customizing WordPerfect macros

You can assign macros to keystrokes, menus, toolbars, and the property bar.

WordPerfect allows you to edit the name and QuickTips of a button, edit button images, and change the macro triggered by a button.

### To assign a macro to a keystroke

- 1 Click **Tools** ► **Settings**.
- 2 Click **Customize**.
- 3 In the **Customize settings** dialog box, click the **Keyboards** tab.
- 4 Choose a keyboard from the **Available keyboards** list, and click **Edit**.  
If you want to create a keyboard with the same initial settings as an existing keyboard, choose a keyboard, click **Create**, and type a name in the **New keyboard name** box.
- 5 In the **Choose a shortcut key** list, choose a key to which you want to assign the template macro.
- 6 Click the **Macros** tab.
- 7 Click one of the following:
  - **Assign macro to key**
  - **Assign template macro to key**
- 8 In the **Select macro** dialog box, type the filename and path in the **Filename** box.
- 9 Click **Select**.



If you save a macro file without its full path, WordPerfect searches for the macro in the default folder, as specified on the **Document** page of the **File settings** dialog box. To open the **File settings** dialog box, click **Tools** ► **Settings**, and click **Files**.

## To assign a macro to a menu

- 1 Click **Tools** ► **Settings**.
- 2 Click **Customize**.
- 3 In the **Customize settings** dialog box, click the **Menus** tab.
- 4 Choose a menu from the **Available menus** list.
- 5 Click **Edit**.
- 6 Click the **Macros** tab.
- 7 Click **Add macro**.
- 8 In the **Select macro** dialog box, click a macro.
- 9 Click **Select**.

### You can also

---

Place the macro in a menu

Drag the new macro item over the menu.  
The blue line represents the macro.

---

Create a menu with the same initial settings  
as an existing menu

Click the **Menus** tab, and choose a menu  
from the **Available menus** list. Click  
**Create**, and type a name for the new menu  
in the **New menu bar name** box.

---

## To assign a macro to a toolbar button

- 1 Click **Tools** ► **Settings**.
- 2 Click **Customize**.
- 3 Choose a toolbar from the **Available toolbars** list box.
- 4 Click **Edit**.
- 5 Click the **Macros** tab.
- 6 Click **Add macro**.
- 7 Type the macro path and filename in the **Filename** box.
- 8 Click **Select**.

## To edit the name and QuickTips of a button

- 1 Right-click a button, and click **Edit**.

- 2 Right-click the button you want to edit, and click **Customize**.
- 3 Type text in any of the following boxes:
  - **Button text** — edits the text of the button
  - **QuickTip** — edits the QuickTips text of the button



If you save a macro file without its full path, WordPerfect searches for the macro in the default folder, as specified on the **Document** page of the **Files settings** dialog box.

### **To edit the image of a macro button**

- 1 Right-click a button, and click **Edit**.
- 2 In the **Toolbar editor** dialog box, click the **Macros** tab.
- 3 With the **Toolbar editor** dialog box open, right-click the button on the toolbar, and click **Customize**.
- 4 In the **Customize button** dialog box, click **Edit**.
- 5 Make changes in any of the following areas:
  - **Colors** — lets you change the color of the button
  - **Drawing mode** — lets you choose between changing the image a single pixel at a time or filling the whole area
  - **Zoomed image** — lets you re-create the image

### **To assign a macro to the property bar**

- 1 Click **Tools** ► **Settings**, and click **Customize**.
- 2 Click the **Property bars** tab.
- 3 Choose a property bar from the **Available property bars** box.
- 4 Click **Edit**.
- 5 Click the **Macros** tab.
- 6 Click **Add macro**.
- 7 Type the macro filename and path in the **Filename** box.
- 8 Click **Select**.
- 9 Drag the button that represents the macro to the property bar.

## Assigning template macros to keystrokes, menus, and toolbars

You can assign template macros to a keystroke, a menu, and a toolbar button. When you press the assigned keystroke, click a menu item, or click a toolbar button, the macro is launched. You can assign template macros by using macros that you have created or macros that are included with WordPerfect.

You can also edit the current menu and create a menu with the same initial settings as an existing menu.

### To assign a template macro to a keystroke

- 1 Click **File** ► **New from project**.
- 2 Choose a template from the **Project** list.
- 3 Click **Options** ► **Edit WP template**.
- 4 Click **Tools** ► **Settings**, and click **Customize**.
- 5 Click the **Keyboards** tab.
- 6 Choose a keyboard from the **Available keyboards** list, and click **Edit**.
- 7 Choose a key in the **Choose a shortcut key** list.  
If you want to remove a template macro from a keystroke, choose a key to remove from the template macro from the **Choose a shortcut key** list box, and click **Remove assignment**.
- 8 Click the **Macros** tab, and click **Assign template macro to key**.
- 9 Click a macro in the **Macros in template** list, and click **Select**.

### To create a keyboard with the same initial settings as an existing keyboard

- 1 Click **File** ► **New from project**.
- 2 Choose a template from the **Project** list.
- 3 Click **Options** ► **Edit WP template**.
- 4 Click **Tools** ► **Settings**, and click **Customize**.
- 5 Click the **Keyboards** tab.
- 6 Choose a keyboard from the **Available keyboards** list, and click **Create**.
- 7 Type a name for the new keyboard in the **New keyboard name** box.
- 8 Click **Location**.

- 9 Enable one of the following options:
  - **Current template** — saves the keyboard in the current template
  - **Default template** — saves the keyboard in the default template

### **To assign a template macro to a menu**

- 1 Click **File** ▶ **New from project**.
- 2 Choose a WordPerfect template, and click **Options** ▶ **Edit WP template**.
- 3 Click **Tools** ▶ **Settings**, and click **Customize**.
- 4 In the **Customize settings** dialog box, click the **Menus** tab.
- 5 Choose a menu from the **Available menus** list, and click **Edit**.
- 6 Click the **Macros** tab, and click **Add template macro**.
- 7 Choose the template macro from the **Macros in template** list, and click **Select**.
- 8 Click **OK**.
- 9 Drag the button that represents the template macro to the menu.

### **To edit the current template menu**

- 1 Right-click the current template menu.
- 2 Click **Settings**.
- 3 Click **Edit**.

### **To create a template menu with the same initial settings as an existing menu**

- 1 Click **File** ▶ **New from project**.
- 2 Choose a category from the **Category** list box.
- 3 Choose a template from the **Project** list.
- 4 Click **Options** ▶ **Edit WP template**.
- 5 Click **Tools** ▶ **Settings**, and click **Customize**.
- 6 In the **Customize settings** dialog box, click the **Menus** tab.
- 7 Choose a menu from the **Available menus** list, and click **Create**.
- 8 In the **Create menu bar** dialog box, type a name for the new menu in the **New menu bar name** box.
- 9 Click **Location**, and enable one of the following options:



- **Current template** — saves the menu in the current template
- **Default template** — saves the menu in the default template

### To assign a template macro to a toolbar button

- 1 Click **File** ▶ **New from project**.
- 2 Choose a category from the **Category** list.
- 3 Choose a template from the **Project** list.
- 4 Click **Options** ▶ **Edit WP template**.
- 5 Click **Tools** ▶ **Settings**, and click **Customize**.
- 6 Click the **Toolbars** tab, enable a toolbar in the **Available toolbars** list box, and click **Edit**.
- 7 In the **Toolbar editor** dialog box, click the **Macros** tab, and click **Add template macro**.
- 8 In the **Select template macro** dialog box, click a macro in the **Macros in template** list box.
- 9 Click **Select**.

If you want the macro to display in a menu, drag the new macro menu item over the menu of your choice to the position you want. The blue line represents the macro.

### To edit a toolbar button

- 1 Right-click any button, and click **Edit**.  
If you want to customize a button, make any changes in the **Toolbar editor** dialog box.
- 2 Right-click the button you want to edit, and click **Customize**.
- 3 In the **Customize button** dialog box, type text in any of the following boxes:
  - **Button text** — edits the text of the button
  - **QuickTip** — edits the QuickTips text of the button

### To edit the image of a toolbar button

- 1 Right-click any button, and click **Edit**.
- 2 Right-click the button you want to edit, and click **Customize**.

- 3 In the **Customize button** dialog box, click **Edit**, and make changes in any of the following areas:
  - **Colors** — allows you to change the color of a button
  - **Drawing mode** — allows you to choose between changing the image a single pixel at a time or filling the whole area
  - **Zoomed image** — allows you to re-create an image

## Associating toolbars with template features

You can display a specific toolbar when you are working with specific features and macros. Toolbars, menus, and keyboards can be associated with a predefined list of features, which can be activated when the particular feature is used in a document.

You can also associate macros with various triggers that execute when a particular event occurs inside WordPerfect. There are 13 predefined triggers that you can associate with macros (for example, PRE NEW, POST NEW, PRE PRINT, and POST PRINT). For a list of macro triggers, see “Triggering macros from templates” on page 203.

### To use the **Associate** button with a template macro

- 1 Click **File** ▶ **New** from project.
- 2 Choose a category from the **Category** list box.
- 3 Choose a template from the **Project** list.
- 4 Click **Options** ▶ **Edit WP template**.
- 5 Click **Associate** on the **Template** toolbar.
- 6 Enable the **Triggers** option.
- 7 Choose a trigger from the **Items to associate** list.
- 8 Choose a macro from the **Macros** list box.

## Writing and editing macros by using PerfectScript

PerfectScript macros are the common macro language for all applications in WordPerfect Office. PerfectScript is a command-based language. When you record a macro, you record the results of keystrokes or mouse selections instead of recording the keystrokes themselves. For example, instead of recording each keystroke required to change the top margin of a page to 2” (5.1 cm), the macro records the following command:

```
MarginTop(MarginWidth:2.0")
```

Recording and playing macros can speed up routine tasks, but the real power of macros is tapped when product commands are used together with PerfectScript programming commands. By using product commands and programming commands, the functionality of WordPerfect Office features is combined with the customizing, decision making, and iterative capabilities of a programming language. Using programming commands also makes it possible to include the functionality of other applications.

A written macro can include non-recordable statements, which cannot be included in recorded macros, that specify how a macro performs a task. You specify conditions for playing assignments, loops, and programming commands. Writing a macro provides greater flexibility to determine function than recording a macro. You can create a macro in WordPerfect and play it in the application for which it was written.

With PerfectScript, you can combine statements to automate routine tasks and simplify large ones. You write the macro using statements, compile the macro, and play the macro.

The PerfectScript programming language consists of WordPerfect application commands and functions, and programming statements and functions. PerfectScript can do more than perform your recorded WordPerfect commands — it can extend the functionality of WordPerfect in a number of ways, such as prompting you for input, displaying messages, controlling other Corel and Windows-based applications, and performing and repeating commands. You can also build complete applications or wizards so that, if you have limited experience using WordPerfect, you can still use some of the more complex actions.

PerfectScript lets you record, play, compile, and convert macros for all WordPerfect Office applications. PerfectScript starts automatically when you record or play a macro. If you play a macro for an application that is not running, PerfectScript automatically starts the application.

### **Installing the Software Developer's Kit**

The Software Developer's Kit (SDK) is a set of tools that lets you customize WordPerfect Office applications for commercial or business use. For information about acquiring a WordPerfect Office Software Developer's Kit, visit Corel Technology Partner.

The Corel Technology Partner program supports developers of complimentary products and add-ons for selected Corel products, including WordPerfect Office X3. The

program is designed to help accelerate the development of third-party products and promote these products.

The SDK includes the following components:

- online Help for the SDK
- OLE automation samples
- PerfectScript tools
- tools and utilities, including code generation wizards for third-party add-ons to WordPerfect, Quattro Pro, and Presentations; utilities to monitor events in WordPerfect and Presentations; and a file format parsing tool

## Understanding macro commands and syntax

To edit and write macros, you must understand the PerfectScript programming language and the principles of computer programming. For most users, recording macro commands is more efficient than typing commands into the macro. WordPerfect opens a new blank window with another macro bar. After you have recorded keystrokes or commands, WordPerfect returns to the macro you are editing and inserts the newly recorded commands.

When you create macros using the macro command browser, the macro commands appear in a separate document, numbered. The first line of the macro identifies the program and default language that it uses. The remainder of the macro performs the reported instructions.

For more information about macro commands, see “Using macro conventions and formatting macros” on page 216.

### Understanding components of macro commands

Macro commands consist of four parts: a command name, parameters, enumerations, and separators. The table and example below display and describe these elements of syntax.

<b>Macro command component</b>	<b>Description</b>
Command name	Indicates which feature the command activates. Some commands consist only of a command name, such as FileOpenDlg().

<b>Macro command component</b>	<b>Description</b>
Parameters	Provides more information about the command, such as which options of a feature are active. Parameters are always enclosed in parentheses; for example, Backup (State:On!).
Enumerations	Sets the value of a parameter (for example, State: On! or State: Off!). Enumerations always end with an exclamation point.
Separators	Marks the parameters in a command. Semicolons separate individual parameters; parentheses enclose a series of parameters; and braces enclose a series of repeating parameters.

For example:

```
MakeItFit (TargetPage:1;{Adjust: FitLeftMargin!};{Adjust:
FitLineSpacing!})
```

The command in the above example has two parameters: TargetPage and Adjust. They are separated by a semicolon. Adjust is a repeating parameter with two enumerations specified: FitLeftMargin and FitLineSpacing. All the Adjust parameters are enclosed in braces to group them.

When you create macros using the macro command browser, the commands are inserted in the correct format. If you type a macro without the macro command browser, you must arrange macro commands and their elements in a precise order or syntax. Each macro command must be spelled correctly and must include all the required parameters and separators.

### **Using types of macro commands**

There are three types of macro commands: product commands, OLE object commands, and programming commands. Product commands are specific to a product, such as WordPerfect or Quattro Pro. OLE object commands perform tasks on an OLE object. Programming commands work across applications; they are PerfectScript commands.

Command names often describe an action, such as Font, MarginLeft, Advance, and FootnoteOption, in WordPerfect; AlignObjectsLeft, BitmapBlur, SelectAllObjects, and ToolbarCopy in Presentations; or Range in Microsoft Excel. Command names are not

case sensitive and usually do not contain spaces. Exceptions include programming commands that call a subroutine, such as Case Call or OnCancel Call.

A macro can use more than one application product and OLE object. Commands to the non-default application or OLE object require a prefix, which is specified in an application or object statement. For example,

```
A1.AboutDlg ( )
```

A1 (followed by a period) is the prefix. It tells the compiler to use the application or Object assigned A1 in a PerfectScript application or Object statement.

### **Understanding syntax**

Syntax refers to the grammatical rules that govern the form of macro statements and expressions. For example, the syntax of the following statement, which types "John Doe," is correct:

```
Type(Text: "John Doe" )
```

The syntax of the next example is incorrect and produces an error message because the statement lacks a closing parenthesis:

```
Type(Text: "John Doe"
```

If you find it difficult to distinguish different parts of a macro, remember that you can add extra line spaces, tabs, and even font changes to make the macro more readable. As long as the commands are written correctly, the macro compiler ignores extra spaces and lines.

## **Using macro conventions and formatting macros**

When you create macros in WordPerfect, you must follow macro conventions for the macro to compile properly. However, you do not need to observe macro formatting conventions for a macro to compile correctly. These conventions are designed to improve the readability of your macro.

### **Macro conventions**

Macro command syntax must be correct for a macro to compile. Understanding the following conventions used in WordPerfect macros will help you avoid common syntax errors:

You can enter programming commands in uppercase, lowercase, or mixed case. The compiler is not case sensitive. Product commands, such as AboutDlg or AddSlide, are

shown in mixed case. WordPerfect system variables begin with ?, such as ?TextColorRed or ?FontUnderline. They are shown in mixed case, and they return information about the application environment.

Line wrapping does not affect macro execution. You should not insert spaces in a command name unless the space is part of the syntax. Do not use hard returns, tabs, or indents in a character expression (a character string enclosed in double quotation marks). You can use spaces, tabs, indents, and hard returns before and after commands, or between parameters, to make a macro easier to read. SmartQuotes in a macro create a compile-time syntax error. For more information about SmartQuotes, see “Changing the appearance of quotation marks” in the online Help.

### **Formatting macros**

You can type commands into a macro that is saved in a file or in a template. If you want to improve the readability of a macro, you can format it so that it includes tabs, spaces, and even font or text appearance changes. Formatting the macro does not affect how it works. For example, WordPerfect records the following macro in this format:

```
PosDocBottom( )
Type(Text: "Sincerely" )
HardReturn( )
HardReturn( )
HardReturn( )
HardReturn( )
Type(text: "Mrs. Jane Doe" )
HardReturn( )
Type(Text: "Vice President, Marketing" )
```

However, if you type the commands yourself or edit an existing macro, you can format the macro the way you want. For example, you can format it as follows:


```
PosDocBottom( )
Type(Text: "Sincerely" )
HardReturn( )
HardReturn( )
HardReturn( )
HardReturn( )
Type(text: "Mrs. Jane Doe" )
```

```
HardReturn()  
Type(Text:"Vice President, Marketing")
```

## Recording macro commands in macros

WordPerfect lets you record macro commands in a macro.

### To record macro commands in a macro

- 1 Click where you want to insert the macro command.
- 2 Click **Tools** ▶ **Macro** ▶ **Record**.
- 3 Type a name for the macro in the **Filename** box.
- 4 Click **Record**.  
A blank document displays.
- 5 Perform the actions you want to record.
- 6 Click the **Stop**  button on the **Macro** toolbar.  
WordPerfect returns you to the macro document with the new macro command you recorded inserted.

## Inserting codes in macros

When you insert a code in a macro, you must use straight double quotation marks around the code so that WordPerfect recognizes the code in the macro.

### To insert a code in a macro

- 1 Click **Tools** ▶ **Macro** ▶ **Macro toolbar**.
- 2 Click **Codes** on the **Macro** toolbar.
- 3 Click one of the following tabs:
  - **Search** — allows you to select search find codes
  - **Merge** — allows you to select merge find codes
  - **Date** — allows you to select date find codes
  - **Other** — allows you to select chapter, page, section page, total page, and volume number find codes
- 4 Choose a code from the **Find codes** list.



- 5 Click **Insert**.
- 6 Click **Close**.

## Using macros from earlier versions of WordPerfect

You can update macros from earlier versions of WordPerfect. The structure of the macro language has not changed for WordPerfect versions 6 through X3. While later versions of the macro language include access to new WordPerfect features and some new commands for accessing existing features, most of the older product commands have been retained to maintain macro compatibility. Because some older product commands have changed, macros from versions 6 through 10 might need minor corrections when you compile them for the first time.

### To update macros from earlier versions of WordPerfect

- 1 Click **Tools** ► **Macro** ► **Edit**.
- 2 Choose a macro.
- 3 Click **Edit**.
- 4 Make any changes.
- 5 Click **Save & compile** on the **Macro** toolbar.
- 6 Note any errors listed by the macro compiler and make changes as needed.

## Using programming commands in macros

Programming commands work across WordPerfect Office applications. They control macro functions by

- specifying conditions under which other macro commands or statements operate (for example, **Case**, **IfElse**, **Endif**, **Switch**, and **EndSwitch**)

For example,

```
If (x = "A")  
LineHeightDlg  
Else  
LineSpacingDlg  
Endif
```

displays the **Line height** dialog box in WordPerfect if x equals the value "A". If x has another value, the subroutine displays the **Line spacing** dialog box. The If, Else, and Endif commands are programming commands. LineHeightDlg and LineSpacingDlg are product commands.

- repeating macro commands or statements a specified number of times or until certain conditions are met (for example, For, Endfor, Repeat, Until, While, or EndWhile)
- invoking or jumping to a specified subroutine with Call or Go

Programming commands and product commands are not case sensitive.

You can add blank lines to separate programming commands and subroutines, and you can indent lines to show levels of nested commands. Some macro commands cannot be recorded. You must type or insert them using the macro command browser. For information about the macro command browser, see "Using the macro command browser" on page 223.

## Using parameters in macros

Commands often require parameters, which are constant values (data). Parameters are passed to the compiler (which translates the macro so that it can be played in the application) or passed between subroutines. In this WordPerfect command,

```
Advance (Where: AdvanceDown!; Amount: 1.0")
```

Advance is the command name, Where and Amount are parameters, and AdvanceDown! and 1.0" are parameter data. This command advances the cursor down one inch. Parameter names, such as Where and Amount, are optional.

### Data types

A data type represents information that is needed by a parameter or returned by a command (return value).

In the command syntax, data types are displayed in italics. For example, the enumerations for the Rotation parameter of BoxCaption Rotation are *Degrees90!*, *Degrees180!*, *Degrees270!*, and *None!*. Only these enumerations can replace the data type in the command syntax. Enumerations are identified by a trailing exclamation point. The most common data types in product commands are string, enumeration, and numeric. Programming commands frequently use variables.

## Parameter names

Using parameter names is optional. For example, `InhibitInput (State: Off!)` works just like `InhibitInput (Off!)`. Some product commands have no parameters. Their syntax is usually written with empty parameters, such as `PosScreenUp ()`. Some programming commands and all system variables have no parameters. Their syntax is the command name alone, such as `Pause` and `?FeatureBar`.

## Italics

Italics in macros syntax indicate parameter names or types to be replaced with data. For example, the syntax of `GraphicsLineLength` is:

```
GraphicsLineLength (Length: measurement)
```

After you replace `measurement` with a number, the command might be:

```
GraphicsLineLength (Length: 21)
```

or

```
GraphicsLineLength (21)
```

## Punctuation

You must enclose parameters in parentheses. A missing parenthesis is a common error that prevents macros from compiling. Parentheses are optional for commands without parameters, but must be used with user-defined functions and procedures.

Spaces between command names and the opening parenthesis of the parameter section, and after semicolons in parameters, are optional.

You must separate multiple parameters with semicolons (;). If you omit an optional parameter, include the semicolon in the syntax to keep following parameters in their correct positions. For example,

```
AbbreviationExpand (AbbreviationName:; Template: PersonalLibrary!)
```

or

```
AbbreviationExpand (; PersonalLibrary!)
```

Repeating parameters are enclosed in braces and are separated by semicolons. For example,

```
CASE (<test>: any ; {<Case>: any; <Label>: label; <Case>: and;  
<Label>: label...})
```

When data is supplied, the command could be

```
CASE (vChoice; {1; Exclaim; 2; Info; 3; Question; 4; Stop; 5;
QuitMacro}; QuitMacro)
```

Product commands perform product tasks in a specific application. For example,

```
ShowSlide(Slide: 4)
```

displays the fourth slide in the current slide show in Presentations.

Product commands are specific for each application. They perform various functions in that application, such as

- displaying a dialog box, `InitialCodesStyleDlg`
- specifying settings, such as styles, `BorderBottomLine`; user settings, `PrefZoom`; or attributes, `Font`
- enabling and disabling features, `InhibitInput` or `TableCellIgnoreCalculation`
- performing actions, such as inserting a file, `FileInsert` or code, `PrinterCommand`; renaming a bookmark `BookmarkRename`; converting comments to text `CommentConvert`; or moving the cursor `PosColBottom`
- playing macros that are included with the application  
`AddressMergeShippingMacro`

Product commands that report information (return value) about the state of an application or feature are sometimes called system variables. In WordPerfect, system variables begin with a leading question mark, `?ColumnWidth`. In Presentations, they begin with a leading `Env` (`EnvPaths`). Some system variables in Presentations have parameters as well as return values.

Product commands and programming commands are not case sensitive.

## Using variables in PerfectScript

A variable acts as a place holder that represents a value, which can be text, numbers, or measurements, that you can use repeatedly in a macro. You can change or manipulate this value in the macro. WordPerfect allows you to use the commands, such as `Constant`, `Declare`, `Global`, `Indirect`, `Local`, and `Persist`, to create variables with different functions and actions.

Variables are typically preceded by the letter “v”.

### To assign a variable in PerfectScript

- Type the `Assign` macro command where you want to define the variable.

For example, type Assign (vName; "Lori") to assign the text "Lori" to the variable "vName".



You can type a colon followed by the equals sign (: =) as a shortcut to assigning a variable. For example, you could type vName:="Lori" for the above example.

## Using the macro command browser

The macro command browser helps you insert macro product and programming commands in WordPerfect Office macros.

Product commands perform tasks that let you use WordPerfect Office features in macros. Many product commands require you to specify parameters and enumerations, which give the applications information about which options to use in dialog boxes and whether to hide or display certain features (for example, the ruler). You can use the macro command browser to specify the commands quickly.

### To access macro commands

- 1 Click **Tools** ▶ **Macro** ▶ **Macro toolbar**.
- 2 Click **Commands** on the **Macro toolbar**.  
The **PerfectScript commands** dialog box displays.

### To insert commands with the macro command browser

- 1 Click **Tools** ▶ **Macro** ▶ **Macro toolbar**.
- 2 Click **Commands** on the **Macro toolbar**.
- 3 Choose a product from the **Command type** list box.
- 4 Choose items from any of the following lists:
  - **Commands**
  - **Parameters**
  - **Enumeration**
- 5 In the **Command edit** box, type any additional parameters you need.
- 6 Click **Insert**.
- 7 Click **Close**.



With the macro command browser, you can also insert system variables, which contain system information, such as the current chart type or the default directory. In WordPerfect, system variables begin with a question mark.

A parameter that is displayed in bold is a required parameter. The macro will not compile or run without it.

## Using macro commands to retrieve information

WordPerfect lets you create commands, such as `MessageBox` or `GetString`, that gather information for macros. You can use these types of commands, for example, to prompt the user to type in information. For information about the `MessageBox` command, see the PerfectScript Programming Macros Help in the PerfectScript macro command browser.

### Using `GetString`, `GetUnits`, and `GetNumber`

You can use the `GetString` command to retrieve information, such as text or numbers, as text. The `GetString` command uses the following format:

```
GetString (Var; Prompt Text; Title; MaxLength)
```

The prompt text, title, and maximum parameter length are optional. You can use the `GetUnits` command if you want to provide WordPerfect with measurement information that can be used to move the cursor and set margins. If you want WordPerfect to use the information entered in a numeric expression (such as addition or subtraction), you can use the `GetNumber` command. Both the `GetUnits` and `GetNumber` commands are similar to the `GetString` command; however, they do not use maximum parameter length. The user can use any of the following abbreviations to represent units of measurement:

<b>Unit of measurement</b>	<b>Abbreviation</b>
WP Units (1200 per inch)	w
Points (72 per inch)	p
Millimeters	m
Centimeters	c
Inches	i or "

If the user doesn't type a unit of measurement with the number when prompted, WordPerfect uses WP Units as a default unit of measurement.

## **Using OLE object commands in macros**

Commands for OLE objects are called methods, and they perform tasks on an OLE object in a specific OLE Automation server.

OLE object methods are specific for each object, such as "Excel.Application" or "Excel.Workbooks."

OLE object methods that return information about an object are called properties. Many properties have parameters as well as return values. In addition, many properties can be assigned a value, like the name of a variable, by placing them on the left-hand side of the assignment symbol ":=".

## **Compiling macros**

You must compile a macro before you can play it. The programs that compile macros are called compilers. A macro compiler is used to compile or "translate" macros so that WordPerfect Office applications can play them. WordPerfect compiles a macro every time you save it.

Macros are written with an editor or word processor and saved as a source file. The macro compiler creates an object, which it saves in a hidden area of the source file (the macro compiler does not create a separate object file). When you edit the source file, the object is destroyed. The object is recreated each time the source file is compiled. A compiled source file (macro) contains instructions that are executed when you play the macro.

When you compile a macro, you might receive error messages which can indicate misspelled commands, missing parentheses or semicolons, and other syntax errors. If you receive an error message while the macro is compiling, you must correct all the errors before the macro will play. You can edit the macro to fix the errors.

WordPerfect macros have three types of errors: syntax errors, run-time errors, and logic errors.

## Identifying syntax errors

Syntax errors appear when you are compiling a macro. The PerfectScript compiler flags unrecognizable commands, such as missing parentheses or semicolons and incorrectly spelled command names. For example, if you type Centr (WordPerfect command) instead of Center, a compile-time syntax error is displayed in a syntax error message box when you save and compile.

The compiler identifies syntax errors and suggests solutions. The error message displays information about the error and its location. The compiler makes a best guess and may not always be accurate. You must correct all errors before a macro can compile correctly. If you continue the compilation after an error is displayed, subsequent errors may be inaccurate.

Common syntax errors include

- missing semicolons between parameters
- missing parentheses
- missing double quotation marks
- missing command in a conditional or loop statement
- misspelled macro command names
- undefined calling statements
- using commas between parameters instead of semicolons

## Identifying runtime errors

Runtime is the same as execution time. Run-time errors occur while the macro is playing. Referencing a variable that has not been assigned a value causes a run-time error. Run-time error messages identify errors that occur while the macro plays and show where errors occur.

## Identifying logic errors

When a macro does not produce the expected result, you may have a logic error. When a macro has a logic error, it plays without producing any error messages because WordPerfect accepts all of the macro commands.

## Troubleshooting macro problems

The compiler can help you troubleshoot macro problems. If the compiler locates an error, a dialog box displays information about the problem. The compiler only directs you to the problem; it does not identify it.



The PerfectScript application has debugging features. For more information about PerfectScript, see the PerfectScript application online Help.

If you are writing or editing a macro, when you compile you change what is on screen to a language that PerfectScript can play. If you want PerfectScript to be able to read errors in the file, you must create a listing or log file. When you generate a listing file, PerfectScript saves it with a .wcl filename extension. If you want to debug PerfectScript macros using the PerfectScript debugger to tell you where the problems are located, you must set PerfectScript to produce a listing file every time you save and compile the macro. For more information about the PerfectScript debugger, see the PerfectScript online Help.

### To compile a macro

- Click **Save & compile** on the **Macro** toolbar.

If the **Macro** toolbar is not displayed, click **Tools ▶ Macro ▶ Macro toolbar**.



If a macro you compile has error messages, WordPerfect still saves it even if you do not fix the compile errors.

### To set PerfectScript to generate a listing file when you compile a macro

- 1 On the Windows taskbar, click **Start ▶ Programs ▶ WordPerfect Office X3 ▶ Utilities ▶ PerfectScript**.
- 2 Click **Tools ▶ Settings**.
- 3 Click the **Compile** tab.
- 4 Enable the **Generate listing file** check box.

### To find macro errors using the PerfectScript debugger

- 1 Click **Tools ▶ Macro ▶ Edit**.
- 2 Choose a macro.
- 3 Click **Edit**.
- 4 Click where you want WordPerfect to begin debugging the macro.
- 5 Type **Step (On!)**.  
If you want to display a debug window, type **Display (On!)**.
- 6 Click **Save & compile** on the **Macro** toolbar.

7 Type a filename and path in the **Listing filename** box.



By default, listing files, which have a .wcl filename extension, are saved to the same location as the macro you are compiling.

## Working from the PerfectScript utility

You can use PerfectScript either inside WordPerfect or from the PerfectScript utility, which is included with the WordPerfect Office utilities. You can also set the default macro folder and the PerfectScript editor. You must set the PerfectScript macro editor before you can edit a macro.

WordPerfect lets you test for errors from inside the PerfectScript utility. WordPerfect allows you several options for debugging macros. You can debug macros step-by-step so that the macro executes the current commands and stops at the next command. You can also debug macros with a breakpoint so that the macro executes all the commands in the macro until it reaches the breakpoint. Macro breakpoints are set by default to be the beginning of the macro, the end of the macro, and at any errors. WordPerfect also lets you debug a macro by briefly displaying or “animating” each command before it is executed.

Animation allows you to step through macros line by line, automatically bringing up the debugging dialog box at each step so you can check the variables and other calls. You can specify how long the debugger will pause before moving to the next step.

PerfectScript starts automatically when you record or play a macro from a Windows application that supports macros. If you play a macro for an application that is not running, PerfectScript automatically starts the application.


### To start PerfectScript from the Windows Start menu

- On the Windows taskbar, click **Start ▶ Programs ▶ WordPerfect Office X3 ▶ Utilities ▶ PerfectScript**.


In Windows XP, click **Start ▶ All programs ▶ WordPerfect Office X3 ▶ Utilities ▶ PerfectScript**.

### To set the default macro folder in PerfectScript

1 In PerfectScript, click **Tools ▶ Settings**.

- 2 Click the **General** tab.
- 3 In the **Macro** box, click the **Browse**  button.
- 4 Choose the drive and folder where you want to store the macro.
- 5 Click **Select**.

### **To set the PerfectScript editor**

- 1 In PerfectScript, click **Tools** ▶ **Settings**.
- 2 Click the **Edit** tab.
- 3 In the **Editor path/filename** box, click the **Browse**  button.
- 4 Choose the drive and folder where the editor is stored.

The PerfectScript editor is stored in the following location: X:\Program files\WordPerfect Office X3\Programs\PS130.exe. “X” represents the folder where you installed WordPerfect Office.

- 5 Click **Open**.



You can also edit macros by selecting a macro filename in Windows Explorer and clicking **Edit** from the QuickMenu.

### **Testing for errors from PerfectScript**

WordPerfect lets you debug macros, step-by-step, with a breakpoint. You can also debug macros by briefly displaying or “animating” each command before it is executed.

### **To debug a macro step-by-step from PerfectScript**

- 1 In PerfectScript, click **File** ▶ **Debug** ▶ **Play**.
- 2 Choose a macro.
- 3 Type a filename and path in the **Listing filename** box.
- 4 Click **OK**.
- 5 Click **Debug** ▶ **Step into**.



You may need to repeat this procedure more than once, until the macro is debugged.

## To set a macro breakpoint

- 1 Choose the line of the macro at which you want to insert a breakpoint.
- 2 Click **Debug ▶ Breakpoint ▶ Add**.

If you want to debug a macro with a breakpoint, click **Debug ▶ Continue**.

## To animate a macro

- 1 In the PerfectScript utility, click **Edit ▶ Tools**.
- 2 Click the **Debug** tab.
- 3 In the **Animate settings** area, enable one of the following options:
  - 'Runto' does 'step into' — executes the next single statement
  - 'Runto' does 'step over' — executes the call of the label or routine without stopping until it has completed
- 4 Type a value in the **Delay (seconds)** box.
- 5 Click **OK**.
- 6 Click **Debug ▶ Animate**.



When correcting compilation errors, start at the beginning and first correct the errors that are obvious, leaving the others until later, as some of these errors may have been caused by an earlier error.

## To view the meaning of commands from the PerfectScript Debugger

- Point to a command line.

The command or variable name and definition display.

## Editing and deleting macros

WordPerfect lets you edit and delete macros.

### To edit a macro

- 1 Click **Tools ▶ Macro ▶ Edit**.
- 2 Choose the drive and folder where the macro is stored.
- 3 Click **Edit**.

- 4 Make any editing changes.
- 5 Click **Save & compile** on the **Macro** toolbar.
- 6 Click **Options ▶ Close macro** on the **Macro** toolbar.

### To delete a macro

- 1 Click **Tools ▶ Macro ▶ Edit**.
- 2 Choose the drive and folder where the macro is stored.
- 3 Click a macro.
- 4 Press **Delete**.

### Searching in macros

WordPerfect provides a macro with searching capabilities by recording a search in a macro. WordPerfect lets you use all of its find and replace functionality when you are searching in a macro. For more information about Find and Replace features, see “Finding and replacing text” on page 45.

### To record a search in a macro

- 1 In the edit view of the macro, click where you want the search to begin.
- 2 Click **Tools ▶ Macro ▶ Record**.
- 3 Type a name for the macro in the **Filename** box.
- 4 Click **Record**.
- 5 Click **Edit ▶ Find and replace**.
- 6 In the **Find** box, type the text for which you want to search.
- 7 In the **Replace** box, type the text with which you want to replace the found item.
- 8 Click **Replace all**.
- 9 Click **Tools ▶ Macro ▶ Record**.

### You can also

---

Search for codes

In the **Find** box, click **Match ▶ Codes**, and insert the codes for which you want to search from the **Codes** dialog box.

---

## You can also

---

Replace codes

In the **Replace** box, click **Replace** ► **Codes**, and insert the codes that you want to use from the **Codes** dialog box.

---

## Integrating with Microsoft Visual Basic for Applications

You can use Microsoft Visual Basic for Applications (VBA) with WordPerfect Office. VBA is an object oriented programming language that lets you create VBA macros to automate tasks. You can, for example, create a macro in WordPerfect that changes the color of the headings. VBA is not part of the typical install of WordPerfect Office. To use VBA, you should do a custom install and enable Microsoft Visual Basic For Applications.

You can program and play a project or a global VBA macro in WordPerfect. You can play a project macro only from the document that was used to create it. If the macro does not perform the desired action, you can debug the macro.

You can edit a VBA macro. Editing a macro involves going directly to the start of the code, whereas debugging a macro involves stepping through each line of the code.

Debugging is an extremely important part of the programming process. Debugging lets you step through your code line by line to ensure that the macro executes properly. This feature of programming is known as single-stepping. For example, if you are at a point in the code where a variable is about to be assigned a value, you can step into this line of code to determine the value of the variable at run-time.

For more information about VBA, see the Microsoft Visual Basic Help in the Visual Basic Editor.

### Event-driven programming

Visual Basic for Applications is an event-driven programming language. Most of the code you create is written to respond to an event. An event is an action that is recognized by VBA; for example, clicking a button or choosing an option from a list box. Unlike traditional procedural programming, in which the program starts at line 1 and executes line by line, event-driven programming executes code in response to events.

## **The difference between PerfectScript and VBA**

Previously, you could only use the PerfectScript language to automate specific tasks. Both product commands and programming commands are used in conjunction with the PerfectScript language. The PerfectScript language is useful for developing simple macros. VBA offers more flexibility and power. When you use VBA to create macros, you are assisted by the Visual Basic compiler. The compiler helps you by providing context-sensitive Help when you are coding a VBA macro. You can combine the power of VBA with the PerfectScript product commands to create powerful macros. You must use the Visual Basic Editor to create VBA macros; however, PerfectScript macros are developed from the WordPerfect Editor. You can access the Visual Basic Editor only when you are working in an active document.

## **The PerfectScript class**

All product commands used in WordPerfect, Quattro Pro, and Presentations can be used in VBA macros. You must call the PerfectScript object to access a product command. An object is an instance of a class. All objects have properties; for example, the name of a document is a property that belongs to the document object. You can set or change an object's properties by calling certain methods. A method performs a specific action, such as inserting a table into a document. You can, for example, close a document by calling the Close method, or you can save a document by calling the Save method. The term "class" is a VBA programming term and means a collection of related methods, which are referred to as class members. The product commands are the class members that belong to the PerfectScript class. WordPerfect, Quattro Pro, and Presentations have their own PerfectScript class because the class members, which are the product commands, are different depending on the application.

All members of the PerfectScript class will perform a specific action. For more information about product commands, see the macros manual.

The syntax for the product commands and the PerfectScript members is usually the same; however, there may be some differences.

## **Working in the VBA Editor**

In most cases, the name of the class is the same as the name of the object. WordPerfect Office has one object, which is the document object. In WordPerfect, the name of the document object is ThisDocument, which is the same as the class. In Presentations, the name of the document object is ThisSlideShow, which is the same as the class. In Quattro Pro, the name of the document object is ThisDocument, which is the same as

the class. The document object is the host application that is open. In future versions, there will be many more objects, such as a table object or a cell object.

You can create a new object, such as a dialog box, which is known as a form. You can add controls, such as a check box or a text box. You can set the object's properties in the Property dialog box located in the Visual Basic Editor. You can also set the object's properties at run time by programming a method. For example, you can color a form red when you click on it. For more information about setting an object's properties, see the Microsoft Visual Basic Help in the Visual Basic Editor.

An experienced programmer can work directly with the Windows API (Application Programming Interface) and, for example, be able to determine how much disk space is free or gain access to the system's time and date values. Most VBA users will want to automate specific and repetitive tasks.

### **Accessing an application from another application's macro**

You can access and change an application from another application's macro. For example, you could create and use a Quattro Pro object from a WordPerfect VBA macro. This allows you to change and save a Quattro Pro document from a WordPerfect VBA macro.

### **Creating VBA macros**

You can create two kinds of VBA macros: a global and a project macro. You can play a global macro from more than one document; however, a project macro can be played only in the document which was used to create it.

You can create a project VBA macro by creating a public method for the ThisDocument object. The term public refers to the access level. If a method is public, it can be accessed from outside the class. This means that you can call it from the host application. If a method is private, only methods in the same class can access it. Every public method that belongs to the ThisDocument class is a project macro. You can create a VBA macro called ShowMessage and code one line as follows: `MsgBox "Hello"`. This VBA macro calls a Message Box that displays the string "Hello."

### **Using VBA macros**

You can store a VBA macro in the document by saving the document. Once you have saved the document, you can close and reopen the document and access the macro. After you have developed the macro, you should debug it. You can step through each macro line by line. This is a useful exercise to ensure that the macro will have the desired



outcome. A project macro is not available if the document is closed. After you have debugged the macro, you can play the macro.

## Assigning security

When you open WordPerfect Office documents created by other users, be aware that a document could contain a macro virus. As a screening measure, VBA includes a security mechanism to help manage document security. You determine the security level used when opening or loading documents and add-ins containing embedded VBA macros. You can review the assigned security level and collection of trusted certificates that come from reputable sources. A VBA developer can attach his digital signature to a macro, which creates a certificate when the document is opened. The fact that a document has a digital signature does not automatically ensure the document to be free of viruses, so that the onus is on you to find out if the developer scans for viruses before adding his certificate to your trusted sources.

There are three security level settings available: High, Medium, and Low. With the High setting, you can open a signed VBA project from a trusted source with the macros enabled. Otherwise, the document is opened with the macros disabled. The default security setting is Medium. A Medium setting indicates that a warning displays if you try to load a VBA document that is not on your trusted source list. You can choose to open the document with the macros enabled or disabled. The Low setting allows you to open all VBA projects without applying any security (which disables all virus protection).

## To start VBA from WordPerfect

- Click Tools ► Visual Basic ► Visual Basic Editor.



The members of the **PerfectScript** class are applicable only to WordPerfect.

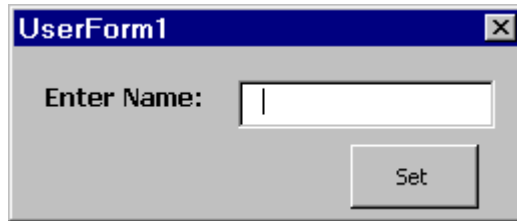
## To display the VBA toolbar

- 1 Click View ► Toolbars.
- 2 Enable the **Visual Basic** check box.

## To create a VBA project macro in WordPerfect

- 1 Click Tools ► Visual Basic ► Visual Basic Editor.
- 2 Double-click **Project (Document1)** in the **Project** view.

- 3 Click **Insert** ► **User form**.
- 4 Change the form so that it resembles the following diagram:



- 5 Change the name of the TextBox control to NameBox, as illustrated in the following list:  
Command Button - CommandButton1  
TextBox - NameBox  
You can change all of the control's attributes, including the name of the control, in the **Property** dialog box located in the Visual Basic Editor.

- 6 Double-click the CommandButton1 control to create a new method for the UserForm1 class, and type the following lines of code in the CommandButton1\_Click method:

```
Private Sub CommandButton1_Click()  
Dim myname, Msg As String  
myname = NameBox  
Msg = "Hello " & myname  
MsgBox Msg  
End  
End Sub
```

This code responds to the event that occurs when the command button is clicked.

- 7 Double-click the **WordPerfect objects** folder in the **Project** view.
- 8 Double-click **ThisDocument**, and type the following lines of code in the **Editor** box:

```
Public Sub ShowForm()  
End Sub
```

This code adds a new method to the **ThisDocument** class. If you declare **ShowForm** as a Private method, you will not be able to run it from WordPerfect.

- 9 Type the following line of code in the **ShowForm** method:

```
Public Sub ShowForm()  
UserForm1.Show  
End Sub
```

## To create a VBA global macro in WordPerfect

- 1 Click **Tools** ▶ **Visual Basic** ▶ **Visual Basic Editor**.
- 2 Double-click **Global macros** in the **Project** view.
- 3 Click **Insert** ▶ **User form**.
- 4 Change the form so that it resembles the diagram below the procedure.
- 5 Change the name of the **TextBox** control to **NameBox** as illustrated in the following list:

```
Command Button - CommandButton1  
TextBox - NameBox
```

You can change all of the control's attributes, including the name of the control, in the **Property** dialog box located in the Visual Basic Editor.

- 6 Double-click the **CommandButton1** control to create a new method for the **UserForm1** class, and type the following lines of code in the **CommandButton1\_Click** method:

```
Private Sub CommandButton1_Click()  
Dim myname, Msg As String  
myname = NameBox  
Msg = "Hello " & myname  
MsgBox Msg  
End  
End Sub
```

This code responds to the event that occurs when the command button is clicked.

- 7 Double-click the **WordPerfect objects** folder in the **Project** view.
- 8 Double-click **ThisDocument**, and type the following lines of code in the **Editor** box:

```
Public Sub ShowForm()  
End Sub
```

This code will add a new method to the **ThisDocument** class. If you declare **ShowForm** as a Private method, you will not be able to run it from WordPerfect.

9 Type the following line of code in the **ShowForm** method:

```
Public Sub ShowForm()  
    UserForm1.Show  
End Sub
```



The name of this macro is **ShowForm**. For more information about VBA, see the Microsoft Visual Basic Help in the Visual Basic Editor.

## To play a VBA macro in WordPerfect

- 1 Click **Tools** ▶ **Visual Basic** ▶ **Play**.
- 2 Choose one of the following macros from the **Macros in** list box:
  - **ThisDocument** — lets you play a project VBA macro
  - **Global** — lets you play a global VBA macro
- 3 Choose a macro from the **Macro name** list box.
- 4 Click **Run**.



To start a VBA macro, you can also click the **Play** ▶ button on the **Visual Basic** toolbar.

## To edit a VBA macro

- 1 Click **Tools** ▶ **Visual Basic** ▶ **Play**.
- 2 Choose a macro from the **Macro name** list box.
- 3 Click **Edit**.
- 4 Edit the code as necessary.

## To debug a macro created in VBA

- 1 Click **Tools** ▶ **Visual Basic** ▶ **Play**.
- 2 Choose a macro from the **Macro name** list box.
- 3 Click **Step into**.
- 4 For each line of code you want to step into, click **Debug** ▶ **Step into**.
- 5 Change the code as necessary.



After you have stepped into a line of code, you can point to a specific variable to determine the value of the variable.

## Using the PerfectScript class to change WordPerfect documents

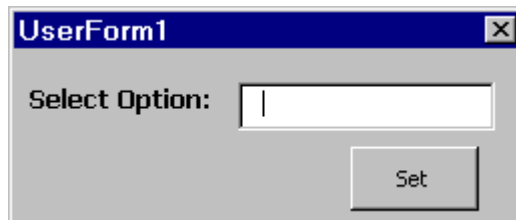
The **PerfectScript** class lets you automate specific and repetitive tasks. The members of the **PerfectScript** class are the product commands that are used in conjunction with the **PerfectScript** language.

### To create a VBA macro that uses the PerfectScript class



The images that are referenced in this procedure are examples. You can substitute the example images with images of your choice.

- 1 Click **Tools** ▶ **Visual Basic** ▶ **Visual Basic Editor**.
- 2 Double-click **Project(Document1)**, and double-click the **WordPerfect objects** folder in the **Project** view.
- 3 Double-click **ThisDocument**, and type the following lines of code in the **Editor** window:
  - `Public Sub AddWatermark()`
  - `UserForm1.Show`
  - `End Sub`
  - This code will add a new method, called **AddWatermark**, to the **ThisDocument** class. **Userform1** is the name of the form object. The **Show** method will call **Userform1**.
- 4 Click **Insert** ▶ **User form**, and change the form so that it resembles the following diagram:



The default names of the controls are used. Located on this form are a `CommandButton` and a `ComboBox`. You can change all of the control's attributes, including the name of the control, in the **Property** dialog box located in the Visual Basic Editor.

- 5 Double-click on the form to access the Editor window, choose **General** from the **Object** list box, and add the following code in the Editor window:

```
Dim myStyle As String
```

This code will create a string variable called `myStyle`.

- 6 Choose **Userform** from the **Object** list box.
- 7 Choose **Initialize** from the **Procedure** list box, and add the following code in the `UserForm_Initialize` method:

```
Private Sub UserForm_Initialize()  
    ComboBox1.AddItem "Rose"  
    ComboBox1.AddItem "World"  
    ComboBox1.AddItem "Ribbon"  
End Sub
```

This code responds to the event that occurs when the form is initialized. This code adds three string items to the `ComboBox1` control.

- 8 Double-click the **CommandButton1** control to create a new method for the `UserForm1` class, and type the following lines of code in the `CommandButton1_Click` method:

```
Private Sub CommandButton1_Click()  
    myStyle = ComboBox1  
    If myStyle = "" Then  
        MsgBox "You have not selected a style", vbExclamation  
    End If  
    "The user selected the rose watermark"  
    If myStyle = "Rose" Then  
        PerfectScript.ClearDoc  
        PerfectScript.WatermarkA Create_WatermarkA_Action,  
        OddPages_WatermarkA_Occurrence  
        PerfectScript.BoxCreate 6  
        PerfectScript.BoxContentType Image_BoxContentType_Content
```

PerfectScript.BoxImageRetrieve MakeInternal\_BoxImageRetrieve\_Action,  
“C:\rose2.wpg”

PerfectScript.ChangeWatermarkGraphicShade 25

PerfectScript.BoxUpdateDisplay

PerfectScript.BoxEnd Save\_BoxEnd\_State

PerfectScript.Close

End If

**'The user selected the world watermark**

If myStyle = “World” Then

PerfectScript.ClearDoc

PerfectScript.WatermarkA Create\_WatermarkA\_Action,  
OddPages\_WatermarkA\_Occurrence

PerfectScript.BoxCreate 6

PerfectScript.BoxContentType Image\_BoxContentType\_Content

PerfectScript.BoxImageRetrieve MakeInternal\_BoxImageRetrieve\_Action,  
“C:\World3.wpg”

PerfectScript.ChangeWatermarkGraphicShade 25

PerfectScript.BoxUpdateDisplay

PerfectScript.BoxEnd Save\_BoxEnd\_State

PerfectScript.Close

End If

**'The user selected the ribbon watermark**

If myStyle = “Ribbon” Then

PerfectScript.ClearDoc

PerfectScript.WatermarkA Create\_WatermarkA\_Action,  
OddPages\_WatermarkA\_Occurrence

PerfectScript.BoxCreate 6

PerfectScript.BoxContentType Image\_BoxContentType\_Content

PerfectScript.BoxImageRetrieve MakeInternal\_BoxImageRetrieve\_Action,  
“C:\ribb0002.wpg”

PerfectScript.ChangeWatermarkGraphicShade 25

PerfectScript.BoxUpdateDisplay

PerfectScript.BoxEnd Save\_BoxEnd\_State

```
PerfectScript.Close
End If
PerfectScript.ZoomToFullPage
Unload Me
End Sub
```

This code responds to the event that occurs when you click the command button. Be sure to enter the correct path to where the graphics files are located.



In this procedure, a new method called `AddWatermark` is added to the `ThisDocument` class. This macro calls a form that lets you select a choice of three watermarks to insert into the odd pages of the document. `PerfectScript` class members can be accessed only by calling the `PerfectScript` object, which must be followed by a “.”. You can call the `AboutDlg` method, which is a `PerfectScript` class member, by typing `PerfectScript>AboutDlg`.

## Working with VBA methods

You can use VBA to get system information, such as the system’s date and time values. Retrieving the system’s date and time values using VBA is very easy because all of the Windows functions are hidden, and all you have to do is call the appropriate VBA method.

### To access the system’s date and time values

- 1 Click **Tools** ► **Visual Basic** ► **Visual Basic Editor**.
- 2 Double-click `Project(Document1)` in the **Project** view.
- 3 Double-click the **WordPerfect objects** folder in the **Project** view.
- 4 Double-click `ThisDocument`, and type the following lines of code in the **Editor** box:

```
Public Sub ShowTime()
End Sub
```

This code will add a new method to the `ThisDocument` class. Make sure that the `ShowTime` method is declared public so that you can access this macro from `WordPerfect`.



- 5 Type the following new code in the **ShowTime** method to declare two new variables:

```
Public Sub ShowTime()  
    Dim myTime  
    Dim myDate As Date  
End Sub
```

- 6 Type the following new code in the **ShowTime** method to populate the **myTime** and the **myDate** variables:

```
Public Sub ShowTime()  
    Dim myTime  
    Dim myDate As Date  
    myTime = Time  
    myDate = Date  
End Sub
```

- 7 Type the following new code in the **ShowTime** method to convert the two variables to string data types:

```
Public Sub ShowTime()  
    Dim myTime  
    Dim myDate As Date  
    myTime = Time  
    myDate = Date  
    Dim myStrTime, myStrDate, Msg As String  
    myStrDate = Str(myDate)  
    myStrTime = Str(myTime)  
End Sub
```

- 8 Type the following new code in the **ShowTime** method to populate and display the **Msg** variable:

```
Public Sub ShowTime()  
    Dim myTime  
    Dim myDate As Date  
    myTime = Time  
    myDate = Date  
    Dim myStrTime, myStrDate, Msg As String
```

```

myStrDate = Str(myDate)
myStrTime = Str(myTime)
Msg = "The date is " & myStrDate & " and the time is " & myStrTime
MsgBox Msg
End Sub

```



For the purpose of this procedure, a message box was selected to display the date and time (**myDate**, **myTime**, **myStrDate**, and **myStrTime**); however, you can create a new form and display the time and date in this form. For more information about VBA, see Microsoft Visual Basic Help in the Visual Basic Editor.

## Accessing and manipulating applications from other applications

You can create a VBA macro that will call another application. It is possible to program a VBA macro to open and change another application at run time. For example, you can create a Quattro Pro object from the WordPerfect VBA Editor. This lets you create a WordPerfect VBA macro that will change a Quattro Pro document.

### To create a WordPerfect VBA Macro that will manipulate a Quattro Pro document

- 1 Open WordPerfect, and click **Tools** ► **Visual Basic** ► **Visual Basic Editor**.
- 2 Double-click **Project (Document1)** in the **Project** view.
- 3 Click **Tools**, choose **Reference**, enable **Corel - Quattro Pro 13.0 type library**, and click **OK**.

Every application has an object. Make sure you reference the right object.

- 4 Double-click the **WordPerfect objects** folder in the **Project** view.
- 5 Double-click **ThisDocument**, and type the following lines of code in the **Editor** box:

```

Public Sub CreateQPTable()
End Sub

```

This code will add a new method to the **ThisDocument** class. Make sure that **CreateQPTable** is declared public so that you can access this macro from WordPerfect.

- 6 Type the following lines of code in the **CreateQPTable** method:

```
Public Sub CreateQPTable()  
Dim myQp as Object  
Set myQp = CreateObject("QuattroPro.PerfectScript")  
If myQp Is Nothing Then  
MsgBox "The Quattro Pro Object is invalid", vbCritical  
End If
```

This code creates a Quattro Pro PerfectScript object. After the object is created, it is tested to determine if memory has been allocated to it. A Message Box will inform you if the object is invalid.

- 7 Type the following lines of code in the **CreateQPTable** method:

```
Public Sub CreateQPTable()  
Dim myQp as Object  
Set myQp = CreateObject("QuattroPro.PerfectScript")  
If myQp Is Nothing Then  
MsgBox "The Quattro Pro Object does not exist", vbCritical  
End If
```

**'Populate the Quattro Pro document**

```
myQp.FileNew "FileNew"  
myQp.SetCellString "B1", "Jan"  
myQp.SetCellString "C1", "Feb"  
myQp.SetCellString "D1", "Mar"  
myQp.SetCellString "A2", "TVs"  
myQp.SetCellString "A3", "VCRs"  
myQp.SetCellString "A4", "Radios"  
End Sub
```

This code will create a new Quattro Pro document and create an inventory table.



For the purpose of this procedure, a simple inventory table was created in a Quattro Pro document (**myQP**). You can run this macro from WordPerfect. For testing purposes, make sure that Quattro Pro is open. For more information about VBA, see Microsoft Visual Basic Help in the Visual Basic Editor.

## Using OLE Automation

The Object Linking and Embedding (OLE) architecture is based on a model of client-server (also known as container-component or controller-component) associations. This model is based on the interaction between two applications in which one application (the client or container) makes requests to the other (the server or client) to perform an action. With OLE Automation, the application acting as the server exposes one or more automation components which allow other applications (controller or client) to manipulate them. For example, WordPerfect can execute a macro containing commands that open Microsoft Word, open a document into Microsoft Word, modify the formatting, resave the document, and close Microsoft Word. In this case, WordPerfect is the OLE automation controller and Microsoft Word is the OLE automation server, since it acts upon the requests made by WordPerfect. When Microsoft Word, Visual Basic for Applications (VBA), or any other OLE automation controller application opens WordPerfect and instructs it to perform certain specified tasks using OLE automation methods, WordPerfect is the OLE automation server and the controlling application becomes the OLE automation controller.

PerfectScript can send commands to WordPerfect, Presentations, and Quattro Pro through OLE Automation. PerfectScript can also send commands to such applications as Microsoft Excel and Microsoft Word. These applications are called OLE Automation servers. PerfectScript is an OLE Automation controller. OLE Automation is not limited to these programs. PerfectScript can send commands to and control any OLE Automation server.

OLE Automation servers define objects. These objects have names that are registered with Windows. You can refer to an application's documentation for the names of objects they define. OLE objects can have methods and properties. A method is a command or function that performs an action on that object. A property is a value that the object has (like system variables in WordPerfect.) You can retrieve and set this value. An example of a method for the "Excel.Application" object is as follows:

```
Worksheets().Activate
```

A property of the "Excel.Application" object is as follows:

```
ActiveSheet.Name
```

Methods, like product commands, may require parameters, and may or may not return values. Unlike system variables in WordPerfect, you can set properties by placing the property name on the left-hand side of an assignment statement. Properties can also take parameters when being retrieved or when being set. This makes the retrieval of a property very similar to a method call.

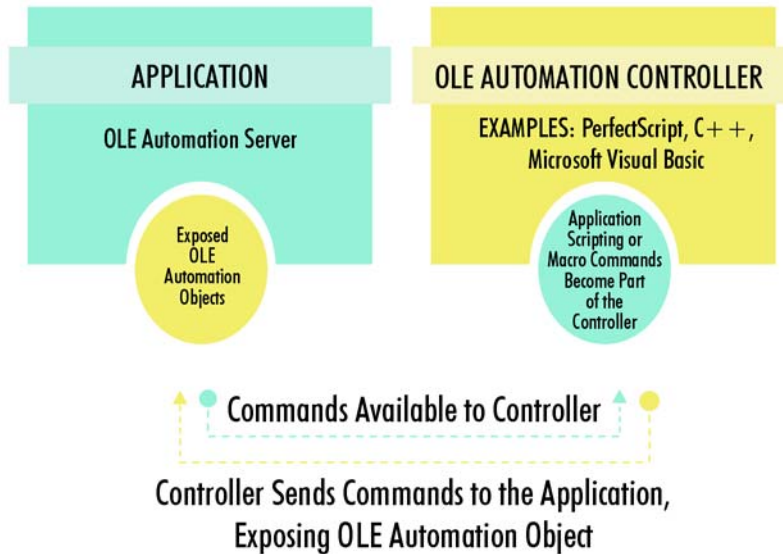
## Understanding OLE Automation

### OLE Automation

OLE Automation for WordPerfect is a flexible and powerful feature you can use to quickly build applications that use WordPerfect components. OLE Automation is an integration standard that has developed to allow applications to “expose” their programmable objects so that other applications can access them. The exposed commands become an extension of the controlling programming language.

Applications that support OLE Automation are called OLE Automation servers. Programming applications that can use a server’s scripting or macro commands are called OLE Automation controllers.

As shown in the following diagram, an OLE Automation server application exposes its programmable objects to the OLE Automation controller. The OLE Automation controller incorporates the server application’s scripting or macro commands as part of its own language. The controller can send these commands back to the server.



*This is a diagram of an OLE Automation server application.*

You can use OLE Automation for long and complicated manual processes that transfer data between two or more applications. For example, you may have a manual process that puts data into a spreadsheet to be used to create a presentation graphic. The graphic is used in a word processing application. If you use OLE Automation, you may be able to create a program that automatically does these steps for you. OLE Automation gives you almost total control over a variety of different applications, letting you build the applications you need through its seamless integration capabilities.

At a basic level, you can think of OLE Automation as a way for applications to speak to and control each other through their own scripting or macro programming languages. For example, you could have WordPerfect speak to and control Microsoft Word, another OLE Automation server. Because WordPerfect, in this case the OLE Automation controller, is a desktop publishing application and does not know about the inner workings of Microsoft Word, the OLE Automation server, it needs a way to get information from the server.

Conversely, WordPerfect can be controlled by other OLE Automation applications through its PerfectScript application commands and a programming language. Some of the most widely used programming languages can support OLE automation, including Microsoft Visual Basic, Microsoft Visual Basic for Applications, and C++.

### **WordPerfect, PerfectScript, and OLE Automation**

If you have ever used a script to send commands to WordPerfect or another Corel application, you've used OLE Automation. When you run a script that sends commands to a Corel application, you must use the `WithObject` statement to enable a programmable object in the application.

Any Corel application, including WordPerfect, that supports OLE Automation provides one programmable object that allows the PerfectScript controller to send it commands. The Microsoft Visual Basic `GetObject` command, for example, cannot be used to access a Corel document. Additionally, Corel applications do not support properties and methods. The only way to access a Corel document through OLE Automation is by using PerfectScript application commands.

You can also use other scripting languages to call Corel OLE Automation applications. For example, you can call the WordPerfect object using a script created in Visual Basic. The following Visual Basic script creates a new WordPerfect document and inserts a footnote.

```
Private Sub Form_Load()  
    Dim objWP As Variant
```

```
Set objWP = CreateObject("WordPerfect.PerfectScript")
objWP.FootnoteCreate
objWP.Tab
objWP.Type "This was inserted with VB."
objWP.Quit
End Sub
```

As in the example above, the Microsoft Visual Basic commands, or any other OLE automation application commands, must be preceded by an application name and a period.

### **Other OLE Automation controllers**

Rather than using only PerfectScript, you can use other applications as your OLE Automation controller. For example, you can use Microsoft Visual Basic, Microsoft Visual Basic for Applications, or Microsoft C++ as your OLE Automation controller for Corel applications. However, if you use a programming language other than PerfectScript to send commands to Corel applications, you cannot use PerfectScript programming statements and functions such as FOR...NEXT or MESSAGE, or Corel dialog box definition statements; you can only use the Corel application commands.

For information about commands and functions and PerfectScript OLE Automation overviews, see the online Help in the respective application. However, it does not provide procedural and reference information about programming by using OLE automation controllers other than PerfectScript. For more information about other OLE automation controllers, see the following reference sources:

- Microsoft Visual Basic Programmer's Guide
- Microsoft Windows Developer's Kit
- Microsoft Office Developer's Kit

The PerfectScript command Quit is specifically for use with OLE Automation. If you are scripting languages such as Visual Basic, C, C++, Delphi, FoxPro, and Corel Script, you should use the Quit command at the end of the script. Because WordPerfect hosts VBA, the Quit command should not be used from VBA.

## Using files with DDE Execute from previous versions of WordPerfect

Older versions of WordPerfect, such as WordPerfect 5.1 and WordPerfect 6.1, use Dynamic Data Exchange (DDE) Execute to trade information or allow one application to instruct another to perform specific tasks.

To use DDE Execute you need to refer to:

- the wordperfect macros Help file for information about the `ddeinitiate()`, `ddeexecute()`, and `ddeterminate()` programming commands
- the documentation for the other Windows applications; the information you need includes the service (application) name, topic name, and list of commands the application will accept through DDE Execute

### Sending commands to other Windows applications

Using DDE you can create WordPerfect macros that send commands to control other applications running under Windows. For example, you can create a macro that launches a spreadsheet application, loads a file, and copies a range of cells to a table in WordPerfect.

### Sending commands to WordPerfect

Other applications can also use DDE Execute to control WordPerfect. The application must first initiate a DDE conversation using the service (application) name of “WPWin13\_Macros” and topic name of “Commands.” Before terminating the conversation, the application can send DDE Execute strings made up of one or more WordPerfect macro commands. Note that WordPerfect accepts only product commands, not programming commands. These product commands cannot contain variables or expressions. See the WordPerfect Macros Help file for a list of product commands and descriptions.

Other applications can also send commands to WordPerfect as a DDE Request item in order to receive a string representing the command’s return value. The application must send the DDE Execute string or DDE Request item in ANSI text format. WordPerfect returns the DDE Request result as an ANSI text string. If either a DDE Execute string or a DDE Request item returns an error, the application can send a DDE Request on the item “LastCmdError” to find out what error occurred. This item will return an ANSI text string containing a three-digit error code and a description of the error.



## DDE Execute application names, services, and topics

Application	Service, Topic
WPWin	WPWin11_Macros,PS3Commands
Presentations	WPPresentations,Command
Quattro Pro	QPW, <full path and filename of open notebook>

## Getting online Help for macros

You can get online Help for macros through the macro command browser and the context-sensitive Help.

You can easily display the lists of product and programming commands for all applications in WordPerfect Office by using the WordPerfect Macros Help and the WordPerfect Office Macro Command Reference Center.

WordPerfect gives you instant Help on any command as you edit a macro. In the macro command browser, a brief description of the macro command appears at the bottom of the dialog box.

Online Help for each command in the macro command browser is available.

### To start WordPerfect Macros Help

- Click Help ► Macro commands.

### To get more information about PerfectScript Commands

- Click Help ► Help topics.

### To display Help while editing a macro

- 1 Click in a command.
- 2 Press F1.

### **To get Help in the macro command browser**

- 1 Choose a command from the **Commands** list.
- 2 Right-click the command to view the Help topic associated with that command.

### **To view the macro commands browser**

- Click **Commands** on the **Macro** toolbar.



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