

**OpenOffice.org**



**Writer Guide**

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# *Chapter 1*

## *Introducing Writer*

*The Word Processor Component of OpenOffice.org*

## What is Writer?

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Writer is the word processor component of OpenOffice.org (OOo). In addition to the usual features of a word processor (spell checking, thesaurus, hyphenation, autocorrect, find and replace, automatic generation of tables of contents and indexes, mail merge, and others), Writer provides these important features:

- Templates and styles
- Powerful page-layout methods (including frames, columns, and tables)
- Embedding or linking of graphics, spreadsheets, and other objects
- Built-in drawing tools
- Master documents, to group a collection of documents into a single document
- Change tracking during revisions
- Database integration, including a bibliography database
- Export to PDF, including bookmarks
- And many more

Styles are central to using Writer. Styles enable you to easily format your document consistently and to change the format with minimal effort. Often, when you format your document in Writer, you are using styles whether you realize it or not. A style is a named set of formatting options. Writer defines several types of styles, for different types of elements: characters, paragraphs, pages, frames, and lists. The use of styles is described in more detail in other chapters in this guide, including “Introduction to Styles” and “Working with Styles”.

The other features of Writer listed above are also covered in detail in other chapters of this guide.

## Starting Writer

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If you are reading this document in OpenOffice.org, you already know how to start Writer. However, if this is a printed version or a PDF version, you may not know how to start Writer. So let's look at three ways to do that:

- From the system menu
- From an existing document
- From the command line

## Starting from the system menu

Using the system menu is the most common way to start Writer. The system menu is the standard menu from which most applications are started. On Windows, it is called the **Start** menu. On GNOME, it is called the **Applications** menu. On KDE, it is identified by the KDE logo. On Mac OS X, it is the **Applications** menu.

When OpenOffice.org was installed, a menu entry was added to your system menu. The exact name and location of this menu entry depends on your graphical environment. This chapter looks at Windows, GNOME and KDE on Linux, and Mac OS X. The concepts should easily be applicable to another operating system.

### Windows

On Windows, the OpenOffice.org menu is located in **Programs > OpenOffice.org 2.x**, where “2.x” corresponds to the version number of OpenOffice.org. Figure 1 shows a typical setup on Windows XP. Select **OpenOffice.org 2.0 Writer** to start Writer with a blank document.

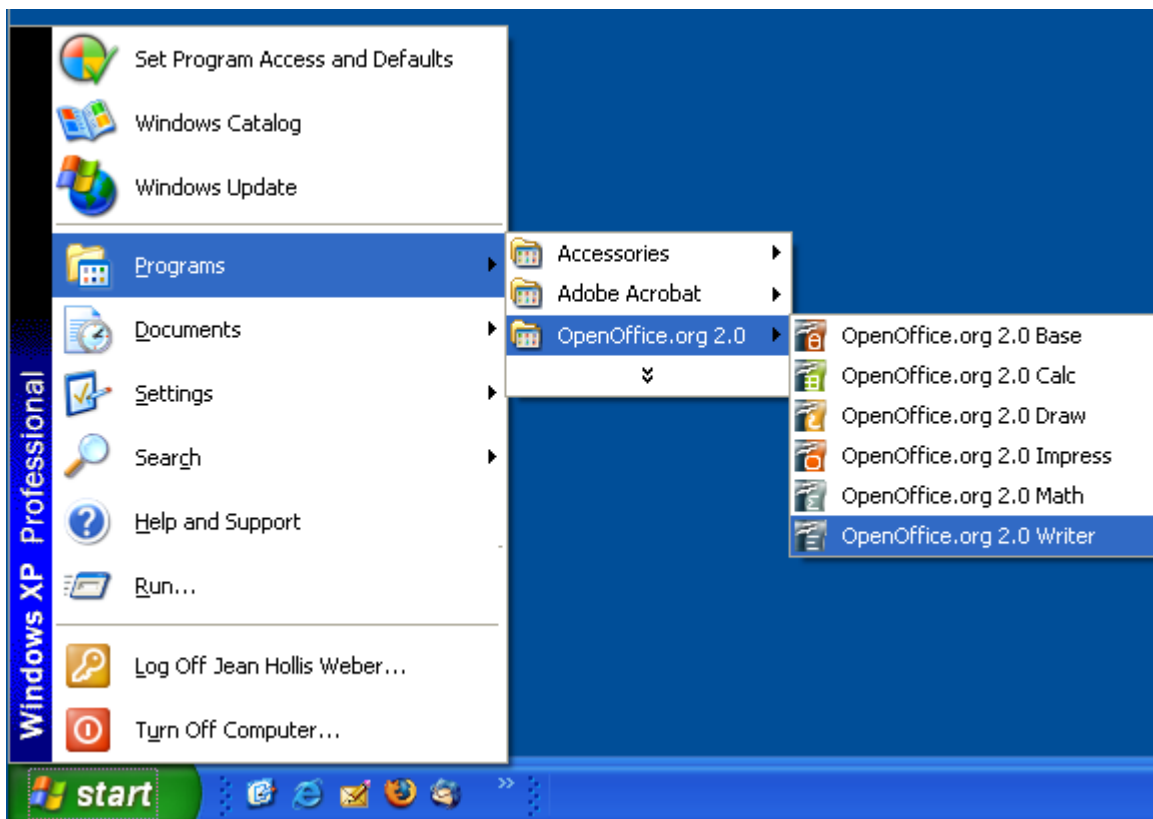


Figure 1. Starting Writer from the Windows XP Start menu

## Linux/GNOME

GNOME installations differ from one distribution to the next. Most modern distributions come with OpenOffice.org already installed. You will find OpenOffice.org under **Applications > Office**, as shown in Figure 2.

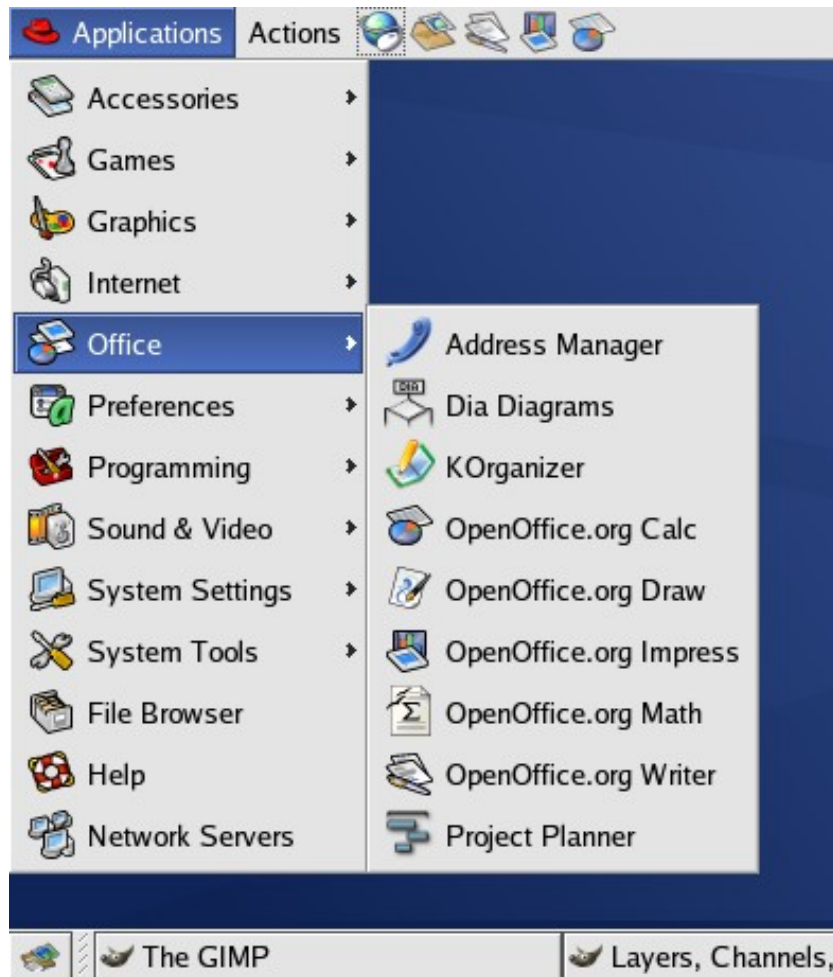


Figure 2. Starting Writer from the GNOME Applications menu

Fedora/Red Hat Enterprise Linux comes with OpenOffice.org installed. On the GNOME desktop, OOO can be found under **Main Menu > Office**. If you have installed a newer version of OOO, you will find it under **Main Menu > Office > More Office Applications**.

If you installed by downloading OOO from the <http://www.openoffice.org> website, it is under **Applications > Other**.

## Linux/KDE

On KDE, OpenOffice.org is installed in its own menu, called **Office** (see Figure 3).

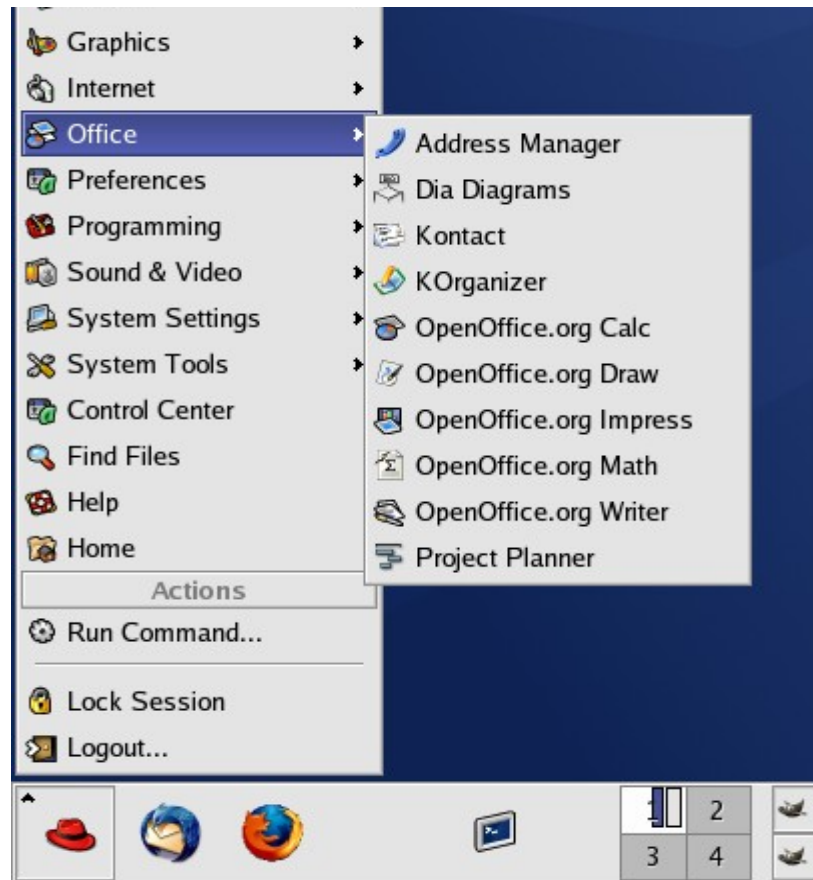


Figure 3. Starting OOo from KDE start menu

Some Linux distributions install OpenOffice.org in the Office submenu. Mandrake is such a distribution. In this case, to launch Writer, choose **Office > Word processors > OpenOffice.org Writer**. Figure 4 illustrates the OOo menu with Math selected.

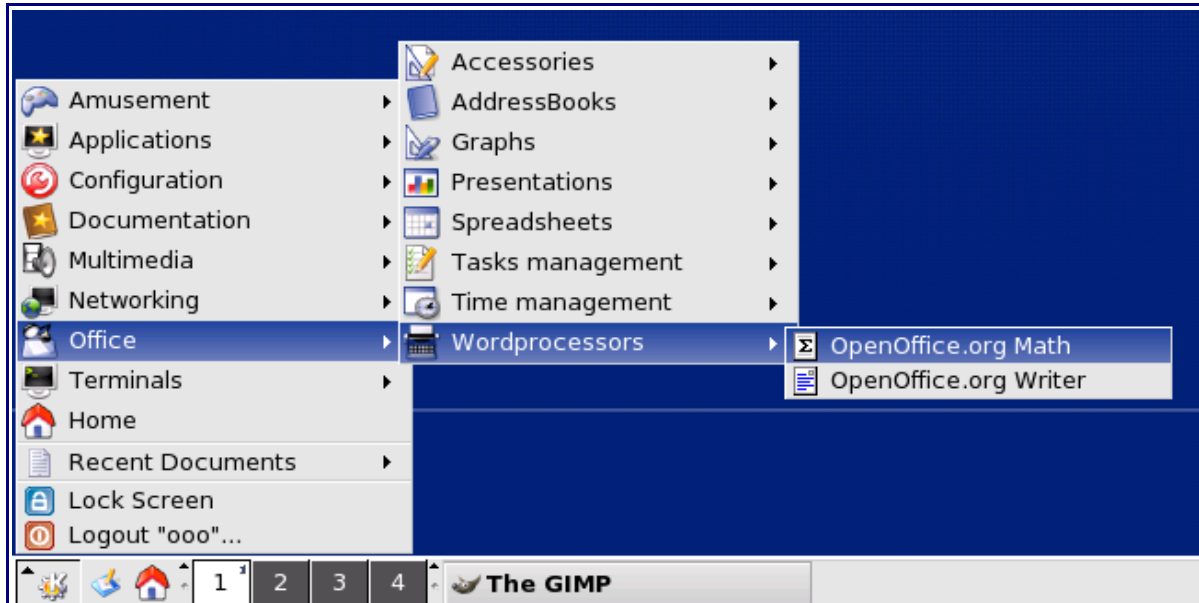


Figure 4: Starting OOO from Mandrake's KDE menu

## Mac OS X

Go to the folder where you installed OpenOffice.org. You should see its icon in the Applications folder (Figure 5). To start OpenOffice.org, double-click its icon.

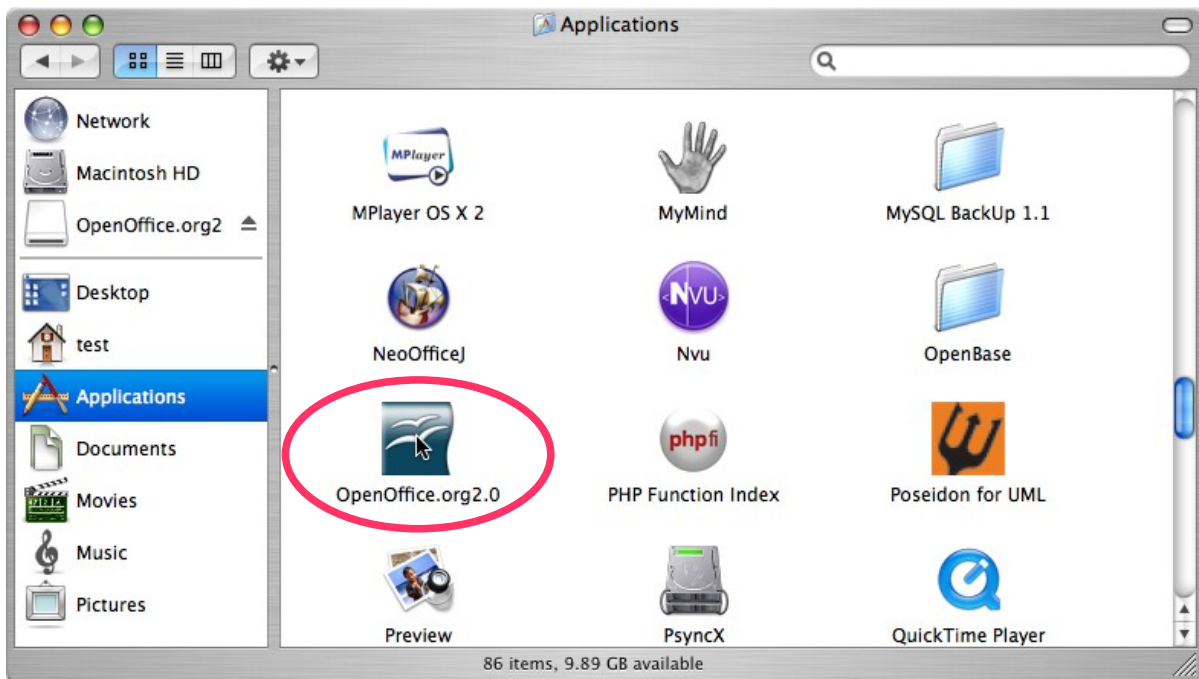


Figure 5: Starting OpenOffice.org from the Mac Applications folder



## Starting from an existing document

If you installed OpenOffice.org correctly, all Writer documents are associated with the Writer application. This means that you can start OpenOffice.org automatically, simply by double-clicking a Writer document in your favorite file manager (for example, Windows Explorer).

You can spot a OpenOffice.org Writer document by its icon: .

### For Windows users

File associations are used to open certain types of files automatically with OpenOffice.org. When installing OOo, you could choose to associate Microsoft Office file types with OOo. If you chose to do this, then when you double-click on a .doc file, it opens in OpenOffice.org.

If you did not associate the file types, then when you double-click on a Microsoft Word document, it opens in Microsoft Word (if Word is installed on your computer).

You can use another method to open .doc files in OOo and save in the .doc format from OOo. See “Opening an existing document” on page 17 for more information.

## Using the Quickstarter under Windows

The Quickstarter is an icon that is placed in the Windows system tray during system startup. It indicates that OpenOffice.org has been loaded and is ready to use. (The Quickstarter loads library .DLL files required by OOo, thus shortening the startup time for OOo components by about half.) If the Quickstarter is disabled, see “Reactivating the Quickstarter” on page 8 if you want to enable it.

### Using the Quickstarter icon

Right-click the Quickstarter icon in the system tray to open a popup menu from which you can open a new document, open the Templates and Documents dialog box, or choose an existing document to open. (See Figure 6.) You can also double-click the Quickstarter icon to display the Templates and Documents dialog box.

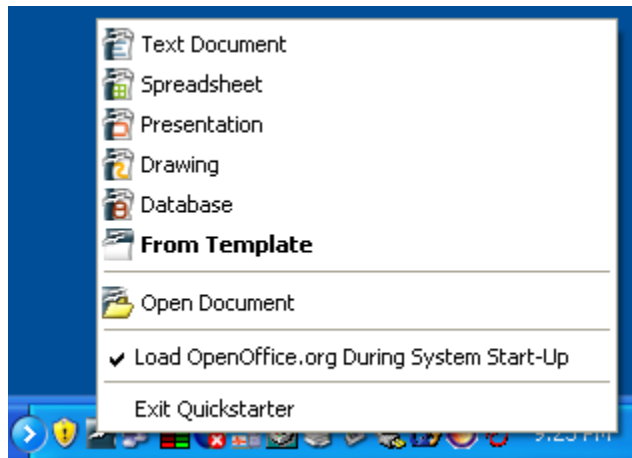


Figure 6: Quickstarter popup menu

## Disabling the Quickstarter

To close the Quickstarter, right-click on the icon in the system tray and then click **Exit Quickstarter** on the popup menu. The next time the computer is restarted, the Quickstarter will be loaded again.

To prevent OpenOffice.org from loading during system startup, deselect the **Load OpenOffice.org During System Start-Up** item on the popup menu. You might want to do this if your computer has insufficient memory, for example.

## Reactivating the Quickstarter

If the Quickstarter has been disabled, you can reactivate it by selecting the **Load OpenOffice.org During System Start-Up** checkbox in **Tools > Options > OpenOffice.org > Memory**.

## Preloading OOo under Linux/KDE

In Linux/KDE, you can use KDocker to have OOo loaded and ready for use at startup. KDocker is not part of OOo; it is a generic “systray app docker” that is helpful if you open OOo often.

## Starting from the command line

You may want to start Writer from the command line (using the keyboard instead of the mouse). Why? Well, by using the command line, you have more control over what happens when Writer is started. For example, using the command line, you can tell Writer to load a document and print it immediately, or to start without showing the splash screen.

---

**Note** Most users will never need to do this.

---

There is more than one way to start Writer from the command line, depending on whether you have installed a customized version or the standard download from the OOo web site.

If you installed using the download on the OOo web site, you can start Writer by typing at the command line:

```
soffice -writer
or      swriter
```

Writer will start and create a new document.

To see a list of options you can use when starting Writer at the command line, type:

```
soffice -?
```

If you have a customized version of OOo (such as the one provided by Linux Mandrake or Gentoo), you can start Writer by typing at the command line:

```
oowriter
```

---

**Note** Although the command syntax differs, the effect is identical: it starts OOo with an empty Writer document.

---

## The Writer interface

The main Writer workspace is shown in Figure 7.

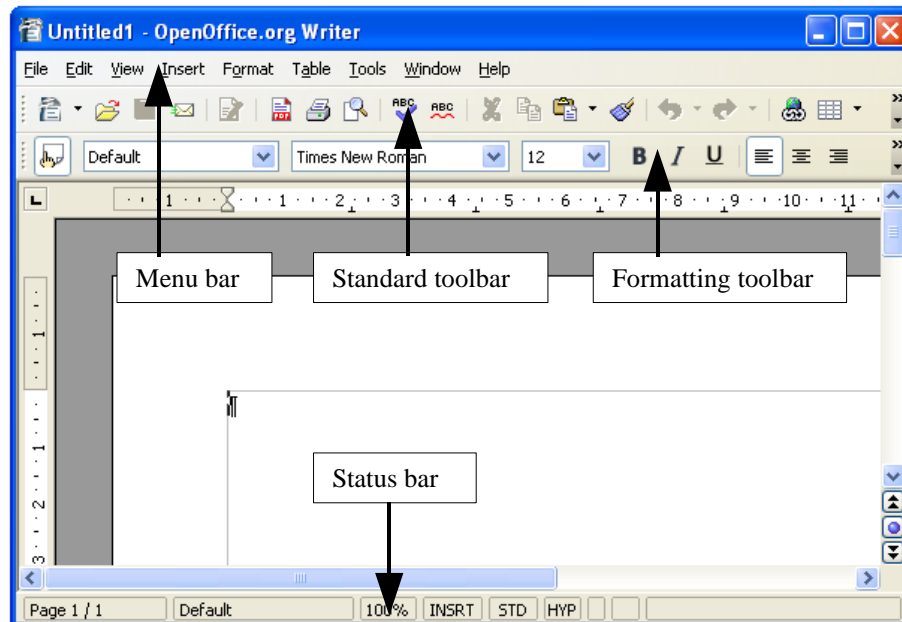


Figure 7: The main Writer workspace in Print Layout view

### Menus

*Menus* are located across the top of the Writer window. The main menu selections are **File**, **Edit**, **View**, **Insert**, **Format**, **Table**, **Tools**, **Window**, and **Help**. When you click one of the main menu names, a list of related options is displayed.

- **File** contains commands that apply to the entire document such as Open, Save, and Export as PDF.
- **Edit** contains commands for editing the document such as Undo and Find & Replace.
- **View** contains commands for controlling the display of the document such as Zoom and Web Layout.
- **Insert** contains commands for inserting elements into your document such as headers, footers, and pictures.
- **Format** contains commands for formatting the layout of your document, such as Styles and Formatting, Paragraph, and Bullets and Numbering.
- **Table** shows all commands to insert and edit a table in a text document.
- **Tools** contains functions such as Spellcheck, Customize, and Options.
- **Window** contains commands for the display window.
- **Help** contains links to the Help file, What's This?, and information about the program. See "Getting help" on page 21.

## Toolbars

Writer has several types of toolbars: docked, floating, and tear-off. Docked toolbars can be moved to different locations or made to float, and floating toolbars can be docked.

The top docked toolbar (default position) is called the *Standard* toolbar. The Standard toolbar is consistent across the OpenOffice.org applications.

The second toolbar across the top (default location) is called the *Formatting* toolbar.

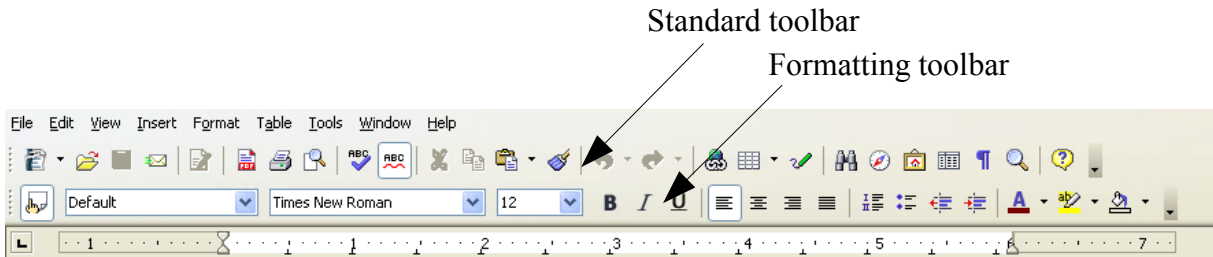


Figure 8. Writer toolbars

### Floating toolbars

Writer includes several context-sensitive toolbars, which by default appear as floating toolbars in response to the cursor's current position or selection. For example, when the cursor is in a table, a floating *Table* toolbar appears, and when the cursor is in a numbered or bullet list, the *Bullets and Numbering* toolbar appears. You can dock these toolbars to the top, bottom, or side of the window if you wish (see "Moving toolbars" below).

### Long-click buttons and tear-off toolbars

Buttons with a small triangle to the right will display *submenus*, *tear-off toolbars*, and other ways of selecting things with a long click, depending on the button. Figure 9 shows an example.

The tear-off toolbars are always floating and cannot be docked on any edge. To move a tear-off toolbar, drag it by the title bar.

### Displaying or hiding toolbars

To display or hide toolbars, choose **View > Toolbars**. An active toolbar shows a checkmark beside its name.

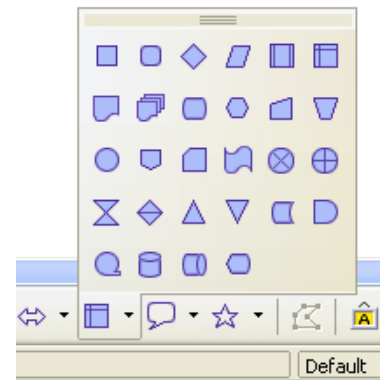


Figure 9. Button submenu

### Moving toolbars

To move a toolbar, place the mouse pointer over the toolbar handle, hold down the left mouse button, and drag the toolbar to the new location.

To dock the toolbar in another area, place the mouse pointer over the toolbar handle, hold down the left mouse button, drag the toolbar to the new location, and then release the mouse button. The toolbar will dock in the new location.

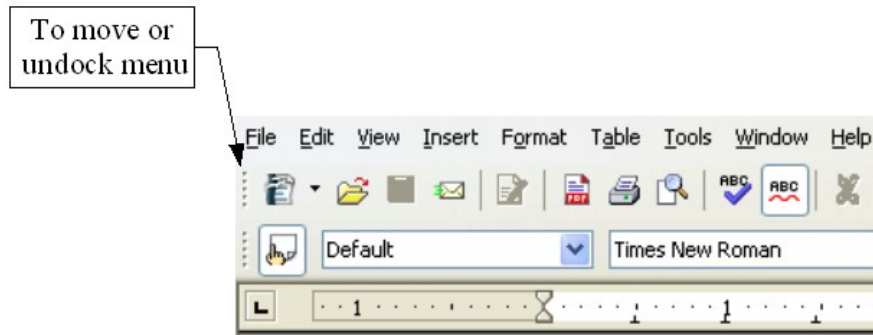


Figure 10. Toolbar handle

## Rulers

To show or hide rulers, choose **View > Ruler**. To show the vertical ruler, choose **Tools > Options > OpenOffice.org Writer > View** and select **Vertical ruler**.

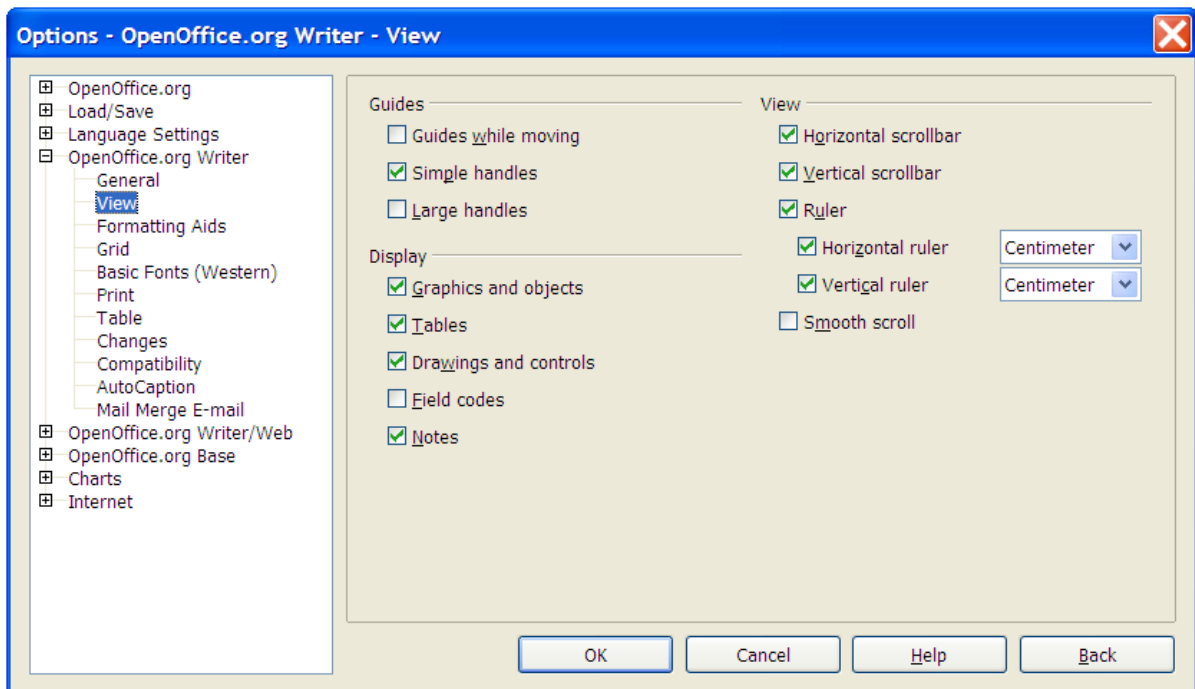


Figure 11. Turn on the vertical ruler using **Tools > Options > OpenOffice.org Writer > View**

## Changing document views

---

OpenOffice.org has several ways to view a document: Print Layout, Web Layout, Full Screen, and Zoom. You can select these choices on the **View** menu. The only document view option with a submenu is Zoom. When you choose **View > Zoom**, the following dialog box appears.

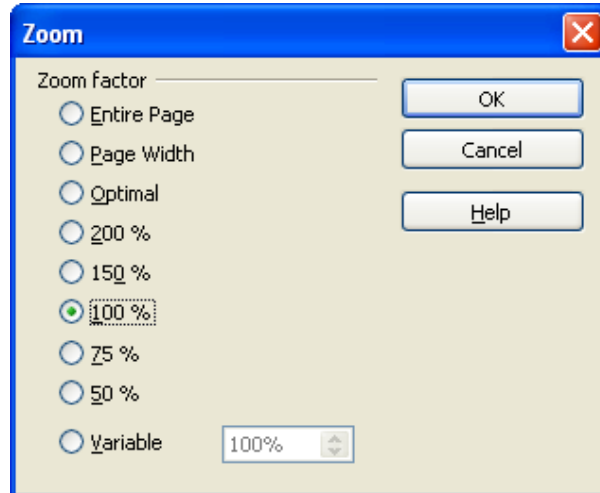


Figure 12. Selecting a zoom factor

- **Entire Page:** Displays the entire page on the screen (text may be too small to read).
- **Page Width:** Displays the complete width of the document page. The top and bottom edges of the page may not be visible.
- **Optimal:** Resizes the display to fit the width of the text in the document.
- **200%:** Displays the document at two times its actual size.
- **150%:** Displays the document at one and a half times its actual size.
- **100%:** Displays the document at its actual size.
- **75%:** Displays the document at 75% of its actual size.
- **50%:** Displays the document at half of its actual size.
- **Variable:** Enter the zoom factor (percentage) at which you want to display the document.

## Using dockable/floating windows

Some windows in OpenOffice.org, such as the Navigator and the Styles and Formatting window, are dockable. You can move, resize, or dock them to an edge.

To dock a window, do one of the following:

- Click on the title bar of the floating window and drag it to the side until you see the outline of a box appear in the main window (see Figure 13) and then release the window. This method depends on your system's window manager settings, so it may not work for you.
- Hold down the *Control* key and double-click on a vacant part of the floating window to dock it in its last position. If that does not work, try double-clicking without using the *Control* key.

To undock a window, hold down the *Control* key and double-click on a vacant part of the docked window.

<b>Notes</b>	The Styles and Formatting window can also be docked or undocked by using <i>Control</i> + <i>double-click</i> on the gray area next to the icons at the top of the window.
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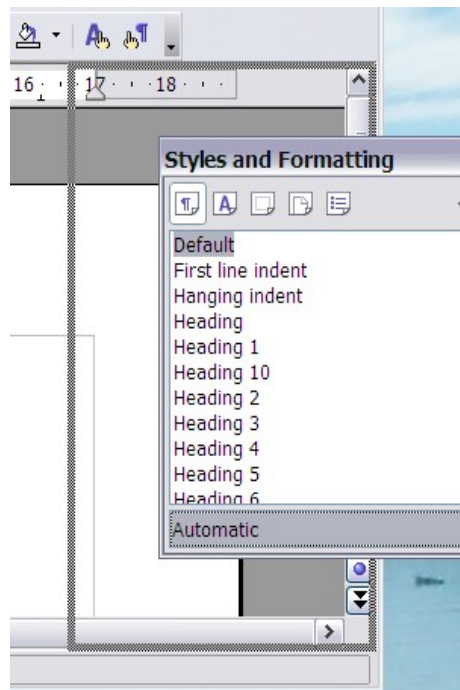


Figure 13: Docking a window

## Using the Navigator

The Navigator displays all objects contained in a document. It provides a very convenient way to move around a document and find items in it. The Navigator button is located on the *Standard* toolbar. You can also display the Navigator by choosing **Edit > Navigator**, or open it quickly by pressing *F5*.



Figure 14. Navigator toolbar icon

The Navigator displays lists of Headings, Tables, Text frames, Graphics, Bookmarks, and other items. Click the + sign by any of the lists to display the contents of the list.

If you only want to see the content in a certain category, highlight the category and click the **Content View** icon.

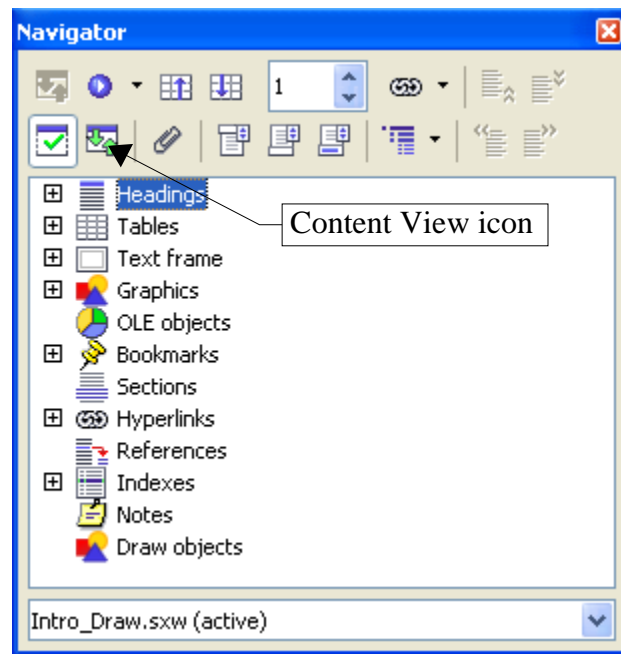


Figure 15. The Navigator

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**Note** The Navigator looks somewhat different in a master document. For more information, see Chapter 13, “Working with Master Documents”.

---

The Navigator helps you to reach objects quickly. Double-click the object in the Navigator to jump directly to that object’s position in the document, as shown in Figure 16.

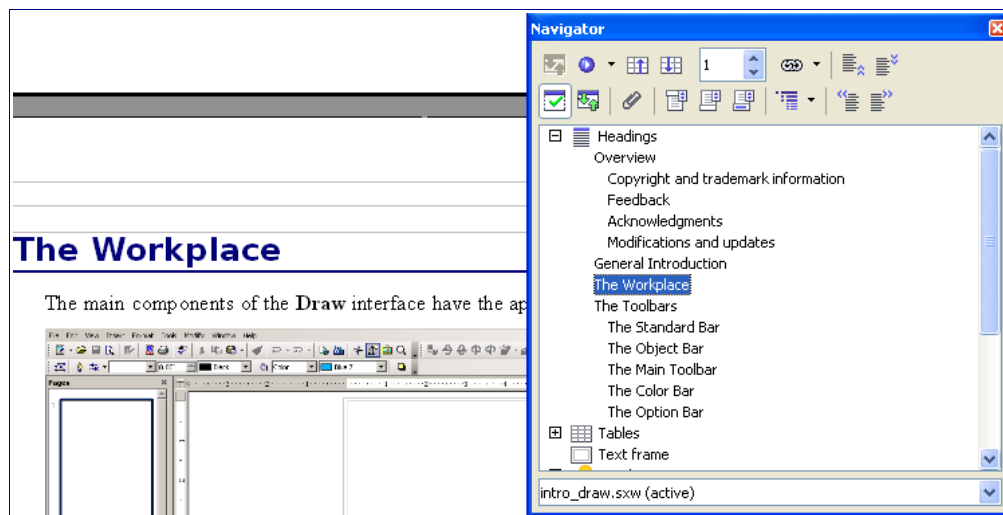


Figure 16. Using the Navigator to jump quickly to a heading



## Arranging chapters using the Navigator

You can arrange chapters and move headings in the document by using the Navigator.

- 1) Click the **Content View** icon to expand the headings, if necessary.
- 2) Click on the heading in question.
- 3) Drag the heading to a new location on the Navigator or click the heading in the Navigator list, and then click **Promote Level**, **Demote Level**, **Chapter Up**, or **Chapter Down**.

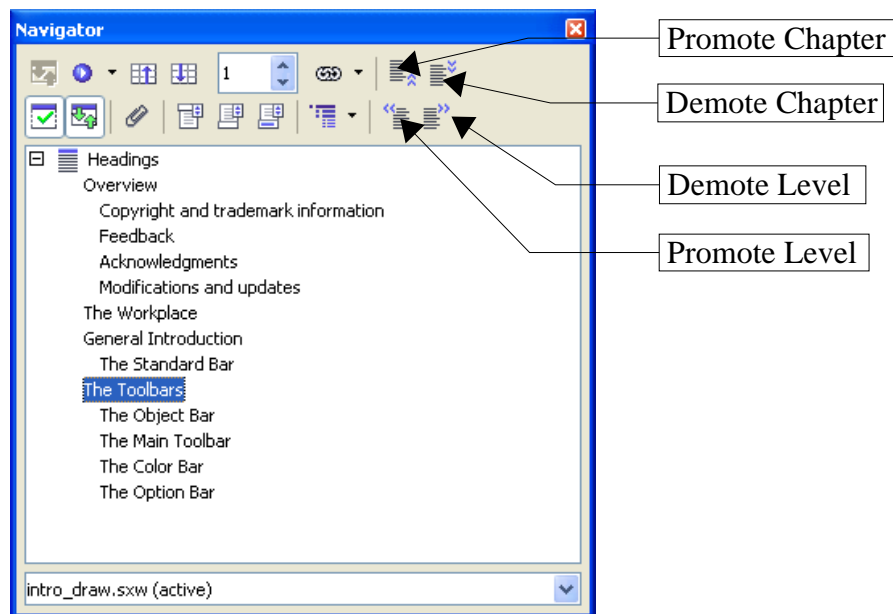



Figure 17. Reorganizing with the Navigator

## Creating a new document

### Creating a blank document

You can create a new, blank document in Writer in a number of ways:

- Press the *Control+N* keys. A new empty document opens. If you already have a document open, the new document appears in a new window.
- Use **File > New > Text Document**.
- Click the **New** button on the main toolbar .

## Creating a document from a template

You can use templates to create new documents in Writer. Templates serve as the foundation of a set of documents, to make sure they all have a similar layout. For example, all the documents of this User Guide are based on the same template. As a result, all the documents look alike; they have the same headers and footers, use the same fonts, and so on.

Unfortunately, a brand-new OpenOffice.org installation does not contain many templates. It is possible for you to add new templates to your installation and use them for new documents. This is explained in Chapter 10, “Working with Templates”. Many more templates can be downloaded from the Internet.

Once you do have templates on your system, you can create new documents based on them by using **File > New > Templates and Documents**. This opens a window where you can choose the template you want to use for your document.

The example shown in Figure 18 uses a template called “book” in the My Templates folder. Select it, then click the **Open** button. A new document is created based on the formats defined in the template.

For more about templates, see Chapter 10, “Working with Templates”.

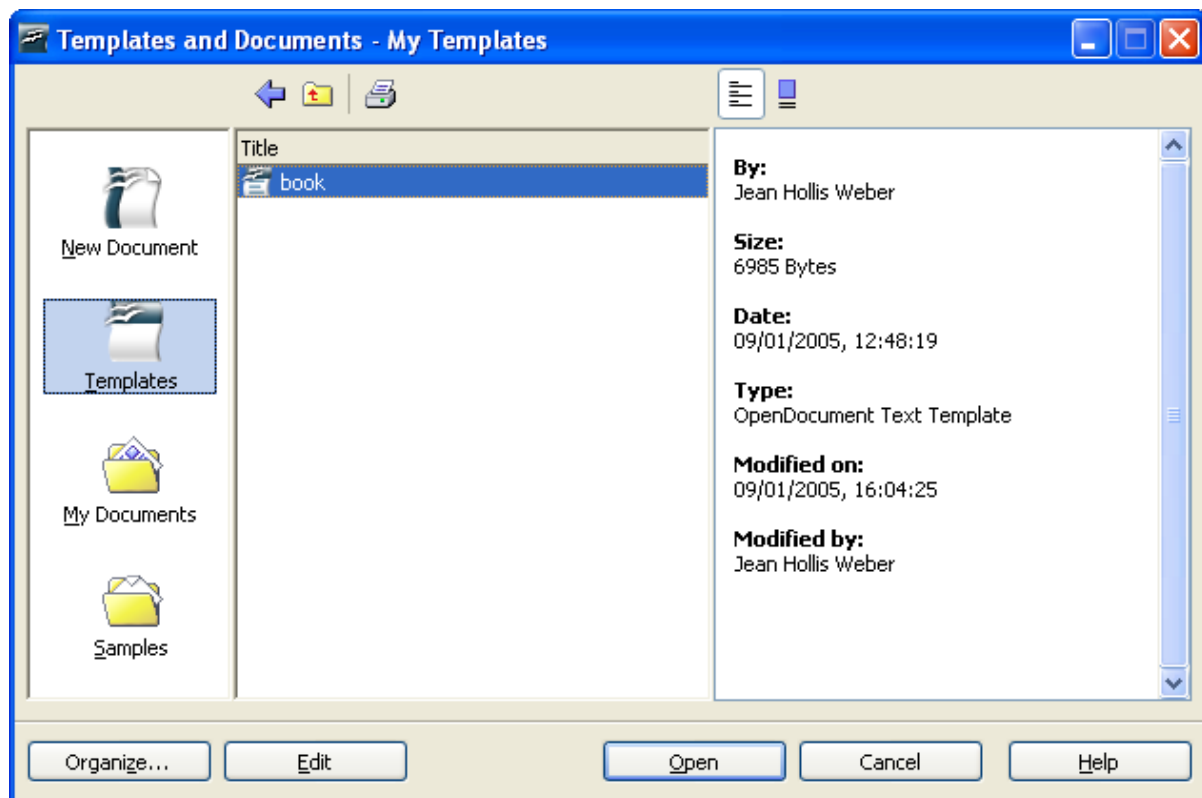


Figure 18. Creating a document from a template

## Opening an existing document

---

Here is one way to open an existing document in Writer:

- 1) Click **File > Open** (or press *Control+O*).
- 2) In the file chooser, you can reduce the list of files by selecting the type of file you are looking for. If you choose **Text documents** as the file type, you will only see documents Writer understands.
- 3) Select the file you want, and then click **Open**.

---

**Note** This method opens Word (.doc) files as well as OOO files and other formats.

---

You can also open an existing OOO Writer document using the same methods you would use to open any document in your operating system.

## Saving a document

---

There are three ways to save a document in Writer:

- Press *Control+S*.
- Select **File > Save**.
- Click the **Save** button on the main toolbar.

You also can tell Writer to save your document automatically at regular intervals. To enable this, you must configure OpenOffice.org to save all documents automatically.

- 1) Select **Tools > Options**. The Options window appears.
- 2) Select **Load/Save > General**.
- 3) Click on **AutoSave every**. This enables the box to set the interval. The default value is 15 minutes. Enter the value you want by typing it or by pressing the up or down arrow keys.

## Saving as a Microsoft Word document

You may need to share your documents with other people who do not use OpenOffice.org, but use Microsoft Word instead. Fortunately, OpenOffice.org can read and write Word files. To save a document as a Microsoft Word file:

- 1) First save your document in OpenOffice.org's format (.odt). If you do not, any changes you made since the last time you saved will only appear in the Microsoft Word version of the document.
- 2) Then click **File > Save As**. The Save As dialog box (Figure 19) appears.

- 3) In the **Save as type** drop-down menu, select the type of Word format you need.
- 4) Click **Save**.

From this point on, *all changes you make to the document will occur only in the Microsoft Word document*. You have actually changed the name of your document. If you want to go back to working with the OpenOffice.org version of your document, you must open it again.

**TIP** To have OOO save documents by default in the Microsoft Word file format, go to **Tools > Options > Load/Save**. There is a section named **Default file format**. Under **Document type**, select *Text document*, under **Always save as**, select your preferred file format.

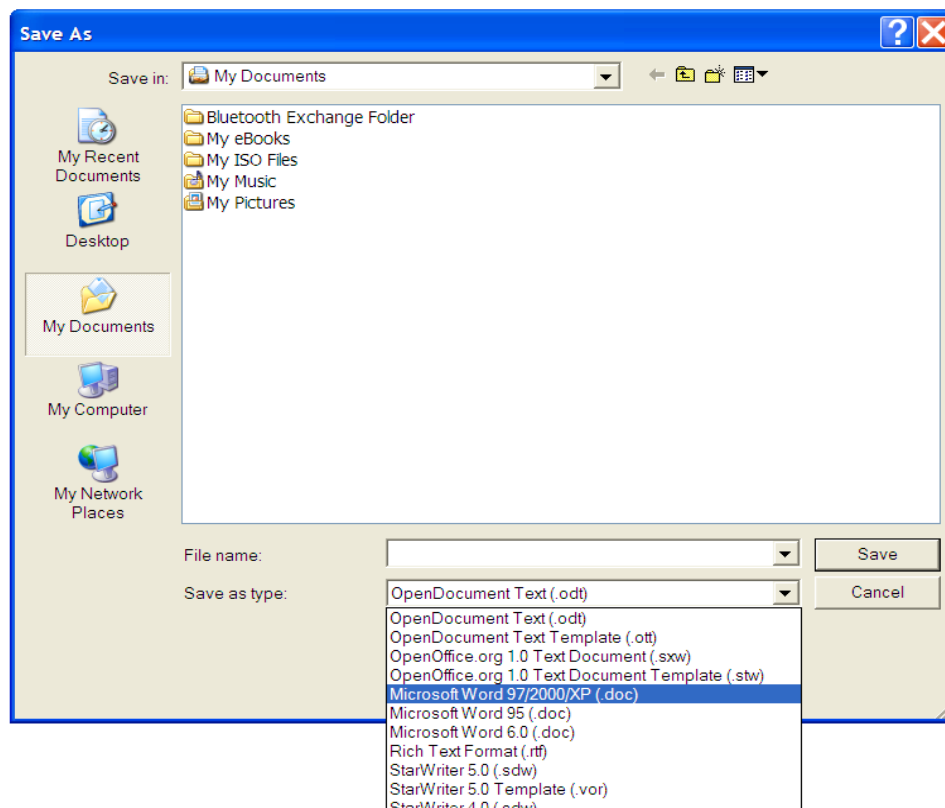



Figure 19. Saving a file in Microsoft Word format

## Printing a document

For more information about printing documents, see Chapter 5, “Printing, Faxing, Exporting, and E-mailing”.

### Quick printing

Click the **Print File Directly** icon  to send the entire document to the default printer defined for your computer.

## Controlling printing using the Print dialog box

For more control over printing, use **File > Print** to display the Print dialog box (Figure 20).

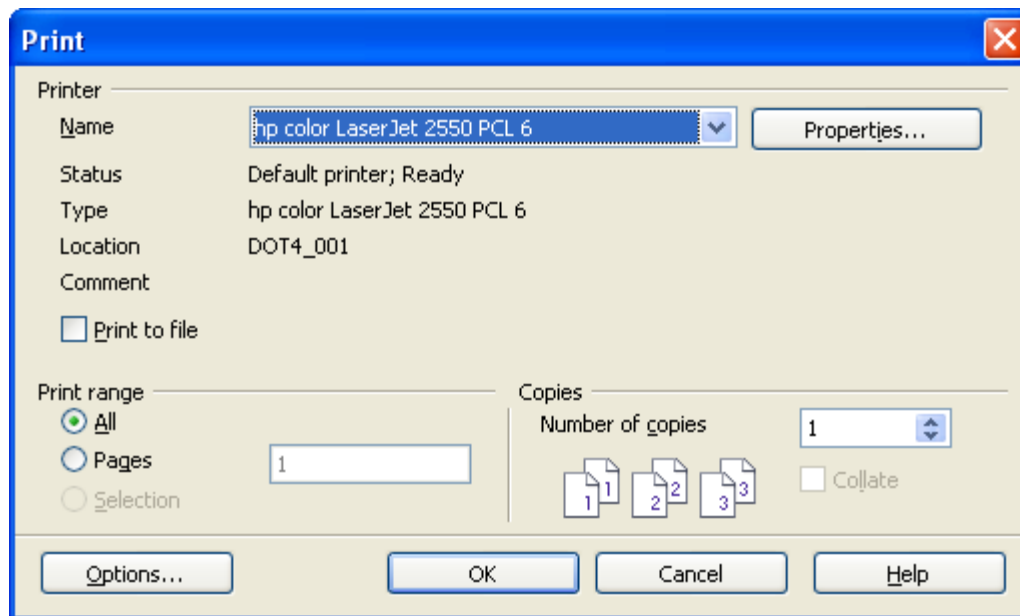



Figure 20. The Print dialog box

On the Print dialog box, you can choose:

- Which printer to use (if more than one are installed on your system) and the properties of the printer—for example, orientation (portrait or landscape), which paper tray to use, and what paper size to print on. The properties available depend on the selected printer; consult the printer’s documentation for details.
- Which pages to print, how many copies to print, and in what order to print them.
  - Use dashes to specify page ranges and commas or semicolons to separate ranges; for example, 1, 5, 11-14, 34-40.
  - *Selection* is the highlighted part of a page or pages.
- Which items to print. Click the **Options** button to display the Printer Options dialog box. For details about print options and setting defaults for Writer, see Chapter 5, “Printing, Faxing, Exporting, and E-mailing”.

## Previewing pages before printing

The normal page view in Writer shows you what each page will look like when printed, but it shows only one page at a time. If you are designing a document to be printed double-sided, you may want to see what facing pages look like. OOo provides a way to do this in Page Preview.

- 1) Click **File > Page Preview**, or click the **Page Preview** button .

The Writer window changes to display the current page and the following page, and shows the **Page Preview** toolbar (Figure 21) in place of the Formatting toolbar.

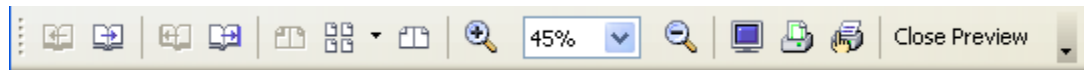





Figure 21. Page Preview toolbar

- 2) Click the **Book Preview** icon  to display left and right pages in their correct orientation (facing pages).
- 3) To print the document in this page view, click the **Print page view** icon .
- 4) To choose margins and other options for the printout, click the **Print options page view** icon  to display the Print Options dialog box. For more information, see Chapter 5, “Printing, Faxing, Exporting, and E-mailing”.


## Exporting to PDF

OpenOffice.org can export documents to PDF (Portable Document Format). This industry-standard file format for file viewing is ideal for sending the file to someone else to view using Acrobat Reader or other PDF viewers.

New in 2.0

PDFs can now be created with bookmarks—a table of contents with clickable links to take readers directly to the page containing the heading.

### Quick export to PDF

Click the **Export Directly as PDF** icon  to export the entire document using the default PDF settings. You are asked to enter the file name and location for the PDF file, but you do not get a chance to choose a page range or the print quality.

### Controlling PDF content and quality

For more control over the content and quality of the resulting PDF, use **File > Export as PDF**. You are asked to enter the location and file name of the PDF to be created, and then the PDF Options dialog box opens.

Here you can choose which pages to include in the PDF, the type of compression to use for images (which affects the quality of images in the PDF), and other options. For more information, see Chapter 5, “Printing, Faxing, Exporting, and E-mailing”.

## Getting help

---

Writer provides several forms of help. In addition to a full Help file, you can choose whether to activate tooltips, extended tips, and the Help Agent.

Placing the mouse pointer over any of the icons displays a small box, called a *tooltip*. It gives a brief explanation of the icon's function. For a more detailed explanation, select **Help > What's This?** and hold the mouse pointer over the icon you need more help with.

---

The extended tips option in OOo 2.0 can no longer be accessed from the Help menu. Tips and extended tips can now be turned on or off from **Tools > Options > OpenOffice.org > General**. *What's This?* help is a new feature in OOo 2.0.

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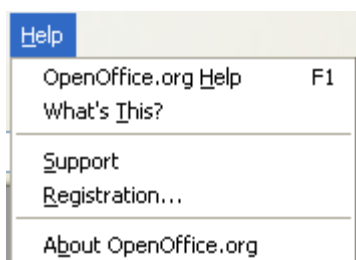


Figure 22. The Help menu

## Closing a document

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To close a document, click **File > Close**.

You can also close a document by clicking on the **Close** icon on the document window. In Windows XP, this button looks like the red X shown in Figure 23.

If more than one OOo window is open, each window looks like the sample shown on the left in Figure 23. Closing this window leaves the other OOo windows open.

If only one OOo window is open, it looks like the sample shown on the right in Figure 23. Notice the small black X below the large red X. Clicking the small X closes the document but leaves OOo open. Clicking the large red X closes OOo completely.



Figure 23. Close icons in Windows XP

If the document has not been saved since the last change, a message box is displayed. Choose whether to save or discard your changes.

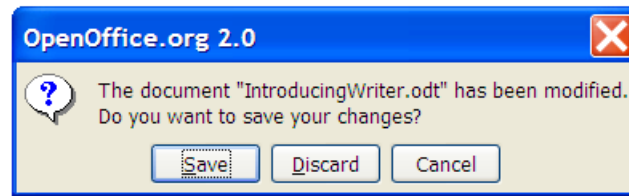


Figure 24. Warning about unsaved changes on close

- **Save:** The document will be saved and then closed.
- **Discard:** The document will be closed, and all modifications since the last save will be lost.
- **Cancel:** Nothing will happen, and you will return to the document.

---

**Caution** Not saving your document could result in the loss of recently made changes, or worse still, your entire file.

---

## Closing Writer

---

To close Writer completely, click **File > Exit**, or close the last open document as described in “Closing a document” on page 21.

If all the documents have been saved, Writer will close immediately. If any documents have been modified but not saved, a warning dialog box like the one shown in Figure 24 will appear. Follow the procedure in “Closing a document” to save or discard your changes.





# *Chapter 2*

## *Setting up Writer*

*Choosing options to suit the way you work*

## Choosing options that affect all of OOo

This section covers some of the settings that apply to all the components of OOo and are particularly important when using Writer. Other general options are discussed in Chapter 5, “Setting Up OpenOffice.org” in the *Getting Started* guide.

- 1) Click **Tools > Options**. The list in the left-hand box varies depending on which component of OOo is open. The illustrations in this chapter show the list as it appears when Writer is open.
- 2) Click the + sign by OpenOffice.org in the left-hand section of the Options – OpenOffice.org dialog box. A list of subsections drops down.

---

**Note** The **Back** button resets options to the values that were in place when you opened OOo. This button has the same behavior on all the Options dialog box pages.

---

### User Data options

Because Writer’s revision features mark your changes and comments with the name or initials stored in the User Data page, you will want to ensure that your name and initials appear there. To do this:

- 1) In the Options dialog box, click **OpenOffice.org > User Data**.
- 2) Fill in the form on the *OpenOffice.org – User Data* page (Figure 25) or delete any existing incorrect information.

The screenshot shows the 'Options - OpenOffice.org - User Data' dialog box. On the left is a tree view with 'OpenOffice.org' expanded and 'User Data' selected. The right pane contains a form with the following fields:

- Address: [Empty text box]
- Company: [Empty text box]
- First,Last name/Initials: Three text boxes containing 'Jean Hollis', 'Weber', and 'JHW'.
- Street: [Empty text box]
- City/State/Zip: Three text boxes.
- Country/Region: [Empty text box]
- Title/Position: Two text boxes.
- Tel. (Home/Work): Two text boxes.
- Fax / E-mail: Two text boxes.

At the bottom of the dialog are four buttons: OK, Cancel, Help, and Back.

Figure 25. Filling in User Data

## General options

- 1) In the Options dialog box, click **OpenOffice.org > General**.
- 2) On the *OpenOffice.org – General* page (Figure 26), the options are as described below.

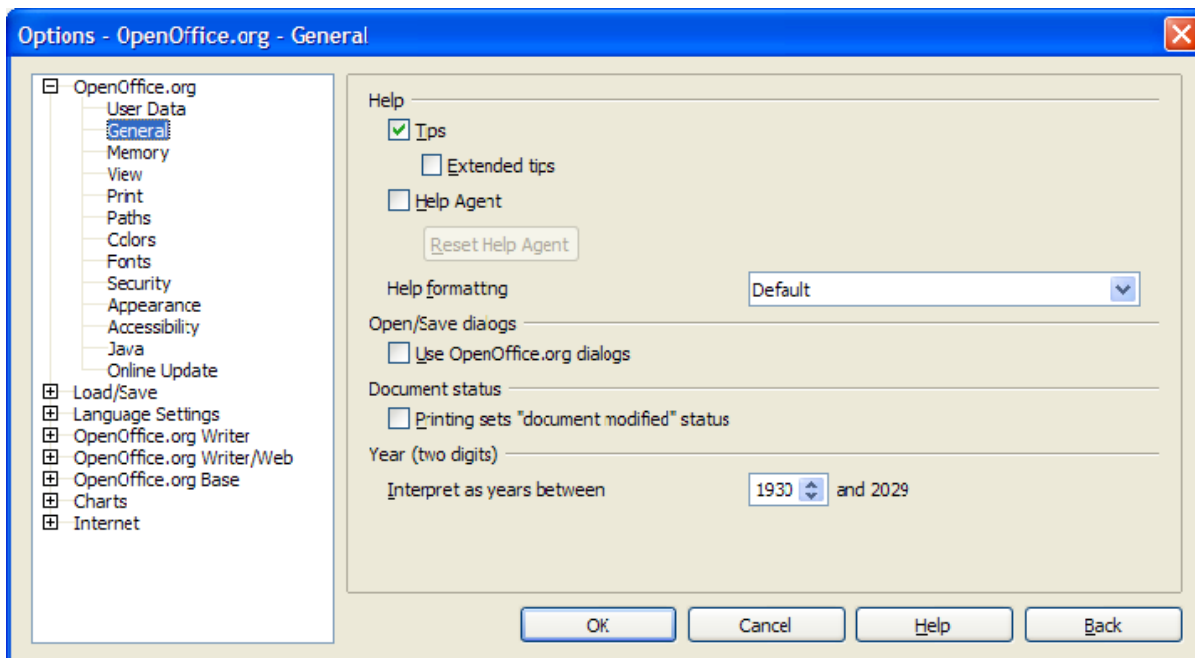


Figure 26. Setting General options for OpenOffice.org

### Help - Tips

When **Help: Tips** are active, one or two words will appear when you hold the cursor over an icon or field on the main OOO window, without clicking. This setting also affects the display of notes: if both **Help: Tips** and **Extended Tips** are turned off, then you won't see the contents of a note when you hold the cursor over the note.

### Help - Extended tips

When **Extended tips** are active, a brief description of the function of a particular icon or menu command or a field on a dialog box appears when you hold the cursor over that item.

### Help Agent

To turn off the **Help Agent** (similar to Microsoft's Office Assistant), deselect this checkbox. To restore the default **Help Agent** behavior, click **Reset Help Agent**.

### Help formatting

High contrast is an operating system setting that changes the system color scheme to improve readability. To display Help in high contrast (if your computer's operating system supports this), choose one of the high-contrast style sheets from the pull-down list. For Windows XP, the high-contrast style options are as described below.

<b>High-contrast style</b>	<b>Visual effect</b>
Default	Black text on white background
High Contrast #1	Yellow text on black background
High Contrast #2	Green text on black background
High Contrast Black	White text on black background
High Contrast White	Black text on white background

## Open/Save dialog boxes

To use the standard Open and Save dialog boxes for your operating system, deselect the **Use OpenOffice.org dialogs** checkbox. When this checkbox is selected, the Open and Save dialog boxes supplied with OpenOffice.org will be used. (See Chapter 3, “File Management” in the *Getting Started* guide for more about the OOo Open and Save dialog boxes.)

## Document status

Choose whether printing a document counts as changing the document. If this option is selected, then the next time you close the document after printing, the print date is recorded in the document properties as a change and you will be prompted to save the document again, even if you did not make any other changes.

## Year (two digits)

Specifies how two-digit years are interpreted. For example, if the two-digit year is set to 1930, and you enter a date of 1/1/30 or later into your document, the date is interpreted as 1/1/1930 or later. An “earlier” date is interpreted as being in the following century; that is, 1/1/20 is interpreted as 1/1/2020.

## View options

The choices of View options affect the way the document window looks and behaves.

- 1) In the Options dialog box, click **OpenOffice.org > View**.
- 2) On the *OpenOffice.org – View* page (Figure 27), set the options to suit your personal preferences. Some options are described below.

### User Interface – Scaling

If the text in the help files or on the menus of the OOo user interface is too small or too large, you can change it by specifying a scaling factor. Sometimes a change here can have unexpected results, depending on the screen fonts available on your system. However, it does not affect the actual font size of the text in your documents.

### User Interface – Icon size and style

The first box specifies the display size of toolbar icons (**Automatic**, **Small**, or **Large**); the **Automatic** icon size option uses the setting for your operating system. The second box specifies the icon style (theme); here the **Automatic** option uses an icon set compatible with your operating system and choice of desktop: for example, KDE, or Gnome on Linux.

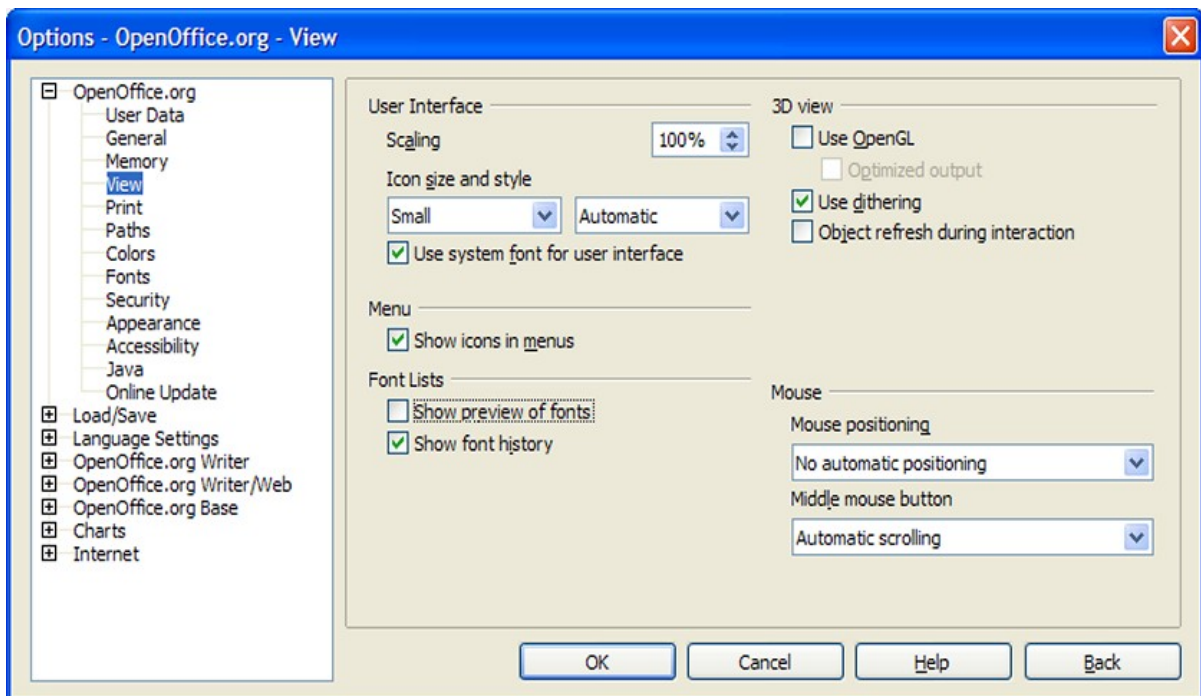


Figure 27. Choosing View options for the OpenOffice.org applications

### User Interface – Use system font for user interface

If you prefer to use the system font (the default font for your computer and operating system) instead of the font provided by OOo for the user interface, select this checkbox.

### Menu – Show icons in menus

Select this option if you want icons as well as words to be visible in menus.

### Font Lists - Show preview of fonts

When you select this option, the font list looks like Figure 28, Left, with the font names shown as an example of the font; with the checkbox deselected, the font list shows only the font names, not their formatting (Figure 28, Right). The fonts you will see listed are those that are installed on your system.



Figure 28. (Left) Font list showing preview; (Right) Font list without preview

### Font Lists - Show font history

When you select this option, the last five fonts you have assigned to the current document are displayed at the top of the font list.

### 3D view – Use OpenGL

Specifies that all 3D graphics from OpenOffice.org Draw and OpenOffice.org Impress will be displayed in your system using OpenGL-capable hardware. If your system does not have OpenGL-capable hardware, this setting will be ignored.

### 3D view – Use OpenGL – Optimized output

Select this option for optimized OpenGL output. Disable the optimization in case of graphical errors of 3D output.

### 3D view – Use dithering

The **Use dithering** option uses dithering to display more colors with few colors available. Dithering creates the illusion of new colors and shades by varying the pattern of color pixels. Varying the patterns of black and white dots, for instance, produces different shades of gray.

---

**Note** Internally, 3-D graphics are always created with 16 million colors (24-bit color depth). They are used to dither portrayals with fewer colors. Without dithering, several bits of color information are omitted, making the grading distinctly visible. The fewer colors available, the poorer the quality.

---

### 3D view – Object refresh during interaction

Specifies that if you rotate or move a 3-D object, the full display is rotated or moved and not a grid frame.

---

**TIP** Press *Shift+Ctrl+R* to restore or refresh the view of the current document.

---

### Mouse positioning

Specifies if and how the mouse pointer will be positioned in newly opened dialog boxes.

### Middle mouse button

Defines the function of the middle mouse button.

- **Automatic scrolling** – dragging while pressing the middle mouse button shifts the view.
- **Paste clipboard** – pressing the middle mouse button inserts the contents of the “Selection clipboard” at the cursor position.

The “Selection clipboard” is independent of the normal clipboard that you use by **Edit > Copy/Cut/Paste** or their respective keyboard shortcuts. Clipboard and “Selection clipboard” can contain different contents at the same time.

<b>Function</b>	<b>Clipboard</b>	<b>Selection clipboard</b>
Copy content	<b>Edit &gt; Copy</b> <i>Ctrl+C</i>	Select text, table, or object.
Paste content	<b>Edit &gt; Paste</b> <i>Ctrl+V</i> pastes at the cursor position.	Clicking the middle mouse button pastes at the mouse pointer position.
Pasting into another document	No effect on the clipboard contents.	The last marked selection is the content of the selection clipboard.

## Print options

Set the print options to suit your default printer and your most common printing method. You can change these settings at any time, either through this dialog box or during the printing process (by clicking the **Options** button on the Print dialog box).

- 1) In the Options dialog box, click **OpenOffice.org > Print**.
- 2) On the *OpenOffice.org – Print* page (Figure 29), look at the *Printer warnings* section near the bottom.
- 3) Here you can choose whether to be warned if the paper size or orientation specified in your document does not match the paper size or orientation available for your printer. Having these warnings turned on can be quite helpful, particularly if you work with documents produced by people in other countries where the standard paper size is different from yours.

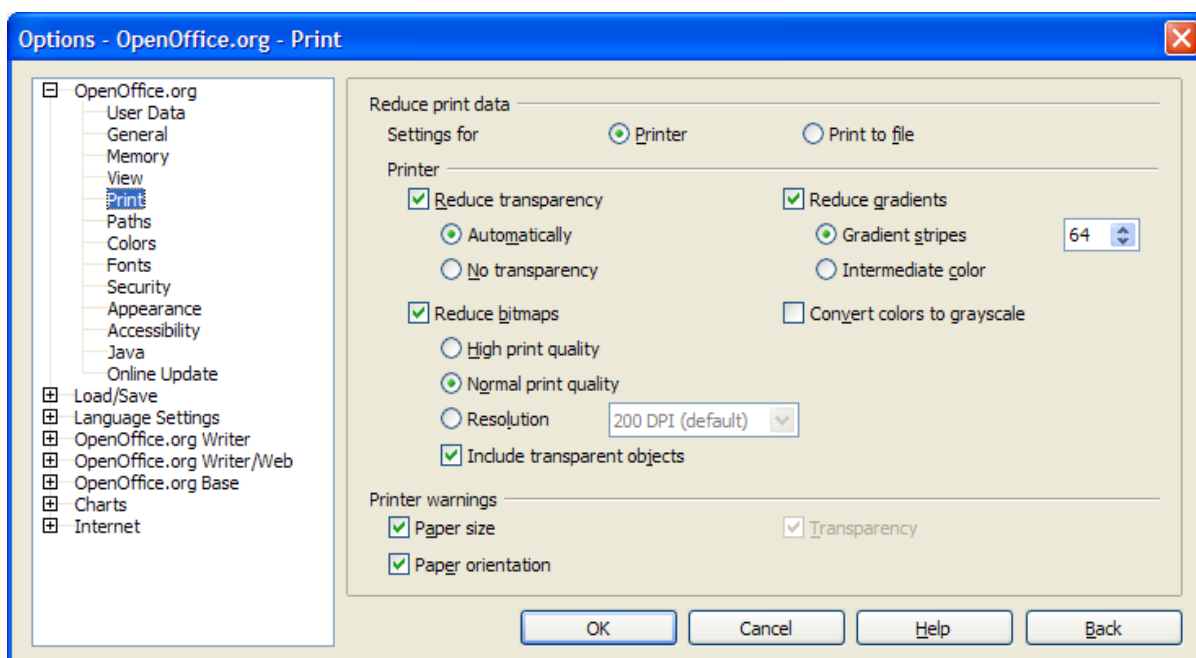


Figure 29. Choosing general printing options to apply to all OOo components

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**Tip** If your printouts are coming out incorrectly placed on the page or chopped off at the top, bottom, or sides or the printer is refusing to print, the most likely cause is page-size incompatibility.

---

## Appearance options

Writing, editing, and page layout are often easier to do when you can see as much as possible of what's going on in your document. You may wish to make visible such items as text, table, and section boundaries, and grid lines (see “Grid options” on page 34). In addition, you might prefer different colors (from OoO’s defaults) for such items as note indicators or field shadings.

On the *OpenOffice.org – Appearance* page (Figure 30), you can specify which items are visible and the colors used to display various items.

- 1) In the Options dialog box, click **OpenOffice.org > Appearance**.
- 2) To show or hide items such as text boundaries, select or deselect the checkboxes next to the names of the items.
- 3) To change the default colors for items, click the down-arrow in the *Color setting* column by the name of the item and select a color from the pop-up box.
- 4) To save your color changes as a color scheme, type a name in the *Scheme* box and click **Save**.

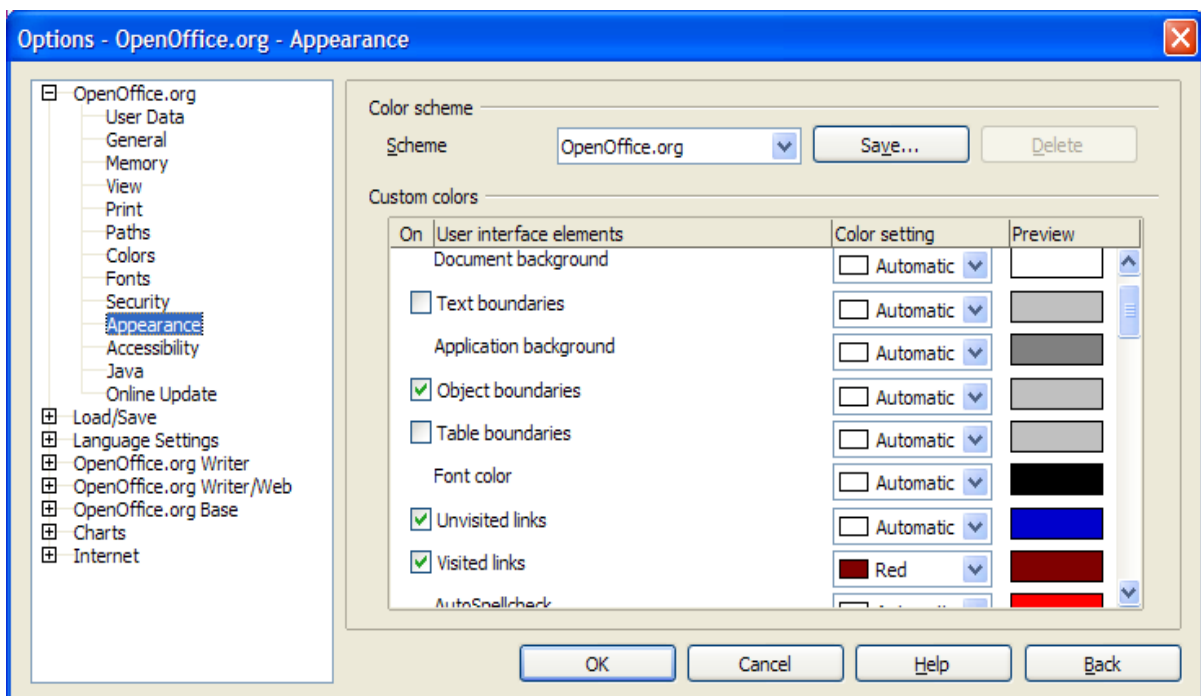


Figure 30. Showing or hiding text, object, and table boundaries



## Choosing options for Writer

Settings chosen on the pages in the OpenOffice.org Writer section of the Options dialog box determine how your Writer documents look and behave while you are working on them.

- 1) If the Options dialog box is not already open, click **Tools > Options**.
- 2) Click the + sign by OpenOffice.org Writer in the left-hand section of the Options – OpenOffice.org dialog box. A list of subsections drops down.

### General options

The choices on the *OpenOffice.org Writer – General* page affect the updating of links and fields, the units used for rulers and other measurements, whether captions are automatically added to selected objects such as tables or figures, paragraph spacing, and tab stop behavior.

- 1) Choose **OpenOffice.org Writer > General** on the Options dialog box (Figure 31).
- 2) Keep in mind the following considerations when selecting options on this page.

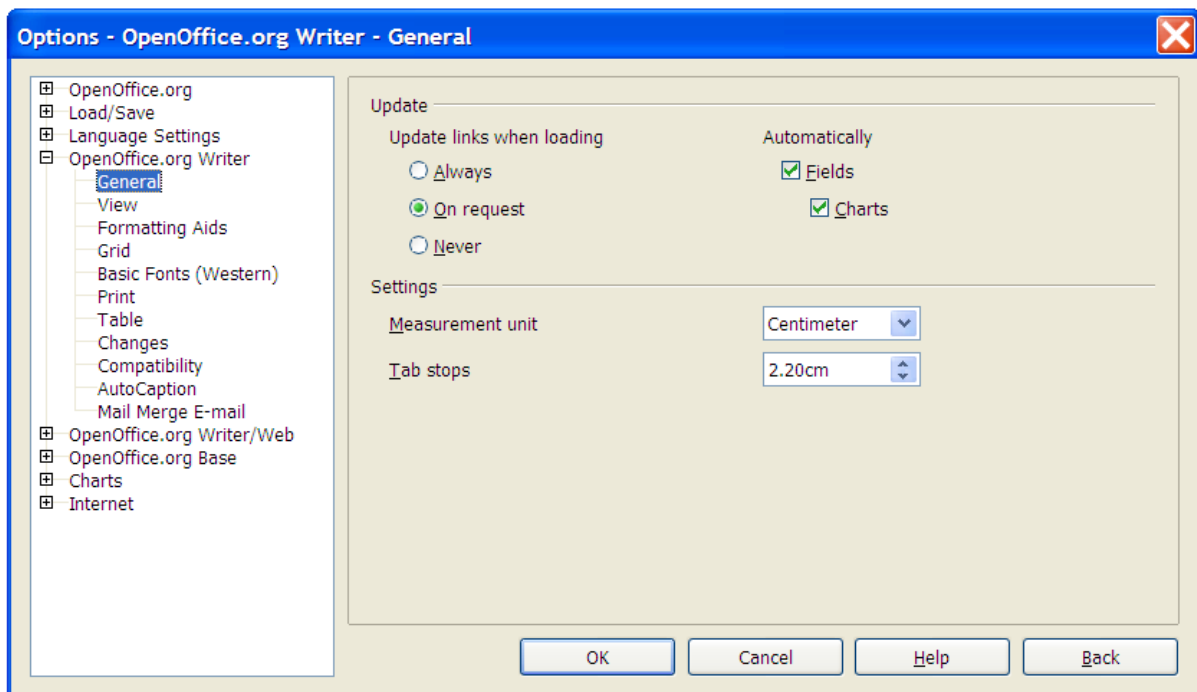


Figure 31. Choosing general options for Writer

### Update links when loading

Depending on your work patterns, you may not want links to be updated when you load a document. For example, if your file links to other files on a network, you won't want those links to update when you are not connected to the network.

## Update fields and charts automatically

You may not want fields or charts to update automatically when you are working, because that slows down performance.

## Settings – Tab stops

The *Tab stops* setting is also used for the indent distance applied by the **Increase Indent** and **Decrease Indent** buttons on the Formatting Bar.

## View options

Two pages of options set the defaults for viewing Writer documents: View and Formatting Aids (described on page 33).

Choose **OpenOffice.org Writer > View** on the Options dialog box (Figure 32).

If the items on this page are not self-explanatory, you can easily test their effects in a blank document.

This is a good page to check if, for example, you cannot see graphics on the screen or you see field codes instead of the text or numbers you are expecting.

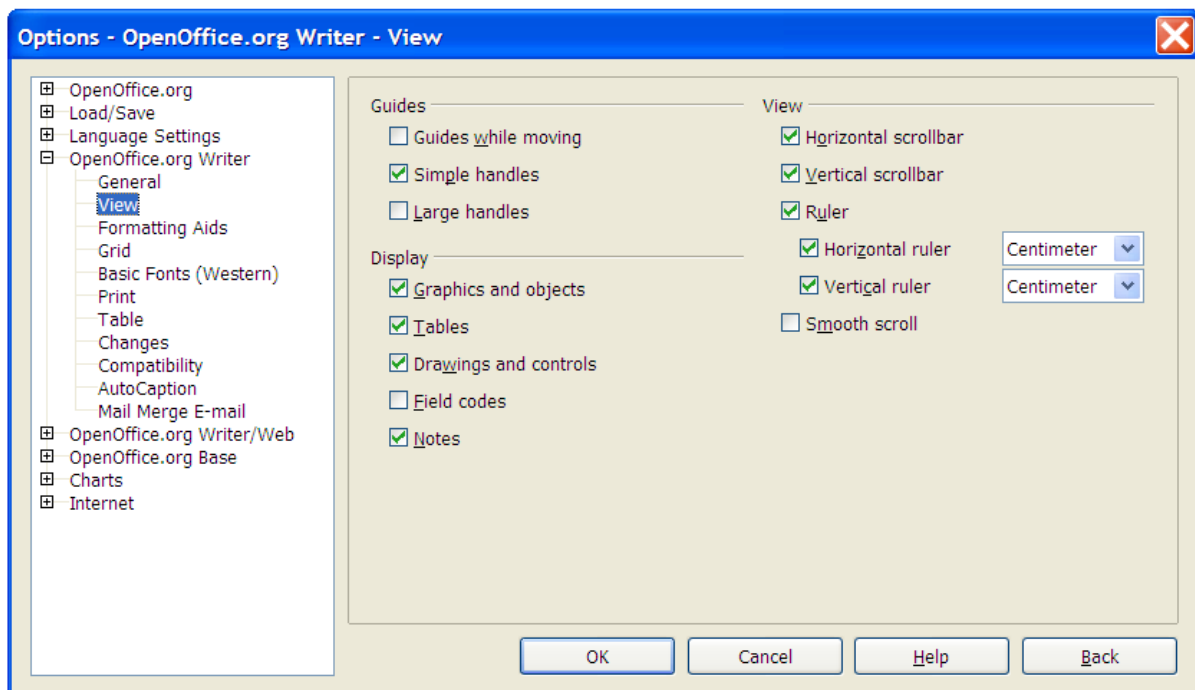


Figure 32. Choosing View options for Writer

## Formatting Aids options

The display of symbols such as paragraph ends and tabs help you when writing, editing, and doing page layout. For example, you might want to know if any blank paragraphs or tabs are included or if any tables or graphics are too wide and intrude into the margins of the page.

On the *OpenOffice.org Writer – Formatting Aids* page (Figure 33), select the required checkboxes.

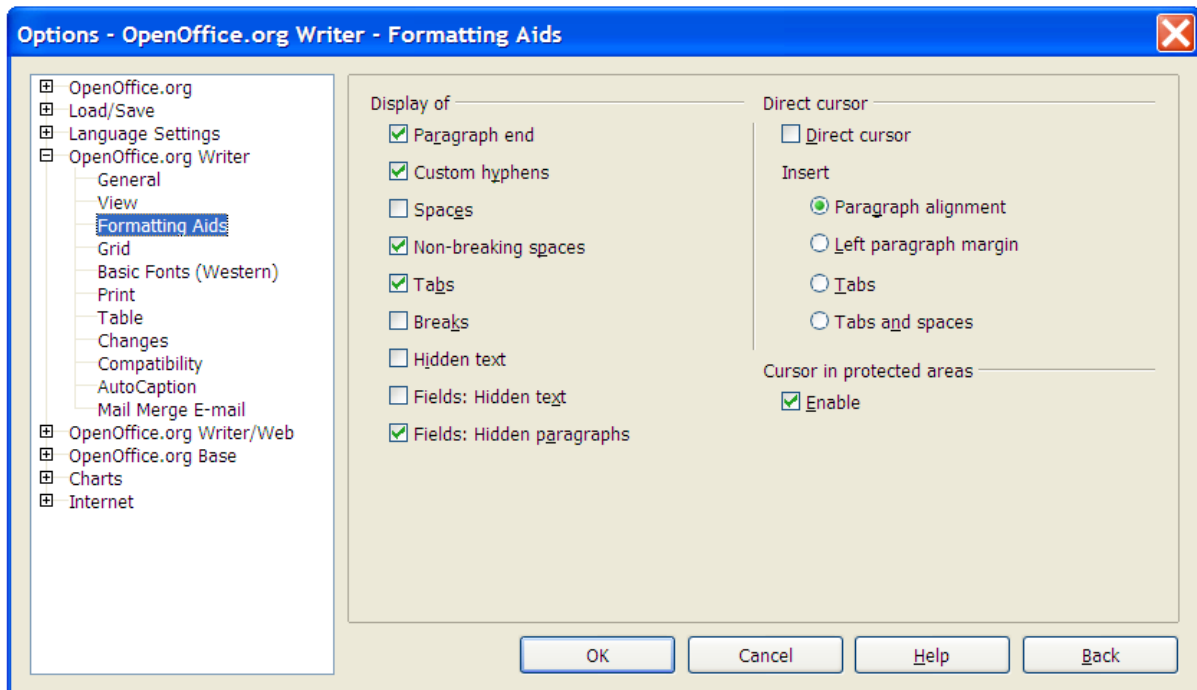


Figure 33. Choosing Formatting Aids options

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**Note** Direct cursor lets you enter text, images, tables, frames, and other objects in any blank area in your document. OOO inserts blank paragraphs and tabs to position the text or objects.

This feature is incompatible with rigorous use of styles and can lead to many formatting oddities, so it should be avoided by professional writers.

The AutoCorrect tool automatically removes empty paragraphs, tabs, and spaces that are inserted by the direct cursor. If you want to use the direct cursor, then disable the AutoCorrect tool.

---

## Grid options

Specifying “snap to grid” can be very helpful when you are trying to align several objects such as graphics or tables. If the grid intervals (subdivisions) are too large, you may find that you do not have enough control in placing the objects.

On the *OpenOffice.org Writer – Grid* page (Figure 34), you can choose whether to enable this feature and what grid intervals to use.

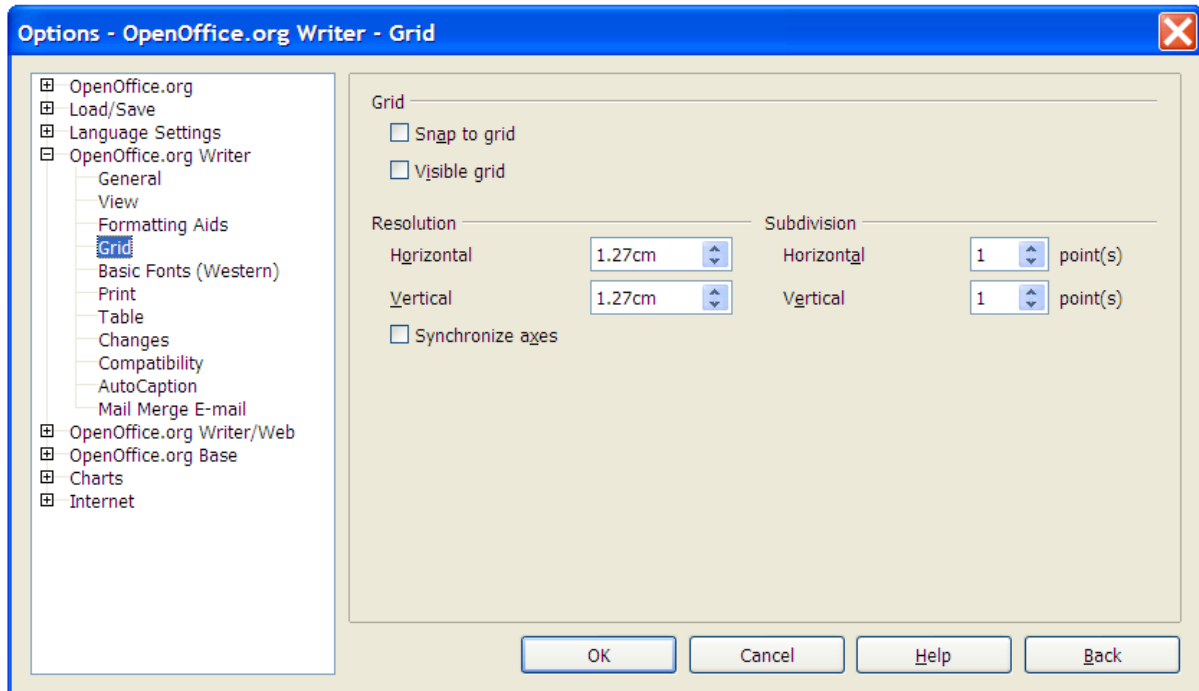


Figure 34. Choosing Grid options

## Default fonts

The default fonts specified on the *OpenOffice.org Writer – Basic Fonts (Western)* page apply to both Writer documents and HTML (Web) documents.

- 1) If you want to change the defaults, do so on the *OpenOffice.org Writer – Basic Fonts (Western)* page (Figure 35). You can, of course, choose other fonts for use in specific documents, either by applying direct formatting or by defining and applying styles in those documents.
- 2) When choosing fonts on this page, you are not limited to single fonts or to the ones shown in the drop-down list. You can specify a “font family” as a set of fonts that includes those suitable for Windows, Macintosh, Linux, and other operating systems. These choices are particularly important in HTML documents.
- 3) If the document is viewed on a system that does not have the first font specified, it will use one of the other fonts if that one is available. Otherwise, it will substitute a font that is available on the system.
- 4) Type the list of fonts, separated by commas, in the boxes. If you want these defaults to apply to the current document only, select that checkbox. The **Default** button resets the values on this page to the defaults installed with OpenOffice.org.

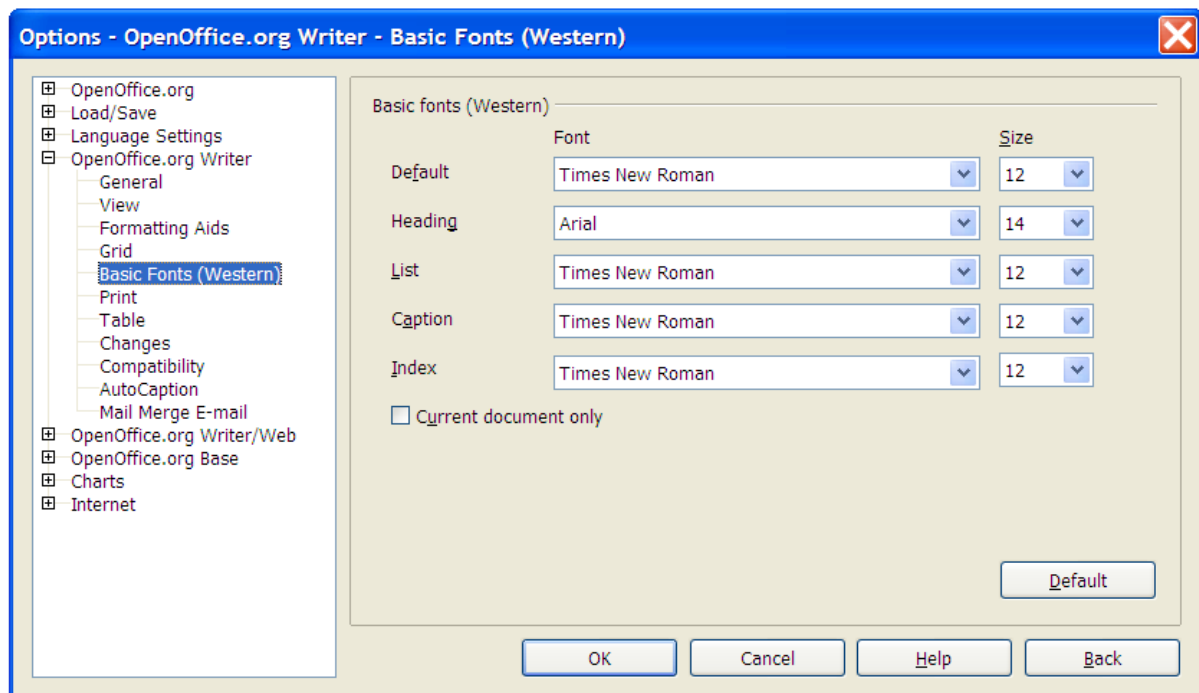


Figure 35. Choosing default fonts

## Print options

On the *OpenOffice.org Writer – Print* page (Figure 36), you can choose which items are printed with the document by default. These options are in addition to those on the *OpenOffice.org – Print* page (Figure 29).

Some considerations:

- When you are working on drafts and you want to save printer ink or toner, you might want to deselect some of the items in the *Contents* section.
- The **Print black** selection causes color text (but not graphics) to print as black on a color printer; on a black-and-white printer, this option causes color text to print as solid black instead of shades of gray (dithered).
- Contrast **Print black** with **Convert colors to grayscale** on the *Options – OpenOffice.org – Print* page (Figure 29), which prints all graphics as grayscale on color printers. (On black-and-white printers, color in graphics normally prints as grayscale.)
- If you are printing double-sided on a non-duplexing printer, you might choose to print only left or right pages, then turn the stack over and print the other pages.
- Depending on how your printer ejects pages (face up or face down), you might need to print the pages in reverse order so they stack in the correct order as they are printed.

---

**TIP** You can override any of these defaults when printing a document. Click **File > Print**, then click the **Options** button on the Print dialog box. The Printer Options dialog box that appears is similar to the one shown in Figure 36.

---

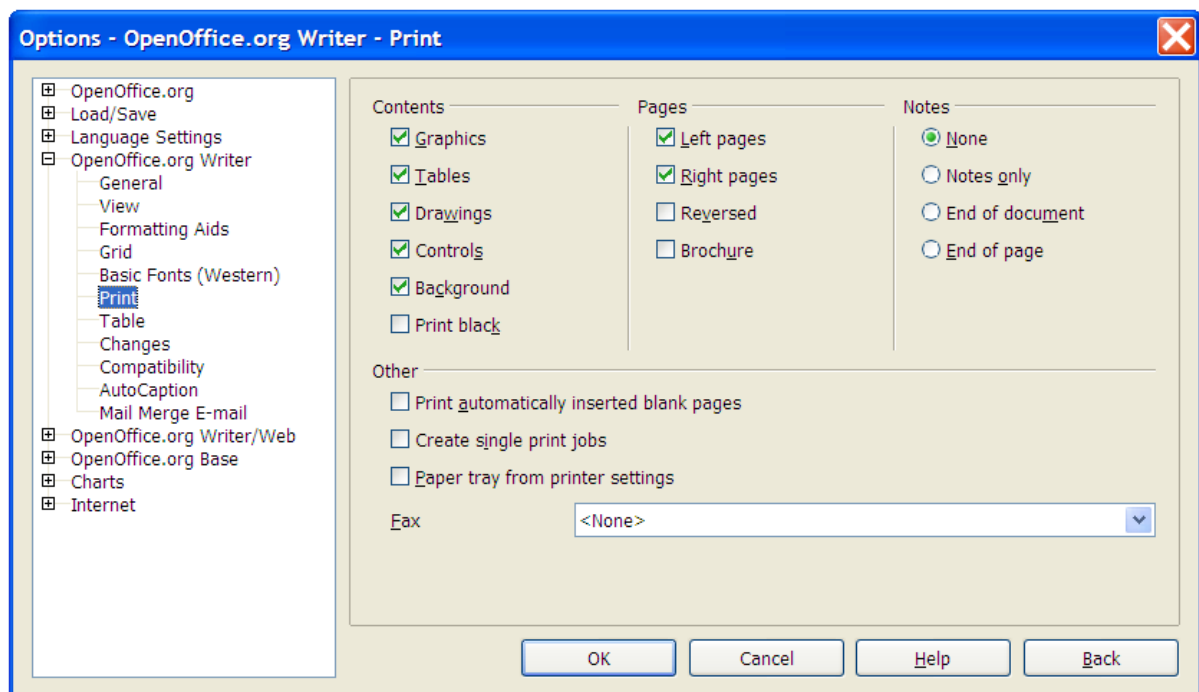


Figure 36. Choosing Print options for Writer

## Default table options

On the *OpenOffice.org Writer – Table* page (Figure 37), you can specify the default table behavior.

Some considerations:

- If most of your tables will require borders or headings, select those checkboxes. If most of your tables are used for page layout, deselect borders and headings.
- *Number recognition* can be very useful if most of your tables contain numerical data; Writer will recognize dates or currency, for example, and format the numbers appropriately. However, if you want the numbers to remain as ordinary text, this feature can be quite irritating, so you'll want to deselect it.
- The *Keyboard handling* section specifies the distances that cells move when you use keyboard shortcuts to move them and the size of rows and columns inserted using keyboard shortcuts.
- The choices in the *Behavior of rows/columns* section determine the effects that changes to rows or columns have on adjacent rows or columns and the entire table. You might need to test these selections to fully understand the effects.

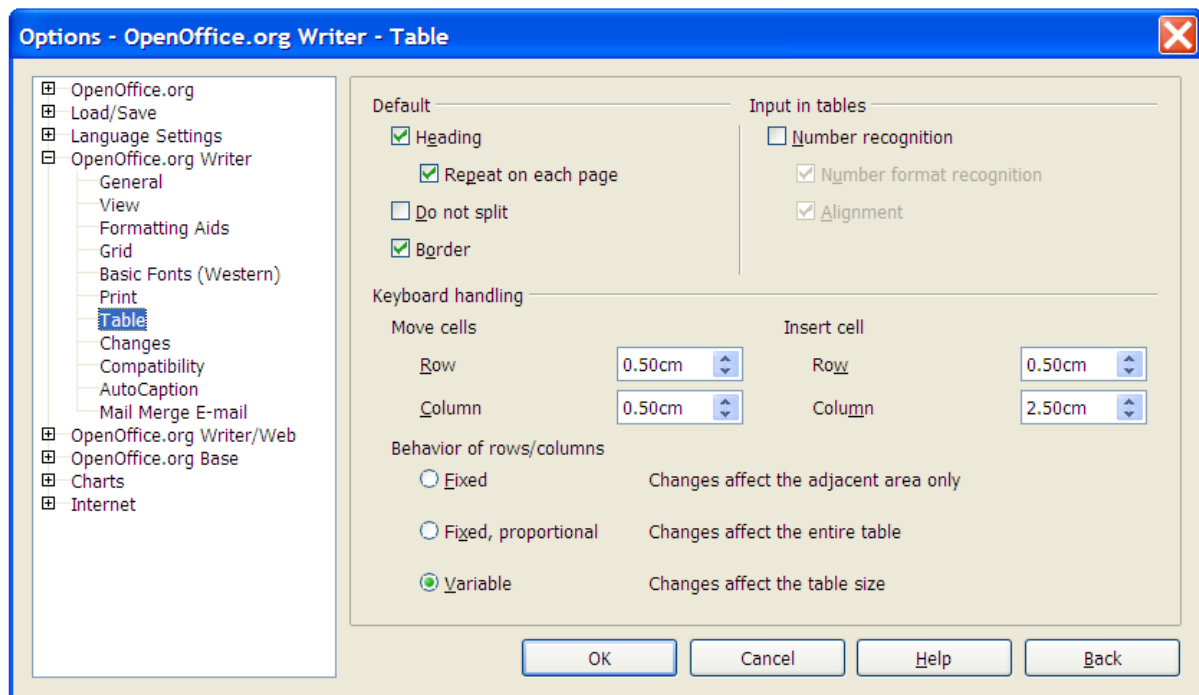


Figure 37. Choosing default Table options

## Change tracking options

If you plan to use the change-tracking feature of Writer, use the *OpenOffice.org Writer – Changes* page (Figure 38) to choose the way inserted and deleted material is marked, whether and how attribute changes are marked, and whether and how change bars are marked in the margins.

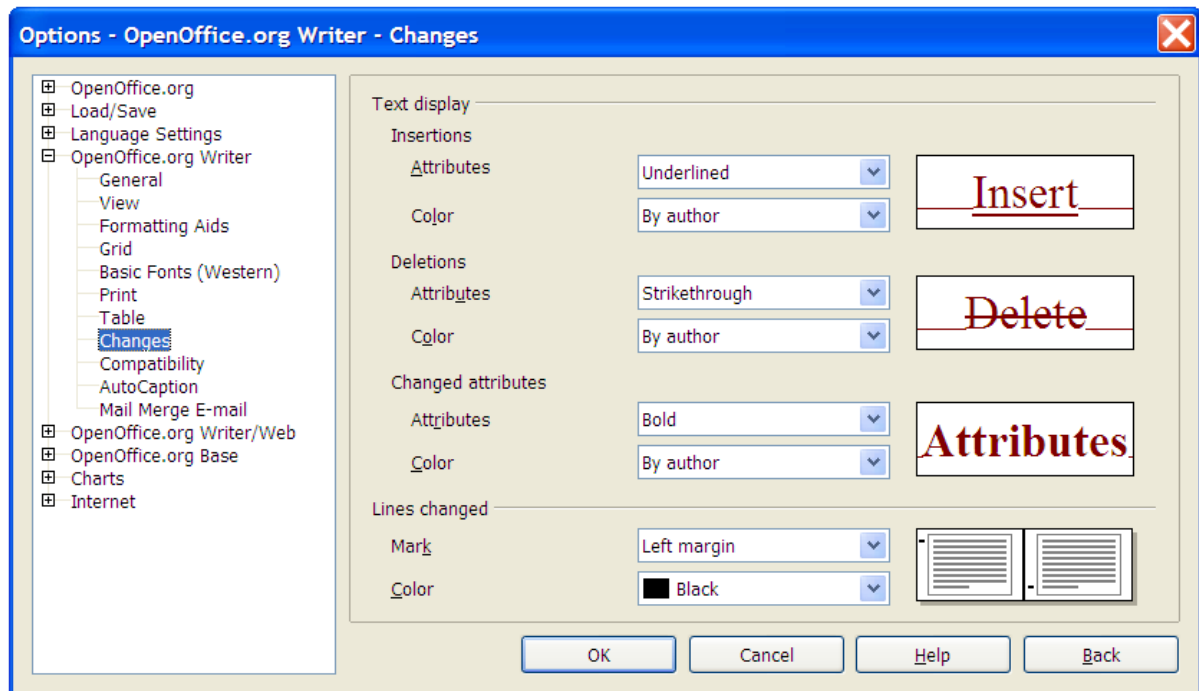


Figure 38. Choosing options for tracking changes

## Compatibility options

Do you need to import Microsoft Word documents into OOO Writer? If so, you might want to select some or all of the settings on the *OpenOffice.org Writer – Compatibility* page (Figure 39). If you're not sure about the effects of these settings, leave them as the defaults provided by OOO. For information about the settings not described below, see the Help.

### Use printer metrics for document formatting

If this checkbox is selected, the printer specified for the document determines how the document is formatted for viewing on screen. The line breaks and paragraph breaks you see on screen match those that apply when the document is printed on that printer.

This setting can be useful when several people are reviewing a document that will eventually be printed on a specific printer or when the document is exported to PDF (a process that uses "Adobe PDF" as the printer).

If this checkbox is not selected, a printer-independent layout will be used for screen display and printing.



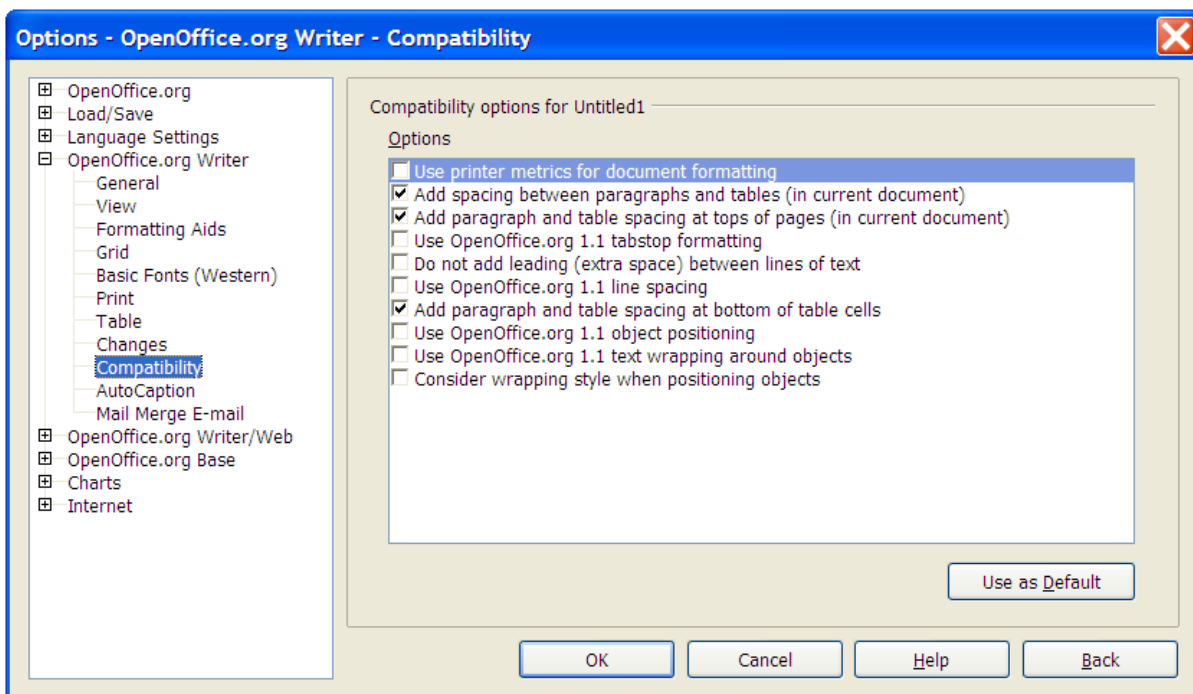


Figure 39. Choosing compatibility options

### **Add spacing between paragraphs and tables (in current document)**

In OpenOffice.org Writer, paragraph spacing is defined differently than it is in MS Word documents. If you have defined spacing between two paragraphs or tables, spacing is also added in the corresponding MS Word documents.

If this checkbox is selected, MS Word-compatible spacing is added between paragraphs and tables in OpenOffice.org Writer documents.

### **Add paragraph and table spacing at tops of pages (in current document)**

You can define paragraphs to have space appear before (above) them. If this checkbox is selected, any space above a paragraph will also appear if the paragraph is at the beginning of a page or column, if the paragraph is positioned on the first page of the document, or after a manual page break.

If you import an MS Word document, the spaces are automatically added during the conversion.

### **Add paragraph and table spacing at bottom of table cells**

Specifies that the bottom spacing is added to a paragraph, even when it is the last paragraph in a table cell.

### **Use as Default button**

Click this button to use the current settings on this page as the default in OpenOffice.org.

## AutoCaption options

Do you want OOO to automatically insert captions for tables, pictures, frames, and OLE objects that have been inserted in a Writer document?

**Note** You may not always want captions for every table, for example, if you use tables for layout as well as for tables of data. You can always add captions to individual tables, graphics, or other objects (right-click > **Caption**).

If you do want automatic captions on one or more object types:

- 1) Choose **OpenOffice.org Writer > AutoCaption** on the Options dialog box.
- 2) On the *OpenOffice.org Writer – AutoCaption* page (Figure 40), select the checkbox next to an object you want to be automatically captioned (**Picture** in the example shown).

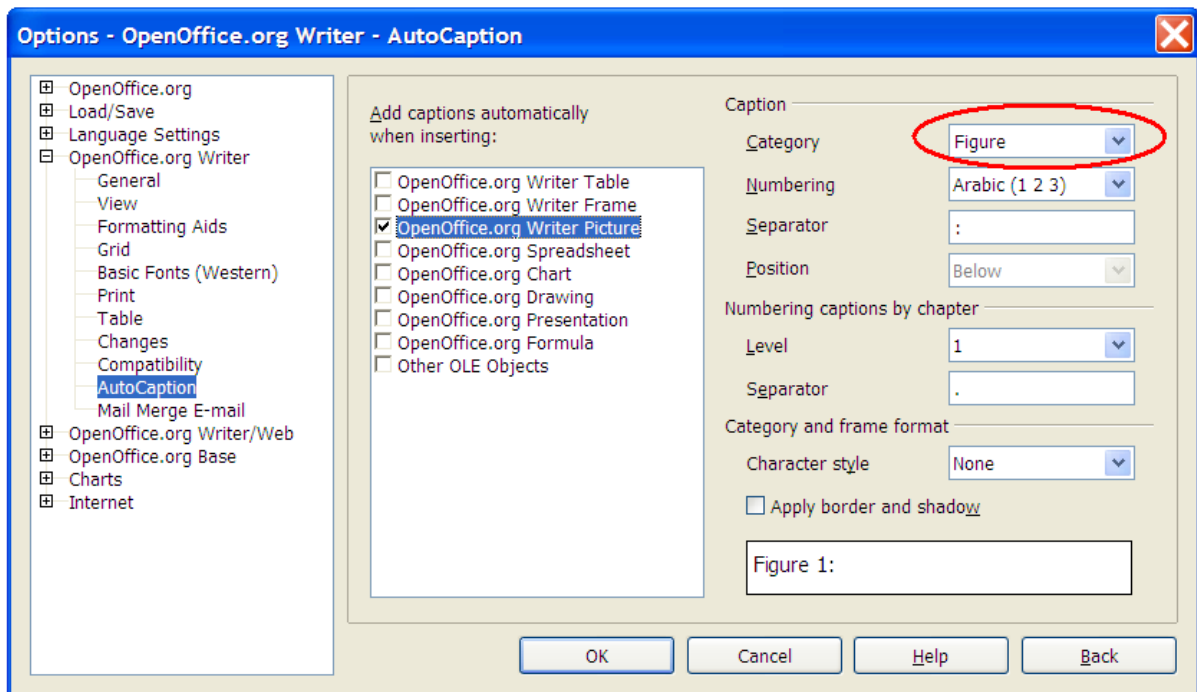


Figure 40. Setting up a new category for automatic captions on graphics

- 3) With the item highlighted, specify the characteristics of the caption. The supplied categories for captions are **Drawing**, **Illustration**, **Table**, and **Text**. However, you are not limited to the supplied categories. If you want to use another name (for example, **Figure**) for the caption label, type the required term in the box. In the example shown, I have added the category “Figure” to the list.

For more information about numbering captions by chapter, character styles, frame styles, and other items on the AutoCaption page, see other chapters in the *Writer Guide*.

## Mail Merge E-mail options

You can produce form letters using Writer and then use the mail merge function to personalize those letters and send them to a number of addresses taken from a data source, such as an address book. Mail merged documents can be printed and mailed, or you can send them by e-mail.

Use the *Options – OpenOffice.org Writer – Mail Merge E-mail* page (Figure 41) to set up the user and server information for sending form letters by e-mail. If you are not sure what information to put in any of the fields, consult your e-mail program or your Internet service provider.

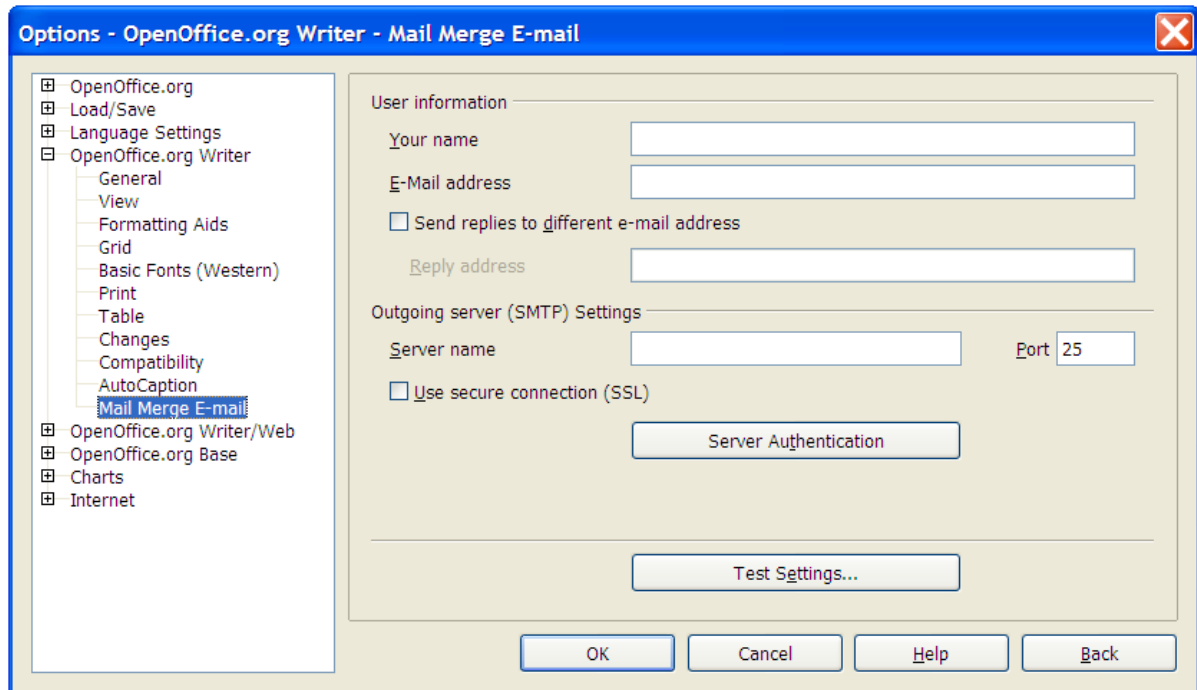


Figure 41: Specifying settings for use when e-mailing mail-merged form letters

## Choosing language settings

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You may need to do several things to set the language settings to what you want:

- Install the required dictionaries
- Change some locale and language settings
- Choose spelling options

### Install the required dictionaries

OpenOffice.org 2.0 automatically installs several dictionaries with the program. To add other dictionaries, use **File > Wizards > Install new dictionaries**.

### Change some locale and language settings

You can change some details of the locale and language settings that OOo uses for all documents or for specific documents.

- 1) In the Options dialog box, click **Language Settings > Languages**.
- 2) On the right-hand side of the *Language Settings – Languages* page (Figure 42), change the *Locale setting*, *Default currency*, and *Default languages for documents* as required. In the example, English (Australia) has been chosen as the locale, and the Australian dollar (AUD) for the currency. Although an English (Australia) dictionary exists, the English (UK) dictionary has been selected as the default language.
- 3) If you want the language (dictionary) setting to apply to the current document only, instead of being the default for all new documents, select the checkbox labeled **For the current document only**.
- 4) If necessary, select the checkboxes to enable support for Asian languages (Chinese, Japanese, Korean) and support for CTL (complex text layout) languages such as Hindi, Thai, Hebrew, and Arabic. If you choose either of these checkboxes, the next time you open this page, you will see some extra choices under *Language Settings*, as shown in Figure 43. These choices (Searching in Japanese, Asian Layout, and Complex Text Layout) are not discussed here.
- 5) Click **OK** to save your changes and close the dialog box.

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**Note** If you need to use non-Western languages, and especially if you need to use more than one non-Western language in the same document, refer to the tutorial, “OOo in a Multi-Lingual Environment.”

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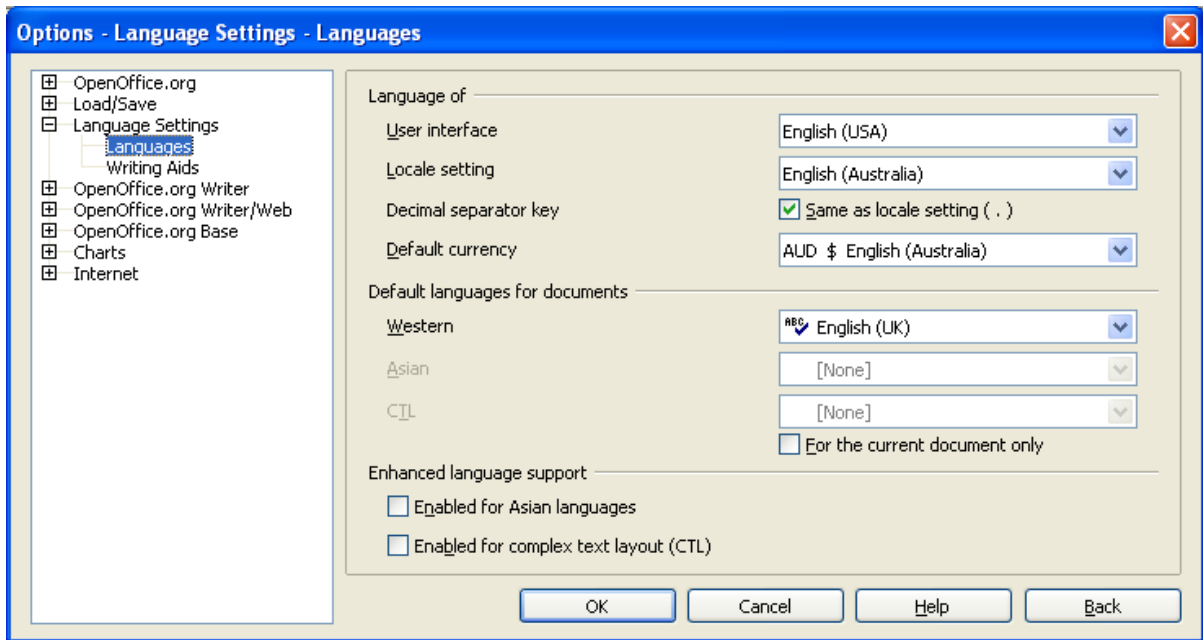


Figure 42. Choosing language options

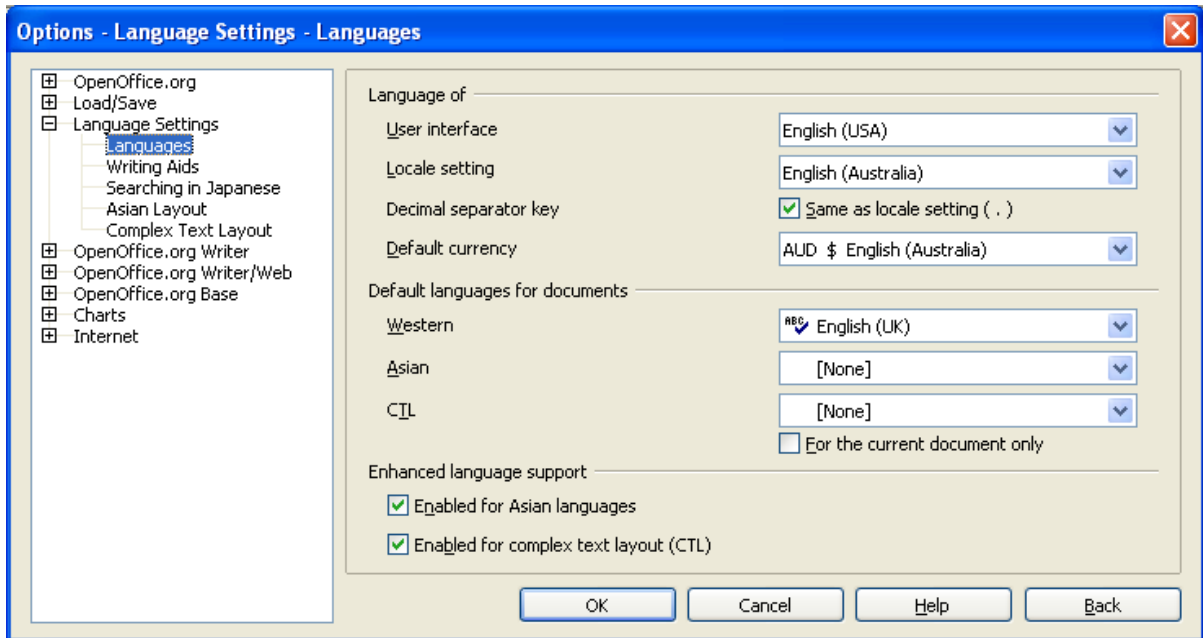


Figure 43. Extra language setting choices when enhanced language support options are selected

## Choose spelling options

To choose the options for checking spelling:

- 1) In the Options dialog box, click **Language Settings > Writing Aids**.
- 2) In the *Options* section of the *Language Settings – Writing Aids* page (Figure 44), choose the settings that are useful for you. Some considerations:
  - If you don't want spelling checked while you type, deselect **Check spelling as you type** and select **Do not mark errors**. (To find the second item, scroll down in the *Options* list.)
  - If you use a custom dictionary that includes words in all uppercase and words with numbers (for example, AS/400), select **Check uppercase words** and **Check words with numbers**.
  - **Check special regions** includes headers, footers, frames, and tables when checking spelling.
  - Here, you can also check which of the user-defined (custom) dictionaries are active, or you can add or remove dictionaries by clicking the **New** or **Delete** buttons.

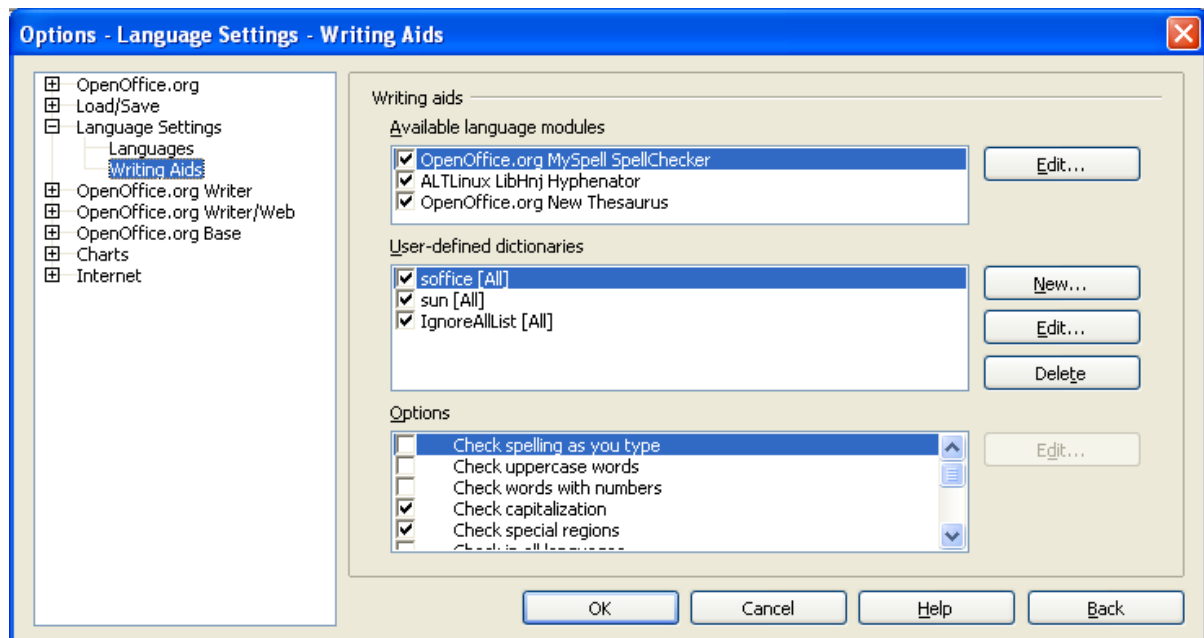


Figure 44. Choosing languages, dictionaries, and options for checking spelling

## Controlling Writer's AutoCorrect functions

Some people find some or all of the items in Writer's AutoCorrect feature annoying because they change what you type when you don't want it changed. Many people find some of the AutoCorrect functions quite helpful; if you do, then select the relevant checkboxes. But if you find unexplained changes appearing in your document, this is a good place to look to find the cause.

To open the AutoCorrect dialog box, click **Tools > AutoCorrect/AutoFormat**. (You need to have a document open for this menu item to appear.)

In Writer, this dialog box has five tabs, as shown in Figure 45.

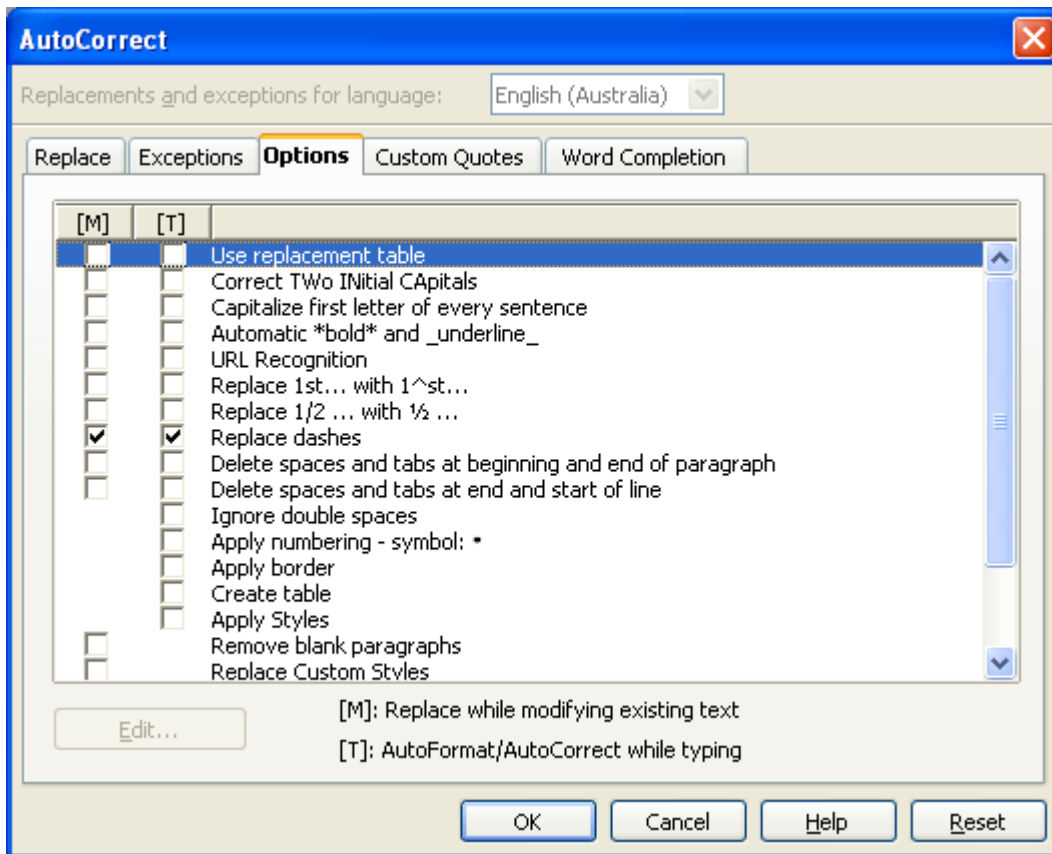


Figure 45. The AutoCorrect dialog box in Writer, showing the five tabs and some of the choices on the Options tab



*Chapter 3*  
*Working with Text*  
*Using OpenOffice.org Writer*



## Introduction

---

This chapter covers the basics of working with text in Writer, the word-processing component of OpenOffice.org (OOo). It assumes that you are familiar with the use of a mouse and keyboard and that you have read about Writer's menus and toolbars and other topics covered in Chapter 1 of this book, "Introducing Writer".

We recommend that you also follow the suggestions in Chapter 2, "Setting up Writer", about displaying formatting aids such as end-of-paragraph marks, and selecting other setup options.

When you have read this chapter, you should know how to:

- Select, cut, copy, paste, and move text
- Find and replace text
- Insert special characters
- Format paragraphs and characters
- Create numbered or bulleted lists
- Check spelling, use the thesaurus, and choose hyphenation options
- Use the autocorrection, word completion, autotext, and line numbering features
- Track changes and undo and redo changes

## Selecting text

---

Before you can do anything with text, you need to select it. Selecting text in Writer is similar to selecting anything in other applications. In addition to selecting blocks of text, you can select items that are not consecutive.

### Selecting items that are not consecutive

To select non-consecutive items (as shown in Figure 46) using the mouse:

- 1) Select the first piece of text.
- 2) Hold down the *Control* key and use the mouse to select the next piece of text.
- 3) Repeat as often as needed.
- 4) Now you can work with the selected text (copy it, delete it, change the style, or whatever).

---

**Note** Macintosh users: substitute the *Command* key when instructions in this chapter say to use the *Control* key.

---

To select non-consecutive items using the keyboard:

- 1) Select the first piece of text. (For more information about keyboard selection of text, see the topic “Navigating and Selecting With the Keyboard” in the Help.)
- 2) Press *Shift+F8*. This puts Writer in “ADD” mode. The word ADD appears on the Status Bar.
- 3) Use the arrow keys to move to the start of the next piece of text to be selected. Hold down the *Shift* key and select the next piece of text.
- 4) Repeat as often as needed. Now you can work with the selected text.
- 5) Press *Esc* to exit from this mode.

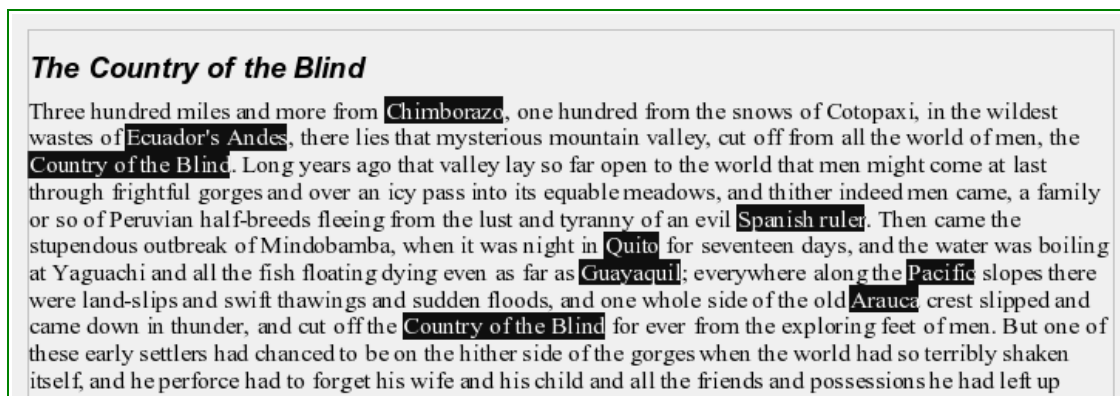




Figure 46: Selecting items that are not next to each other

## Cutting, copying, and pasting text

Cutting and copying text in Writer is similar to cutting and copying text in other applications. After selecting text, you can use the mouse or the keyboard for these operations.

Cut: Use **Edit > Cut** or the keyboard shortcut *Control+X* or the **Cut** icon on the toolbar. 

Copy: Use **Edit > Copy** or the keyboard shortcut *Control+C* or the **Copy** icon. 

Paste: Use **Edit > Paste** or the keyboard shortcut *Control+V* or the **Paste** icon. 

If you simply click on the **Paste** icon, any formatting the text has (such as bold or italics) is retained. To make the pasted text take on the formatting of the surrounding text where it is being pasted, click the triangle to the right of the **Paste** icon and select **Unformatted text** from the menu. See Figure 47.

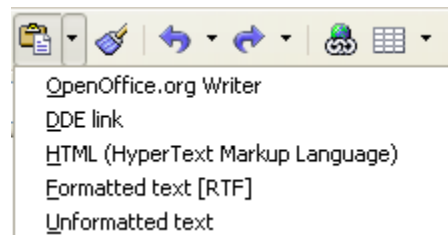


Figure 47: Paste menu

## Moving paragraphs quickly

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- 1) Put the cursor anywhere in the paragraph.
- 2) Press *Control+Alt*.
- 3) Holding the *Control+Alt* keys down, press the *up-arrow* or *down-arrow* key.

The paragraph will move to before the previous paragraph or after the next paragraph in your document. To move more than one paragraph at a time, select at least part of both paragraphs before pressing the *Control+Alt+arrow* keys.

If you are using Solaris, the key combination is *Control+AltGr+arrow* keys.

---

**TIP** If your paragraphs suddenly jumped from one place to another, the most likely reason is that you have accidentally pressed one of these key combinations.

---

## Finding and replacing text

---

When looking for certain words in a 3000-word essay, it would be inefficient (and close to impossible!) to go through every word manually. Writer has a Find and Replace feature that automates the process of searching for text inside a document.

In addition to finding and replacing words and phrases, you can:

- Use wildcards and regular expressions to fine-tune a search.
- Find and replace specific formatting.
- Find and replace paragraph styles.

To display the Find & Replace dialog box (Figure 48), use the keyboard shortcut *Control+F* or select **Edit > Find & Replace**.

- 1) Type the text you want to find in the *Search for* box.
- 2) To replace the text with different text, type the new text in the *Replace with* box.
- 3) You can select various options such as matching the case, matching whole words only, or doing a search for similar words. (See below for some other choices.)
- 4) When you have set up your search, click **Find**. To replace text, click **Replace** instead.

---

**TIP** If you click **Find All**, Writer selects all instances of the search text in the document. Similarly, if you click **Replace All** button, Writer will replace all matches.

---

**Caution**



Use **Replace All** with caution; otherwise, you may end up with some hilarious (and highly embarrassing) mistakes. A mistake with **Replace All** might require a manual, word-by-word search to fix.

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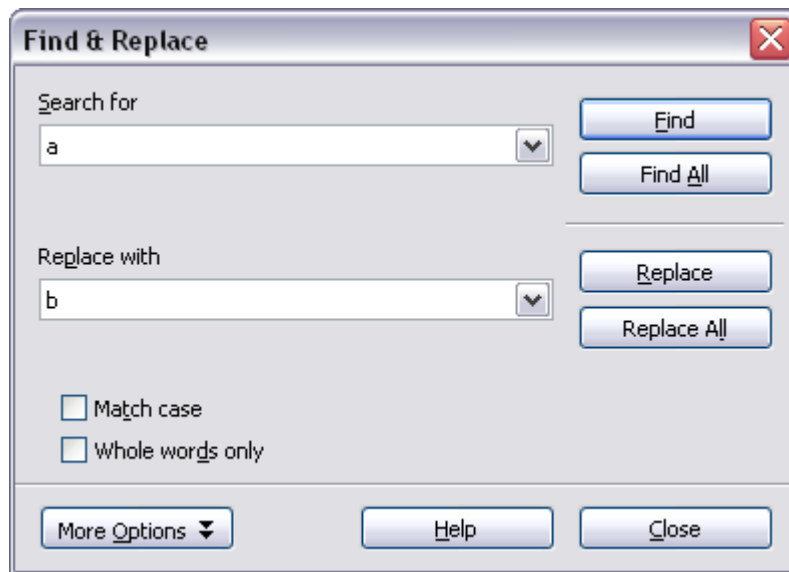


Figure 48: The Find & Replace dialog box

## Use wildcards (regular expressions)

*Wildcards* (also known as *regular expressions*) are combinations of characters that instruct OOo how to search for something. Regular expressions are very powerful but not very intuitive. They can save time and effort by combining multiple finds into one.

Table 1 shows a few of the regular expressions used by OOo.

---

**TIP** The online help describes many more regular expressions and their uses.

---



---

**Note** To search for a character that is defined as a wildcard, type a backslash (\) before the character. For example, to find the text \$5.00, you would search for \\$5\.

---

To use wildcards and regular expressions when searching and replacing:

- 1) On the Find & Replace dialog box, click **More Options** to see more choices. On this expanded dialog box (Figure 49), select the *Regular expressions* checkbox.
- 2) Type the search text, including the wildcards, in the *Search for* box and the replacement text (if any) in the *Replace with* box. Not all regular expressions work as replacement characters; the line break (\n) is one that does work.
- 3) Click **Find**, **Find All**, **Replace**, or **Replace All** (not recommended).

Table 1. Examples of search wildcards (regular expressions)

To find	Use this expression	Examples and comments
Any single character	.	b.d finds <i>bad</i> , <i>bud</i> , <i>bid</i> , and <i>bed</i> .
Any string of characters	.*	b.*d finds <i>bad</i> , <i>brand</i> , and <i>board</i> .
One of the specified characters	[ ]	b[iu]n finds <i>bin</i> and <i>bun</i> .
Any single character in this range	[-]	[r-t]eed finds <i>reed</i> , <i>seed</i> , and <i>teed</i> ; ranges must be in alphabetically ascending order.
Any single character except the characters inside the brackets	[^]	p[^a]st finds <i>post</i> and <i>pest</i> , but not <i>past</i> .
The beginning of a word	\<	\<log finds <i>logbook</i> and <i>logistics</i> , but not <i>catalog</i> .
The end of a word	\>	log> finds <i>catalog</i> , but not <i>logistics</i> .
A paragraph marker	\$	Does not work as a replacement character. Use \n instead.
A line break	\n	Finds a line break that was inserted with <i>Shift+Enter</i> . When used as a replacement character, it inserts a paragraph marker.

## Find and replace specific formatting

A very powerful use of Find & Replace takes advantage of the format option. For example, you might want to replace underlined words with italics.

On the Find & Replace dialog box (with **More Options** displayed, as in Figure 49):

- 1) To search for text with specific formatting, enter the text in the *Search for* box. To search for specific formatting only, delete any text in the *Search for* box.
- 2) Click **Format** to display the Text Format (Search) dialog box. The tabs on this dialog box are similar to those on the Paragraph format and Paragraph Style dialog boxes. Choose the formats you want to search for and then click **OK**. The names of selected formats appear under the *Search for* box. For example, you might search for all text in 14-point bold Helvetica.
- 3) To replace text, enter the replacement text in the *Replace with* box.

To search for specific text with specific formatting (for example, the word “hello” in bold), specify the formatting, put the text in the *Search for* box and leave the *Replace with* box blank.

To remove specific character formatting, click **Format**, select the *Font* tab, then select the opposite format (for example, No Bold). The **No Format** button on the Find & Replace dialog box clears all previously selected formats.

4) Click **Find**, **Find All**, **Replace**, or **Replace All**.

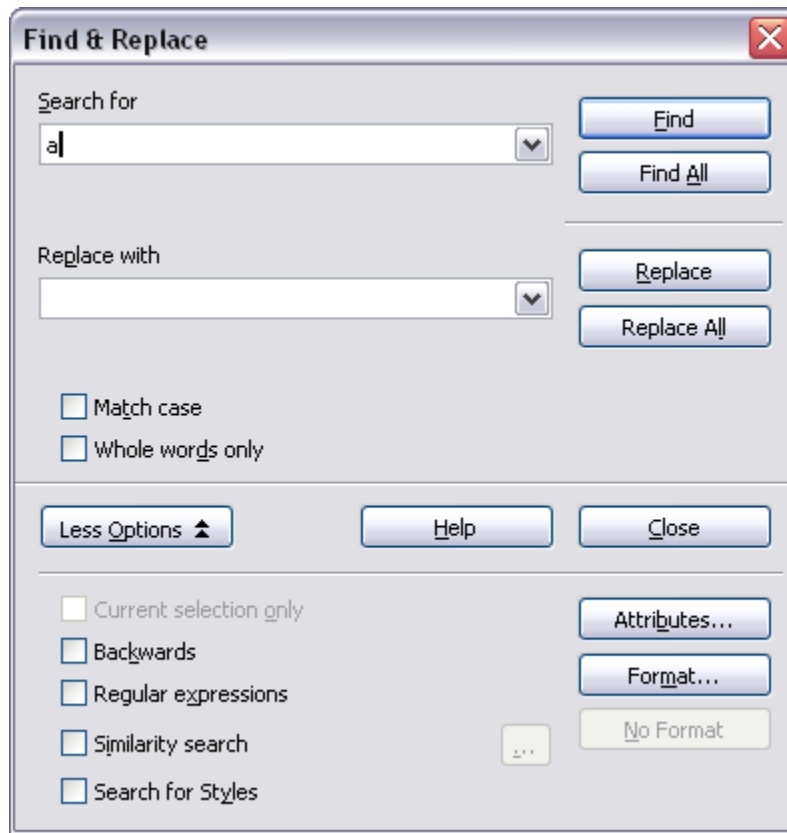


Figure 49: Expanded Find & Replace dialog box

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**TIP** Unless you plan to search for other text using those same attributes, click **No Format** to remove the attributes after completing your search. If you forget to do this, you may wonder why your next search fails to find words you know are in the document.

---

## Find and replace paragraph styles

If you combine material from several sources, you may discover that lots of unwanted paragraph styles have suddenly shown up in your document. To quickly change all the paragraphs of one (unwanted) style to another (preferred) style:

- 1) On the expanded Find & Replace dialog box (Figure 49), select *Search for Styles*. (If you have attributes specified, this checkbox is labeled *Including Styles*.) The *Search for* and *Replace with* boxes now contain a list of styles.
- 2) Select the styles you want to search for and replace.
- 3) Click **Find**, **Find All**, **Replace**, or **Replace All**.

## Inserting special characters

A “special” character is one not found on a standard English keyboard. For example, © ¼ æ ç ñ ö ø ç are all special characters. To insert a special character:

- 1) Place the cursor in your document where you want the character to appear.
- 2) Click **Insert > Special Character** to open the Special Characters dialog box (Figure 50).
- 3) Select the characters you wish to insert, in order, then click **OK**. The selected characters are shown in the lower left of the dialog box. As you select each character, it is shown on the lower right, along with the numerical code for that character.

**Note** Different fonts include different special characters. If you do not find a particular special character you want, try changing the *Font* selection.

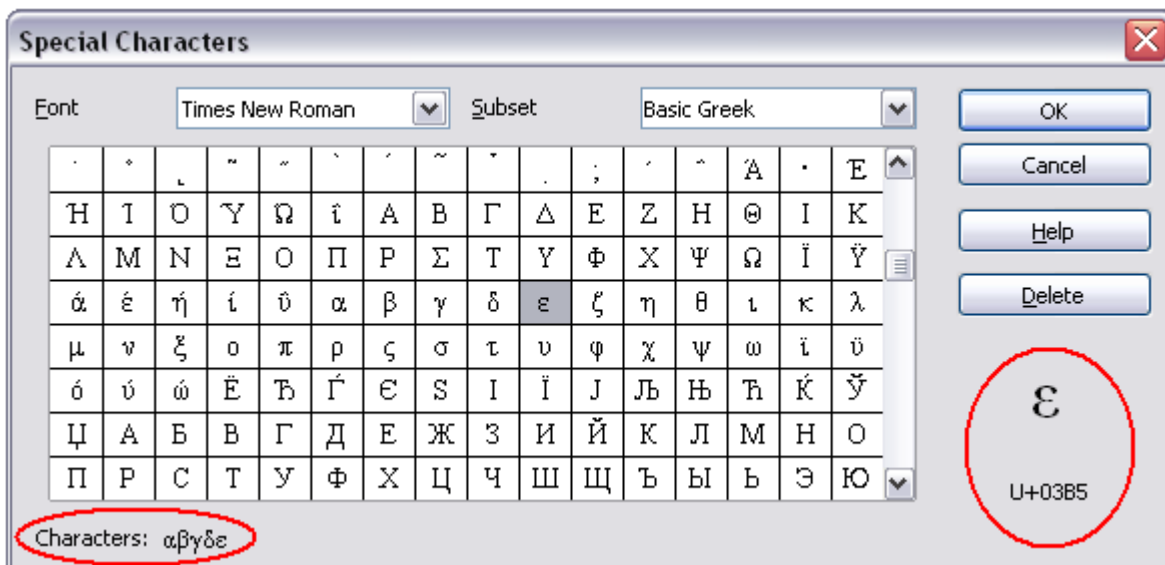


Figure 50: The Special Characters dialog box, where you can insert special characters.

**TIP** Notice that the characters selected appear in the bottom-left corner of the dialog box.

## Inserting dashes and non-breaking spaces

### Non-breaking spaces

To prevent two words from being separated at the end of a line, press *Control+spacebar* after the first word.

### Non-breaking hyphen

You can use a non-breaking hyphen in cases where you do not want the hyphen to appear at the end of a line. Examples of non-breaking hyphens are: in a range such as A-Z or the hyphens in a telephone number, such as 123-4567. To insert a non-breaking hyphen, press *Shift+Ctrl+minus sign*.

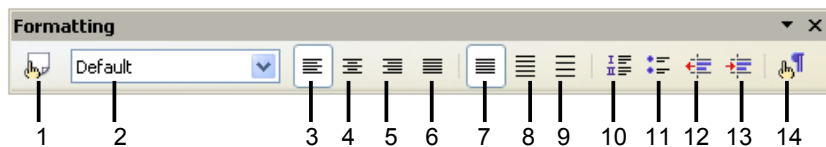
### En and em dashes

To enter en and em dashes, use the *Replace dashes* option under **Tools > AutoCorrect > Options** (Figure 56). This option replaces two hyphens, under certain conditions, with the corresponding dash.

## Formatting paragraphs

You can apply many formats to paragraphs using the buttons on the Formatting toolbar. Figure 51 shows the Formatting toolbar as a floating toolbar, customized to show only the buttons for paragraph formatting.

**TIP** It is highly recommended that you use *paragraph styles* rather than manually formatting paragraphs, especially for long or standardized documents. For information on the advantages of styles and how to use them, see Chapter 6, “Introduction to Styles”.



- |                                     |                     |                            |
|-------------------------------------|---------------------|----------------------------|
| 1 Open Styles and Formatting window | 5 Align Right       | 10 Numbering On/Off        |
| 2 Apply Style                       | 6 Justified         | 11 Bullets On/Off          |
| 3 Align Left                        | 7 Line Spacing: 1   | 12 Decrease Indent         |
| 4 Centered                          | 8 Line Spacing: 1.5 | 13 Increase Indent         |
|                                     | 9 Line Spacing: 2   | 14 Paragraph format dialog |

Figure 51: Formatting toolbar, showing buttons for paragraph formatting

Figure 52 shows examples of the different alignment options.

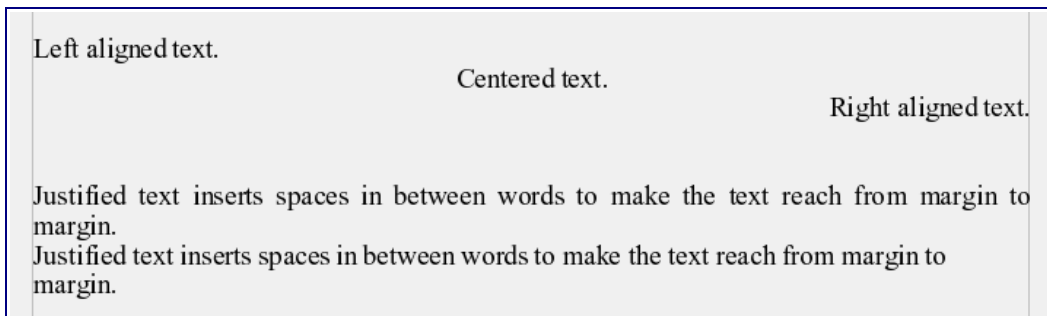


Figure 52: Different text alignment options



## Setting tab stops and indents

The horizontal ruler shows both the default tab stops and any that you have defined. To set the measurement unit and the spacing of default tab stops, go to **Tools > Options > OpenOffice.org Writer > General**.

You can also set or change the measurement unit by right-clicking on the ruler to open a list of units, as shown in Figure 53. Click on one of them to change the ruler to that unit.

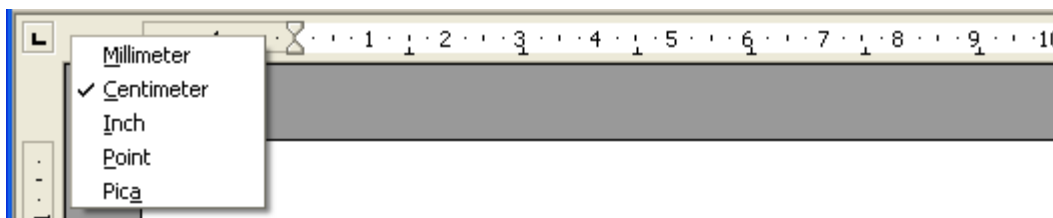
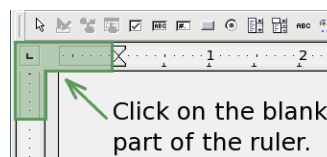


Figure 53: Ruler showing default tab stops

Double-click on a blank part of the ruler to open the *Indents & Spacing* tab of the Paragraph dialog box. Double-click on the ruler itself to open the *Tabs* tab of the Paragraph dialog box (Figure 54).



To fine-tune tab stop settings, use the *Tabs* page of the Paragraph dialog box (Figure 54).

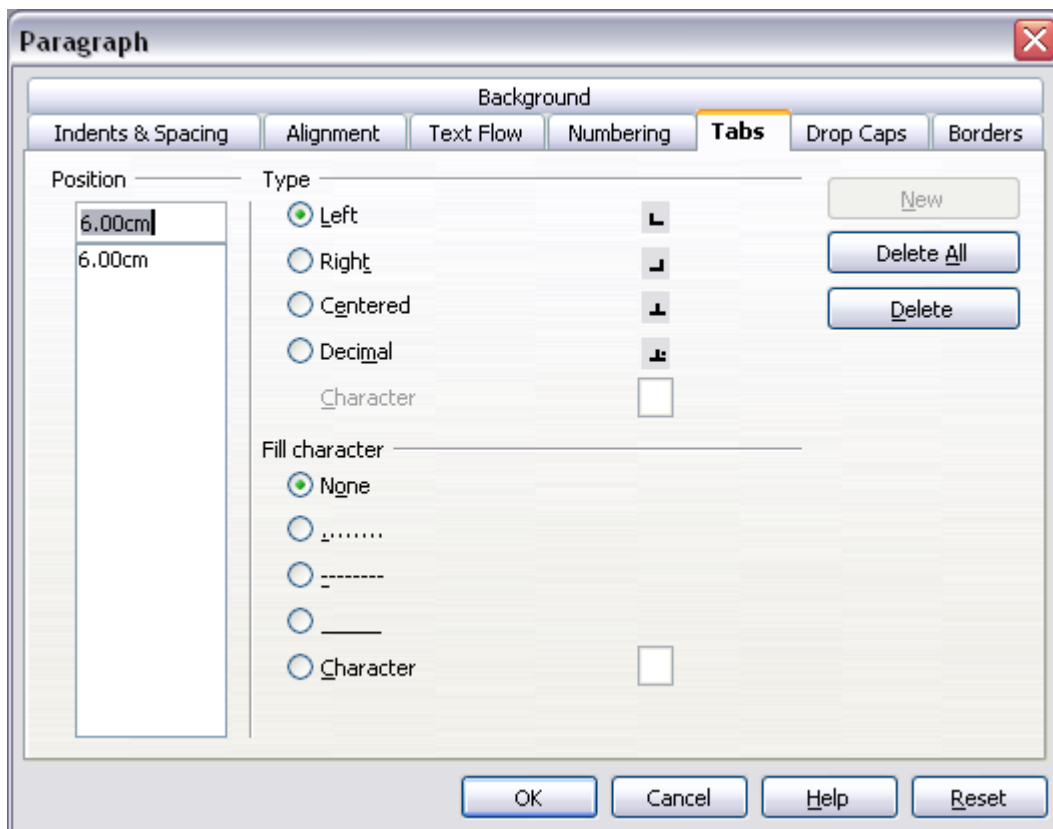


Figure 54: Specifying tab stops and fill characters

## Formatting characters

You can apply many formats to characters using the buttons on the Formatting toolbar. Figure 55 shows the Formatting toolbar as a floating toolbar, customized to show only the buttons for character formatting.

**TIP** It is highly recommended that you use *character styles* rather than manually formatting characters. For information on the advantages of styles and how to use them, see Chapter 6, “Introduction to Styles”.

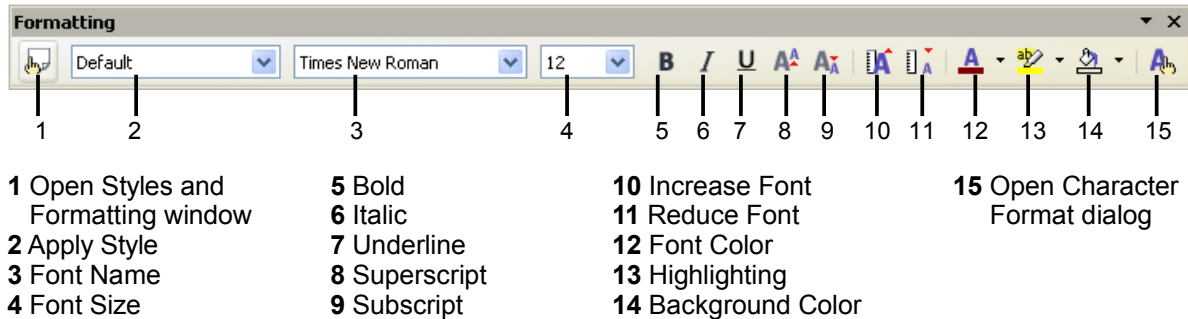


Figure 55: Formatting toolbar, showing buttons for character formatting

**TIP** To remove manual formatting, select the text and click **Format > Default Formatting**, or right-click and select **Default Formatting** from the pop-up menu.

## Autoformatting

Writer can be set to automatically format parts of a document according to the choices made on the *Options* tab of the AutoCorrect dialog box (**Tools > AutoCorrect > Options**). See Figure 56.

The online help describes each of these choices and how to activate the autoformats. Some common unwanted or unexpected formatting changes include:

- Horizontal lines. If you type three or more hyphens (---), underscores (\_\_\_) or equal signs (===) on a line and then press *Enter* the paragraph is replaced by a horizontal line as wide as the page. The line is actually the lower border of the preceding paragraph.
- Bulleted and numbered lists. A bulleted list is created when you type a hyphen (-), star (\*), or plus sign (+), followed by a space or tab at the beginning of a paragraph. A numbered list is created when you type a number followed by a period (.), followed by a space or tab at the beginning of a paragraph. Automatic numbering is only applied to paragraphs formatted with the *Default*, *Text body* or *Text body indent* paragraph styles.

**TIP** If you notice unexpected formatting changes occurring in your document, this is the first place to look for the cause.

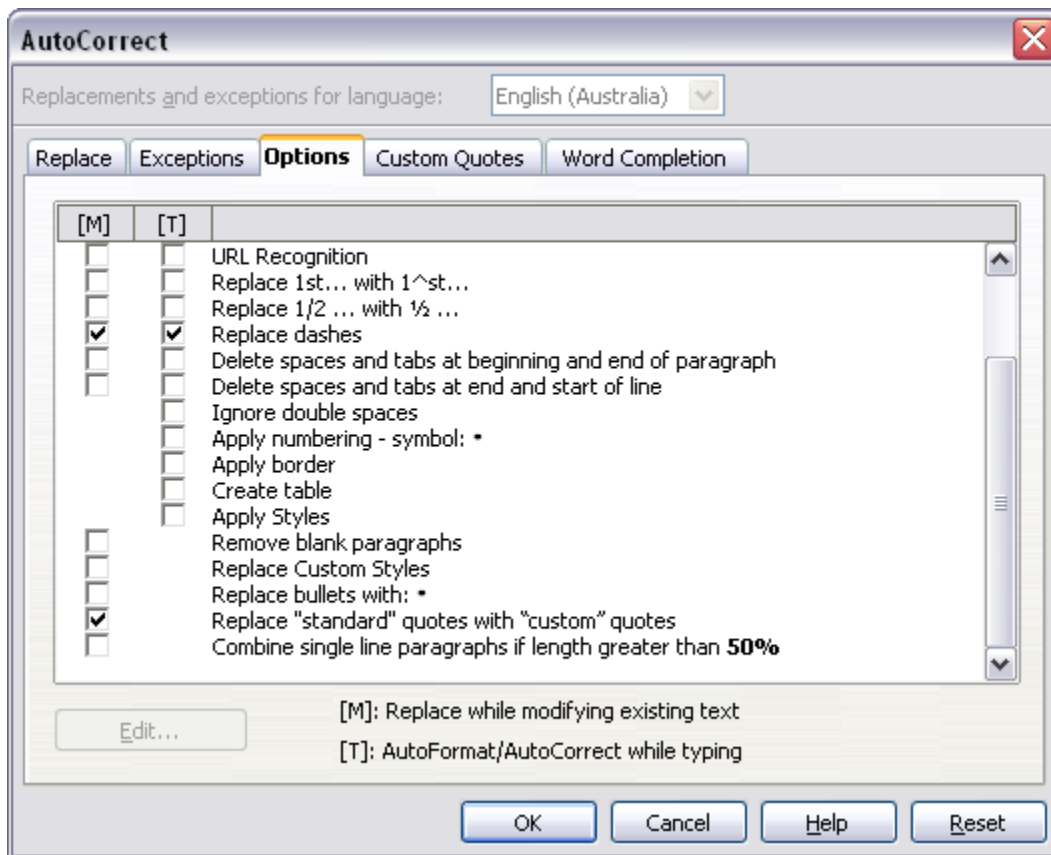


Figure 56: Autoformat choices on the Options tab of the AutoCorrect dialog box

To turn autoformatting on or off, go to **Format > AutoFormat** (Figure 57) and select or deselect the items on the submenu.

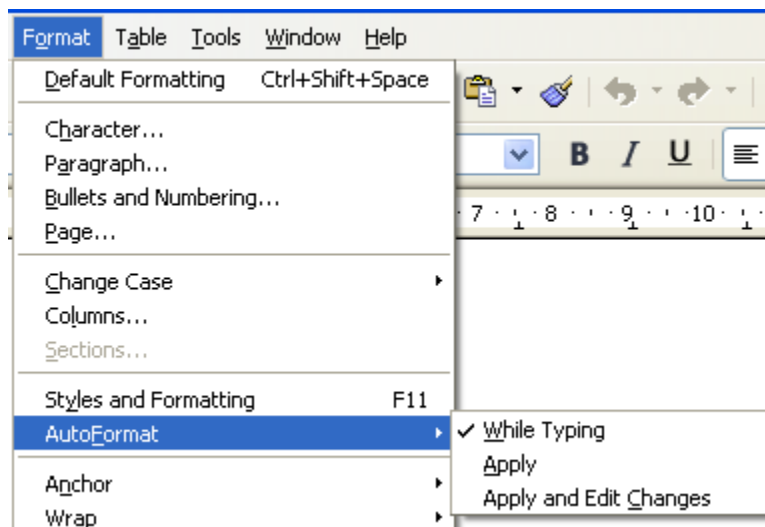


Figure 57: Turning autoformatting on or off

- *While Typing* automatically formats the document while you type.
- If *While Typing* is deselected, you can select *Apply* to automatically format the file.

- *Apply and Edit Changes* automatically formats the file and then opens a dialog box where you can accept or reject the changes.

## Creating numbered or bulleted lists

There are several ways to create numbered or bulleted lists:

- Use autoformatting, as described above.
- Use list styles, as described in Chapter 7, “Working with Styles”.
- Use the *Numbering and Bullets* icons on the paragraph formatting toolbar (see Figure 51). This method is described here.

To produce a numbered or bulleted list, select the paragraphs in the list and then click on the appropriate icon on the toolbar.

---

**Note** It is a matter of personal preference whether you type your information first, then apply Numbering/Bullets or apply these as you type.

---

## Using the Bullets and Numbering toolbar

You can create a nested list (where one or more list items has a sublist under it, as in an outline) by using the buttons on the Bullets and Numbering toolbar (Figure 58). You can move items up or down the list, create subpoints, and even change the style of bullets.



- |  |                             |
|--|-----------------------------|
| 1 Bullets On/Off                       | 8 Insert Unnumbered Entry   |
| 2 Numbering On/Off                     | 9 Move Up                   |
| 3 Numbering Off                        | 10 Move Down                |
| 4 Up One Level                         | 11 Move Up with Subpoints   |
| 5 Down One Level                       | 12 Move Down with Subpoints |
| 6 Move Up (One Level) with Subpoints   | 13 Restart Numbering        |
| 7 Move Down (One Level) with Subpoints | 14 Bullets and Numbering    |

Figure 58: Bullets and Numbering toolbar

---

**TIP** It is possible to move a list entry up, together with all of its sub-entries. You can do this by clicking the **Move Up with Subpoints** button, which is located next to the standard move buttons.

---

## Using footnotes and endnotes

---

Footnotes appear at the bottom of the page on which they are referenced. Endnotes are collected at the end of a document.

To work effectively with footnotes and endnotes, you need to:

- Insert footnotes.
- Define the format of footnotes.
- Define the location of footnotes on the page (see Chapter 4, “Formatting Pages”).

### Inserting footnotes

To insert a footnote, put the cursor where you want the footnote marker to appear. Then click **Insert > Footnote** or click the **Insert Footnote Directly** icon on the Insert toolbar (see Figure 59).

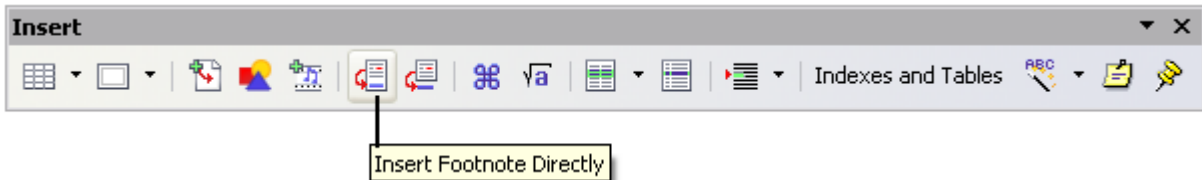


Figure 59: Using the Insert Footnote Directly icon on the toolbar

A footnote marker is inserted in the text, and the cursor is relocated to the footnote area at the bottom of the page (or to the endnote area at the end of the document). Type the footnote content in this area.

If you use **Insert > Footnote**, the Insert Footnote dialog box (Figure 60) is displayed. Here you can choose whether to use the automatic numbering sequence specified in the footnote settings and whether to insert the item as a footnote or endnote.

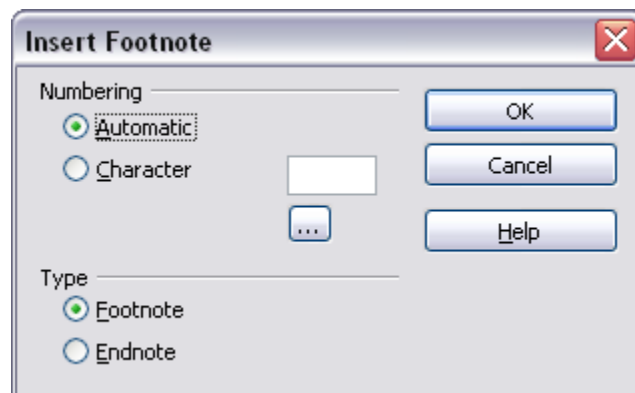


Figure 60: Inserting a footnote directly

If you use the **Insert Footnote Directly** icon, the footnote automatically takes on the attributes previously defined in the Footnote Settings dialog box (Figure 61).

You can edit an existing footnote the same way you edit any other text.

To delete a footnote, delete the footnote marker. The contents of the footnote are deleted automatically, and the numbering of other footnotes is adjusted automatically.

## Defining the format of footnotes

To format the footnotes themselves, click **Tools > Footnotes**. On the Footnote Settings dialog box (Figure 61), choose settings as required. The *Endnotes* tab has similar choices.

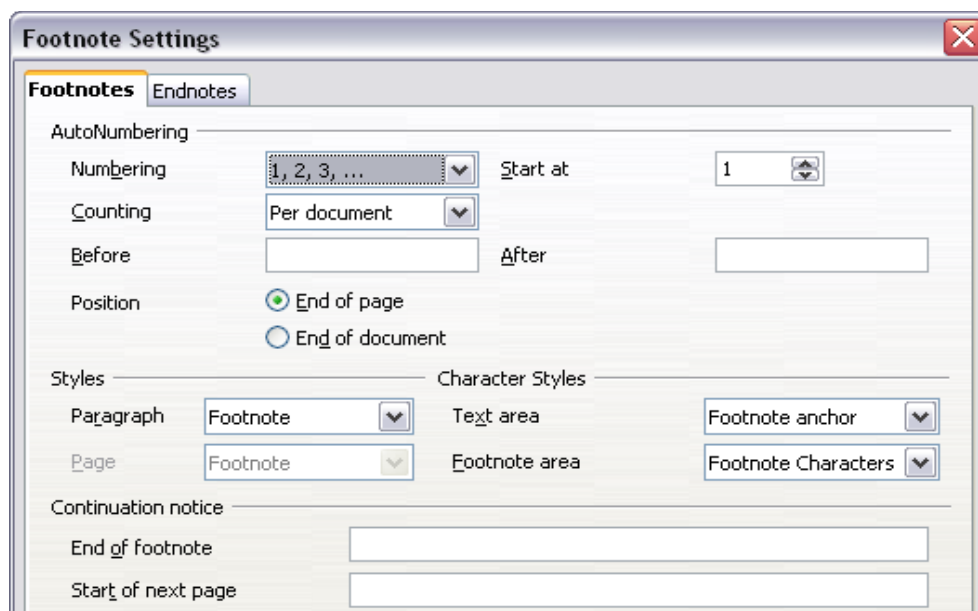


Figure 61: Defining footnote formatting

## Checking spelling

Writer provides a spelling checker, which can be used in two ways.



AutoSpellcheck checks each word as it is typed and displays a wavy red line under any misspelled words. Once the word is corrected, the red wavy line disappears.



To perform a separate spellcheck on the document (or a text selection) click the Spellcheck button. This checks the document or selection and opens the Spellcheck dialog box (Figure 62) if any misspelled words are found.

Here are some more features of the spelling checker:

- You can change the dictionary language (for example, to Spanish, French, or German) on the Spellcheck dialog box.
- You can add a word to a dictionary. Click **Add** in the Spellcheck dialog box and pick the dictionary to add it to.

- The Options dialog box of the Spellcheck tool has a number of different options such as whether to check uppercase words and words with numbers. It also allows you to manage custom dictionaries, that is, add or delete dictionaries and add or delete words in a dictionary.
- On the *Font* tab of the Paragraph Styles dialog box, you can set paragraphs to spell-check in a specific language (different from the rest of the document). See Chapter 7, “Working with Styles” for more information.

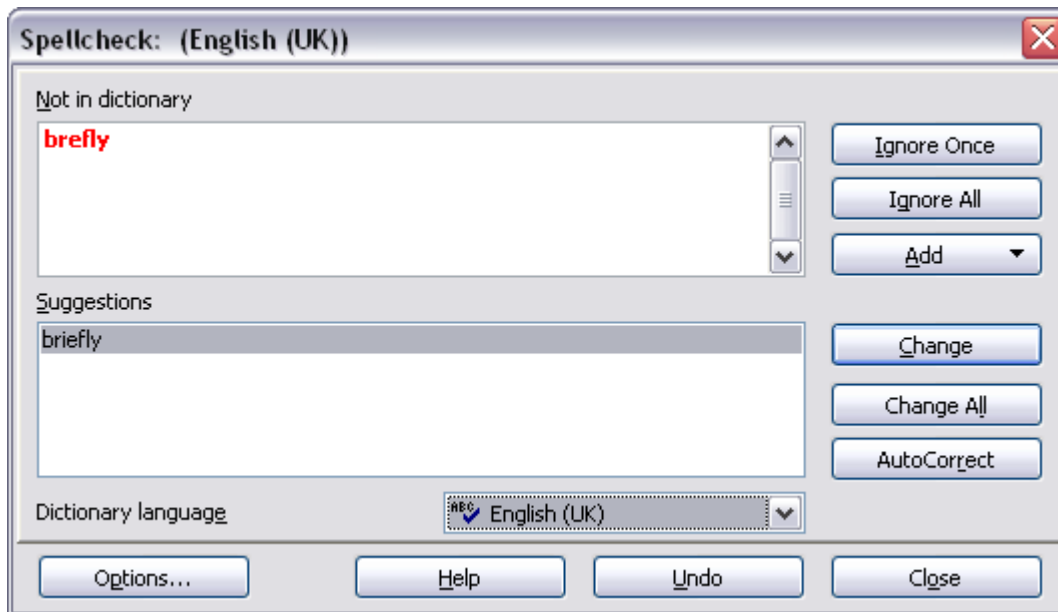


Figure 62: Selecting a word from dictionary using the Spellcheck dialog box

## Using the thesaurus

The thesaurus offers alternative words and phrases. Select the word or phrase you want to find alternatives for and select **Tools > Language > Thesaurus** or press *Control+F7*. Click on a meaning to show alternative words and phrases for that meaning of the word. For example, when given the word “house”, the thesaurus offers several meanings, including “dwelling”, “legislature” and “sign of the zodiac”. If you click on “dwelling”, you will see “dwelling”, “home”, “domicile”, “abode”, and other alternatives, as shown in Figure 63.

---

**Note** If the current language does not have a thesaurus installed, this feature is disabled.

---

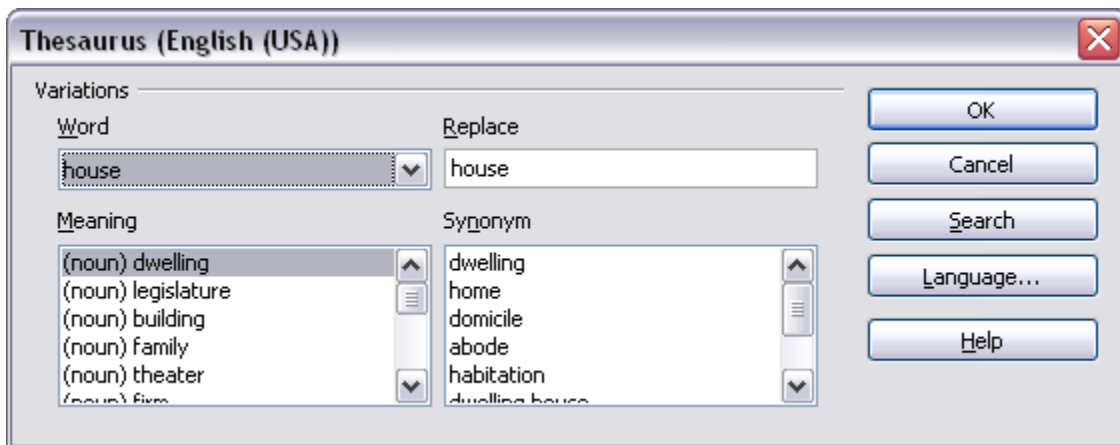


Figure 63: The thesaurus offers alternatives to words

## Hyphenating words

To turn automatic hyphenation of words on or off:

- 1) Press *F11* to open the Styles and Formatting window (Figure 64).

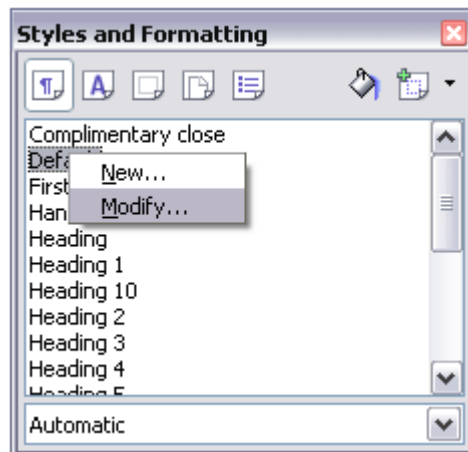


Figure 64: Modifying a style

- 2) On the *Paragraph Styles* page of the Styles and Formatting window, right-click on **Default** and select **Modify**.
- 3) On the Paragraph Style dialog box, go to the *Text Flow* tab (Figure 65).
- 4) Under *Hyphenation*, select or deselect the *Automatically* checkbox.
- 5) Click **OK** to save.



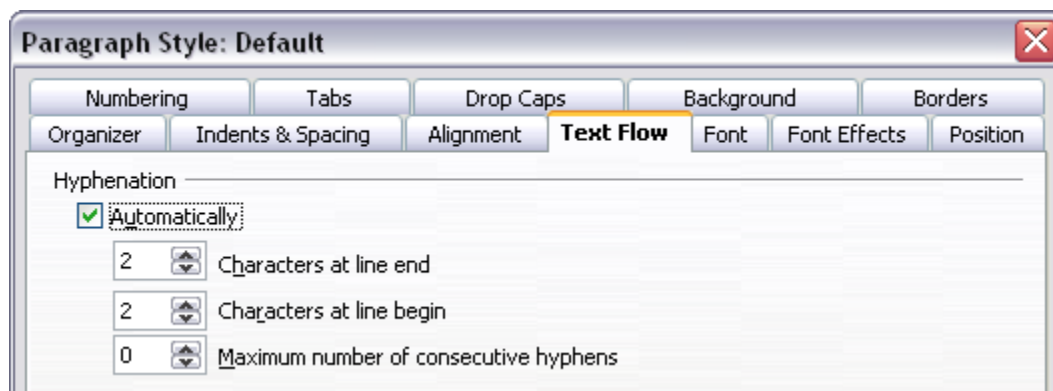


Figure 65: Turning on automatic hyphenation

---

**Note** Turning on hyphenation for the *Default* paragraph style affects all other paragraph styles that are based on *Default*. You can individually change other styles so that hyphenation is not active; for example, you might not want headings to be hyphenated. Any styles that are not based on *Default* are not affected. For more on paragraph styles, see Chapter 6, “Introduction to Styles” and Chapter 7, “Working with Styles”.

---

You can also set hyphenation choices through **Tools > Options > Language Settings > Writing Aids**. In *Options*, near the bottom of the dialog box, scroll down to find the hyphenation settings (see Figure 66).

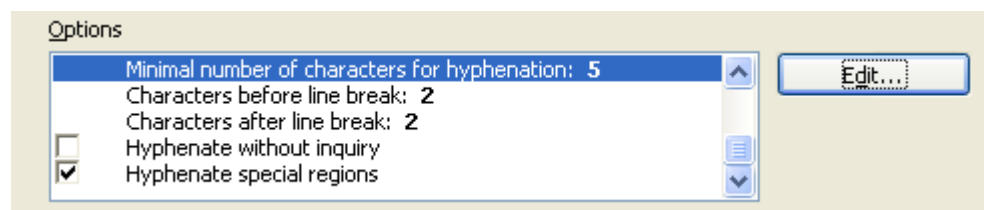


Figure 66: Setting hyphenation options

To change the minimal number of characters for hyphenation, the minimum number of characters before a line break, or the minimum number of characters after a line break, select the item, and then click **Edit**.

*Hyphenate without inquiry* specifies that you will never be asked for to manually hyphenate words that the hyphenation dictionary does not recognize. If this box is not selected, when a word is not recognized, a dialog box will open where you can manually enter hyphens.

*Hyphenate special regions* specifies that hyphenation will also be carried out in footnotes, headers, and footers.

---

**Notes** Hyphenation options set on the Writing Aids dialog box are effective only if hyphenation is turned on through paragraph styles.

Choices on the Writing Aids dialog box for “characters before line break” and “characters after line break” override settings in paragraph styles for “characters at line end” and “characters at line begin”. This is a bug.

---

To enter a conditional hyphen inside a word, press *Control+minus sign*. The word is hyphenated at this position when it is at the end of the line, even if automatic hyphenation for this paragraph is switched off.

## Using AutoCorrect

---

Writer's AutoCorrect function has a long list of common misspellings and typing errors, which it corrects automatically. For example, "hte" will be changed to "the". Select **Tools > AutoCorrect** to open the AutoCorrect dialog box. There you can define what strings of text are corrected and how. In most cases, the defaults are fine.

---

**TIP** AutoCorrect is automatically turned on. To turn it off, uncheck **Format > Autoformat > While Typing**.

---

- To stop Writer replacing a specific spelling, use **Tools > AutoCorrect > Replace**, highlight the word pair and click **Delete**.
- To add a new spelling to correct, type it into the *Replace* and *With* boxes and click **New**.
- See the different tabs of the dialog box for the wide variety of other options available to fine-tune AutoCorrect.

---

**TIP** AutoCorrect can be used as a quick way to insert special characters. For example, (c) will be autocorrected to ©. You can add your own special characters.

---

## Using word completion

---

If Word Completion is enabled, Writer tries to guess which word you are typing and offers to complete this word for you. To accept the suggestion, press *Enter*. Otherwise, continue typing.

---

**TIP** Many people prefer not to use Word Completion. If you do not want to use it, select **Tools > AutoCorrect > Word Completion** and uncheck *Enable word completion*.

---

You can customize word completion from the **Tools > AutoCorrect > Word Completion** tab (Figure 67):

- Add (append) a space automatically after an accepted word.
- Show the suggested word as a tip (hovering over the word) rather than completing the text as you type.
- Change the maximum number of words remembered for word completion and the length of the smallest words to be remembered.
- Delete specific entries from the word completion list.

- Change the key that accepts a suggested entry—the options are *right arrow*, *End* key, *Return (Enter)*, and *Space bar*.

---

**Note** Automatic word completion only occurs after you type a word for the second time in a document.

---

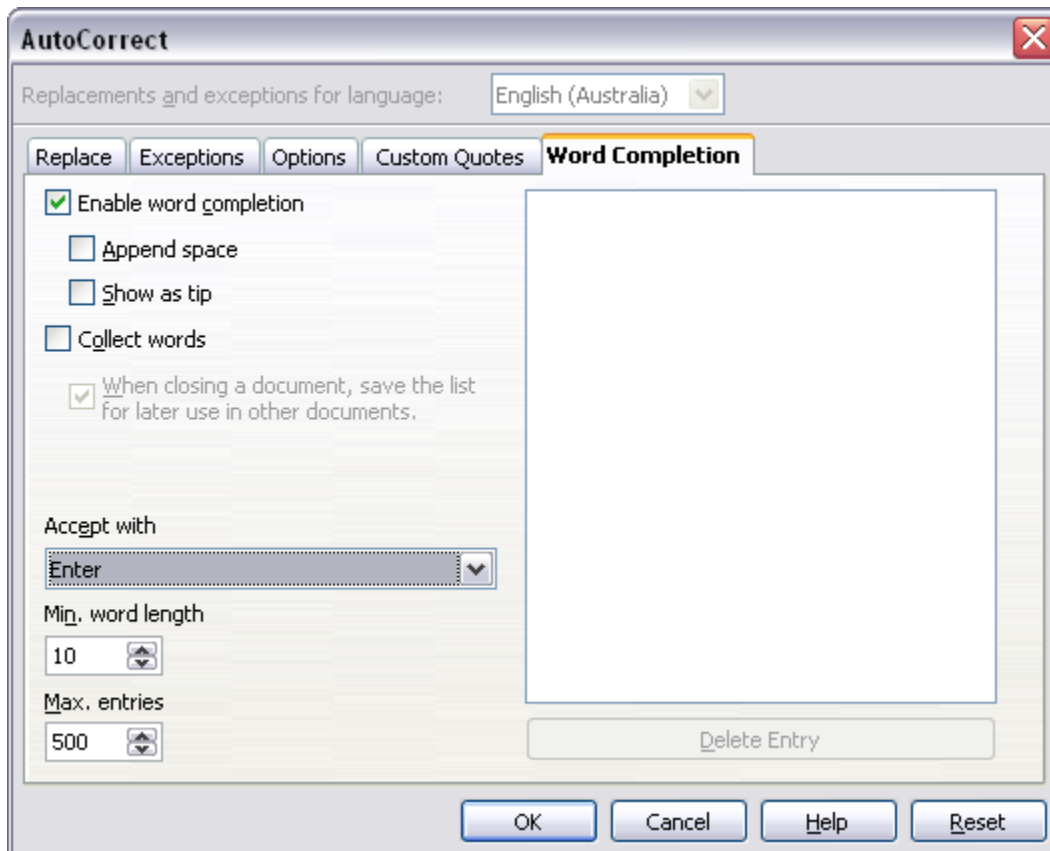


Figure 67: Customizing word completion

## Using AutoText

AutoText allows you to assign text, tables, graphics, and other items to a key combination. For example, rather than typing out “Senior Management”, you just have to type “sm” and press *F3*. Or you can save a formatted Tip (like the one on the next page) as AutoText and then inserting a copy by typing “tip” and pressing *F3*.

To insert AutoText, type the shortcut and press *F3*.

To assign some text to an AutoText shortcut:

- 1) Type the text into your document.
- 2) Select the text.
- 3) Go to **Edit > AutoText** (or press *Control+F3*).

- 4) Enter a name for your shortcut. Writer will suggest a one-letter shortcut, which you can change.
- 5) Click the **AutoText** button on the right of the AutoText dialog box and select **New (text only)** from the menu.
- 6) Click **Close** to return to your document.

---

**TIP** If the only option under the **AutoText** button is **Import**, either you have not entered a name for your AutoText or there is no text selected in the document.

---

AutoText is especially powerful when assigned to fields. See Chapter 14, “Working with Fields” for more information.

## Line numbering

---

Line numbering puts line numbers in the margin. The line numbers are displayed on screen and are printed.

Click **Tools > Line Numbering** and select the *Show numbering* checkbox in the top left corner. Then click **OK**.

Figure 68 shows an example with numbering on every line.

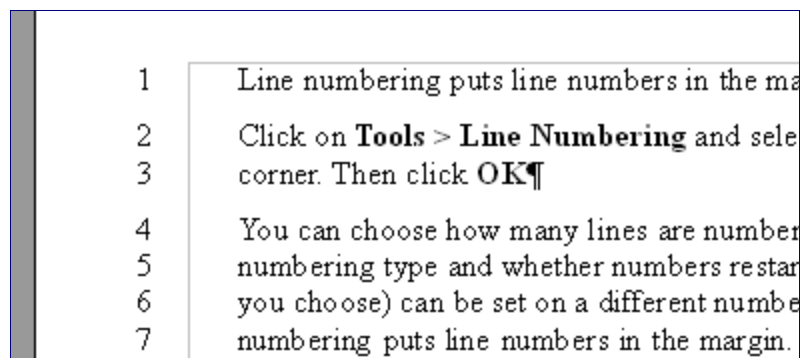


Figure 68: Line numbering example

You can choose how many lines are numbered (for example, every line or every tenth line), the numbering type and whether numbers restart on each page. In addition, a text separator (any text you choose) can be set on a different numbering scheme (one every 12 lines, for example). See Figure 69.

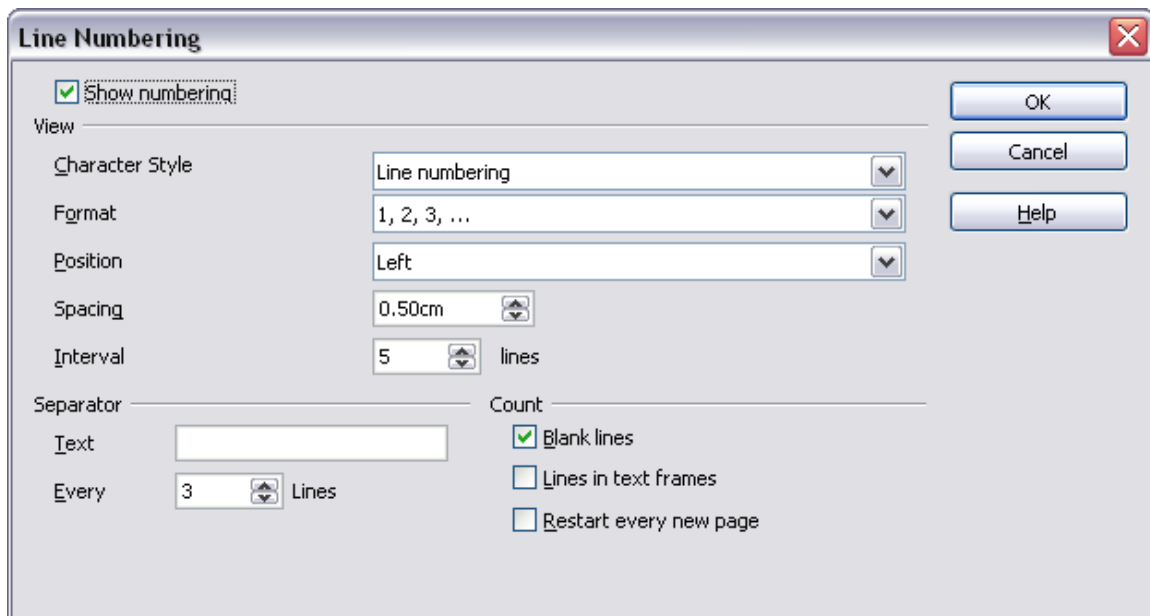



Figure 69: The Line Numbering dialog box

## Undoing and redoing changes

To undo the most recent change, press *Control-Z*, click the **Undo** icon  on the Standard toolbar, or select **Edit > Undo** from the menu bar.

The Edit menu shows the latest change that can be undone, as shown in Figure 70.

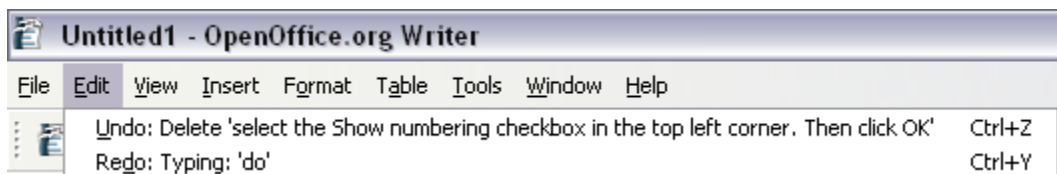


Figure 70: Edit > Undo last action

Click the small triangle to the right of the **Undo** icon to get a list of all the changes that can be undone (Figure 71). You can select multiple changes and undo them at the same time.

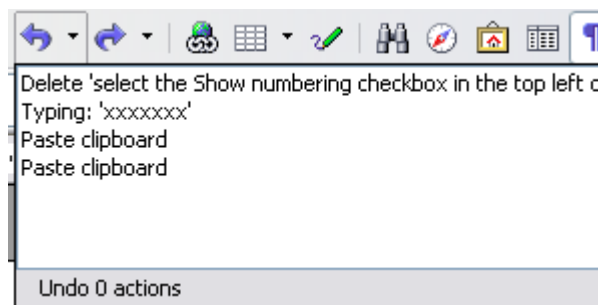



Figure 71: List of actions that can be undone

After changes have been undone, **Redo** becomes active. To redo a change, select **Edit > Redo**, or press *Control+Y* or click on the **Redo** icon . As with Undo, click on the triangle to the right of the arrow to get a list of the changes that can be reapplied.

To modify the number of changes OpenOffice.org remembers, select **Tools > Options > OpenOffice.org > Memory** and change **Undo — Number of steps**. Be aware that asking OOO to remember more changes makes it consume more memory.

## Tracking changes to a document

---

You can use several methods to keep track of changes made to a document.

- Make your changes to a copy of the document (stored in a different folder, under a different name, or both), then use Writer to combine the two files and show the changes you made. Click **Edit > Compare Document**. This technique is particularly useful if you are the only person working on the document, as it avoids the increase in file size and complexity caused by the other methods.
- Save versions that are stored as part of the original file. However, this method can cause problems with documents of non-trivial size or complexity, especially if you save a lot of versions. Avoid this method if you can.
- Use Writer's change marks (often called “redlines” or “revision marks”) to show where you have added or deleted material or changed formatting. Later, you or another person can review and accept or reject each change.

---

**TIP** Not all changes are recorded. For example, changing a tab stop from align left to align right and changes in formulas (equations) or linked graphics are not recorded.

---

## Preparing a document for review

When you send a document to someone else to review or edit, you may want to prepare it first so that the editor or reviewer does not have to remember to turn on the revision marks. After you have protected the document, any user must enter the correct password in order to turn off the function or accept or reject changes.

- 1) Open the document. To check whether it contains multiple versions, click **File > Versions**. If multiple versions are listed, save the current version as a separate document with a different name and use this new document as the review copy.
- 2) With the review copy open, make sure that change recording is turned on. The **Edit > Changes > Record** menu item has a check mark next to it when recording is turned on.
- 3) Click **Edit > Changes > Protect Records**. On the Enter Password dialog box, type a password (twice) and click **OK**.

---

**Note** Passwords must contain at least five characters. It is not necessary to password protect the document while preparing it for review.

---

## Recording changes

See Chapter 2, “Setting up Writer” for instructions on setting up how your changes will be displayed.

- 1) To begin tracking (recording) changes, click **Edit > Changes > Record**.

To show or hide the display of changes, click **Edit > Changes > Show**.

---

**TIP** Hold the mouse pointer over a marked change; you will see a *Help Tip* showing the type of change, the author, date, and time of day for the change. If *Extended Tips* are enabled, you will also see any comments recorded for this change.

---

- 2) To enter a comment on a marked change, place the cursor in the area of the change and then click **Edit > Changes > Comment**. (See Figure 72.) In addition to being displayed as an extended tip, the comment is also displayed in the list in the Accept or Reject Changes dialog box.

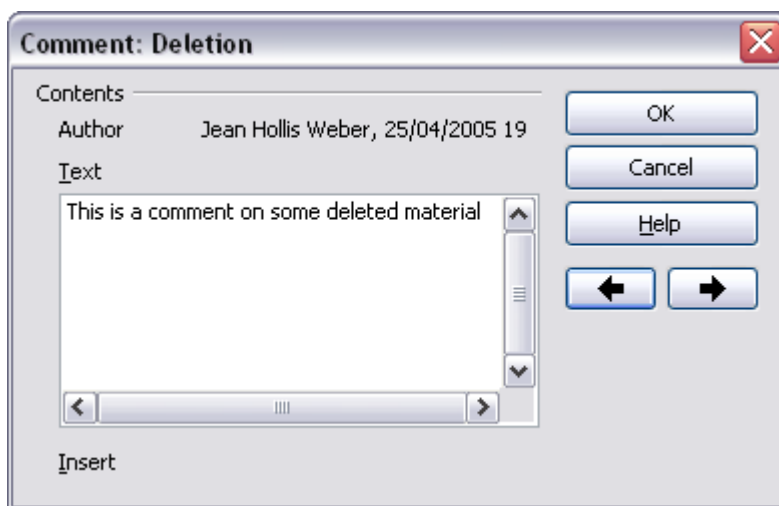


Figure 72: Inserting a comment during change recording

To move from one marked change to the next, use the arrow buttons. If no comment has been recorded for a change, the *Text* field is blank.

- 3) To stop recording changes, click **Edit > Changes > Record** again.

## Inserting notes

To insert a note that is not associated with a recorded change:

- 1) Place the cursor at the text you want to comment on, then click **Insert > Note**.
- 2) On the Insert Note dialog box (Figure 73), type your note. Click the **Author** button to insert your initials and the date and time.

To view a note, move the mouse pointer over the note marker (displayed as a small yellow rectangle). Writer displays the note in a Tip above the text. You can also double-click on the note to see it inside the Edit Note dialog box. If you have trouble viewing or selecting notes this way, you can use the Navigator instead: expand the list of notes, select the one you want, right-click on it, select **Note**, and then select **Edit** to display the Edit Note dialog box.

The Edit Note dialog box looks much like the Insert Note dialog box, with the addition of forward and back arrow buttons if the document contains more than one note.

---

**TIP** You can change the color of the note marker using the **Tools > Options > OpenOffice.org > Appearance** dialog box. (In the *Text Document* section — *Note Indicator*.)

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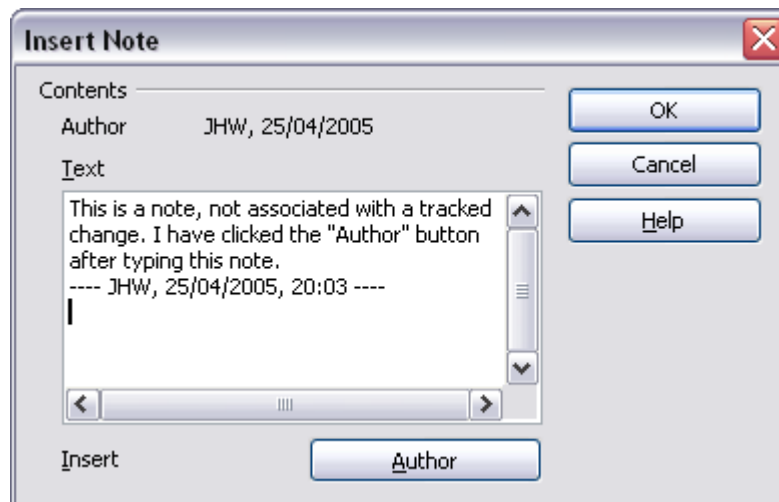


Figure 73: Inserting a note

## Accepting or rejecting changes and comments

- 1) Click **Edit > Changes > Accept or Reject**. The Accept or Reject Changes dialog box (Figure 74) opens.
- 2) When you select a change in the dialog box, the actual change is highlighted in the document, so you can see what the editor changed.
- 3) Click **Accept** or **Reject** to accept or reject the selected change. You can also click **Accept All** or **Reject All** if you do not want to review the changes individually.

Changes that have not yet been accepted or rejected are displayed in the list. Accepted changes are removed from the list and appear in the text without any marking.



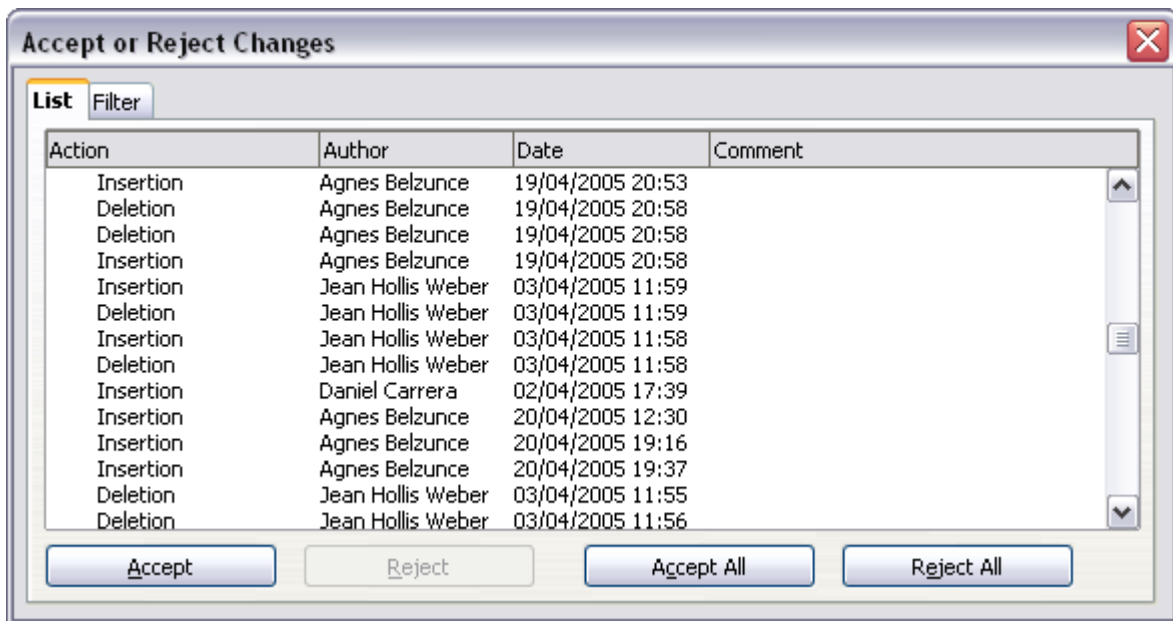


Figure 74: The List tab of the Accept or Reject Changes dialog box

To show only the changes of certain people or only the changes on specific days or various other restrictions, use the *Filter* tab (Figure 75) on the Accept or Reject Changes dialog box. After specifying the filter criteria, return to the *List* tab to see those changes that meet your criteria.

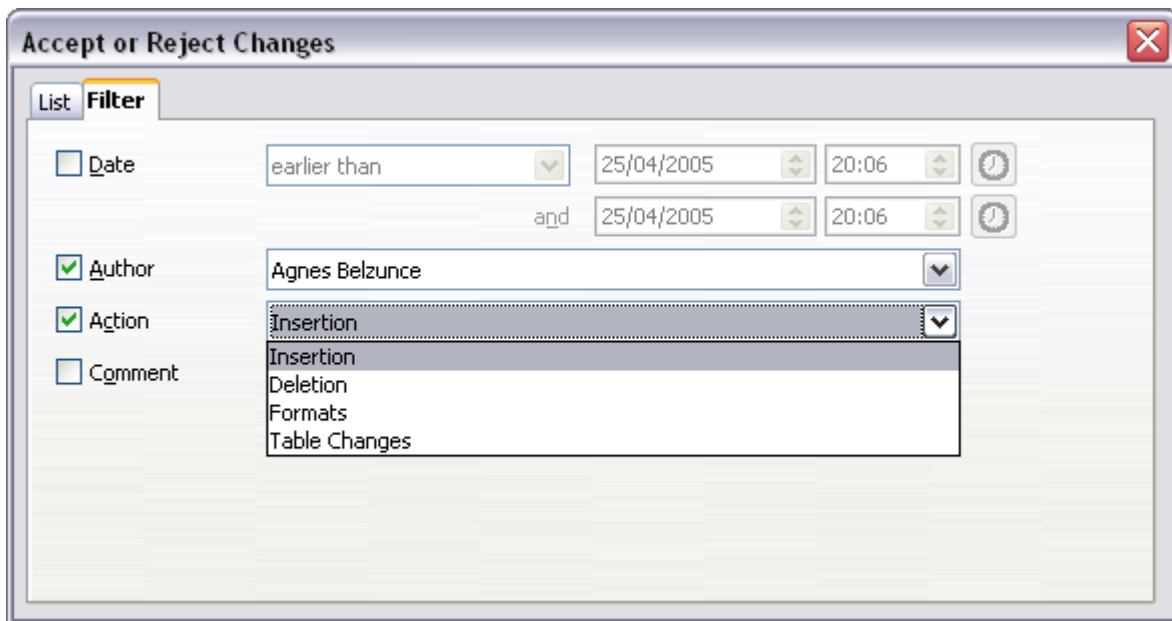


Figure 75: The Filter tab of the Accept or Reject Changes dialog box

## Merging modified documents

The processes discussed to this point are effective when you have one reviewer at a time. Sometimes, however, multiple reviewers all return edited versions of a document at the same time. In this case, it may be quicker to review all of these changes at once, rather than one review at a time. For this purpose, you can merge documents in Writer.

To merge documents, all of the edited documents need to have recorded changes in them.

- 1) Open one copy.
- 2) Click **Edit > Changes > Merge Document** and select and insert another copy of the document to be merged with the first.
- 3) After the documents merge, the Accept or Reject Changes dialog box opens, as in Figure 74, showing changes by more than one reviewer. If you want to merge more documents, close the dialog box and then repeat step 2.
- 4) Repeat until all copies are merged.

All recorded changes are now included in the open copy. Save this file under another name.

## Comparing documents

Sometimes reviewers may forget to record the changes they make. This is not a problem with Writer because you can find the changes if you compare documents.

In order to compare documents, you need to have the original document and the one that is edited. To compare them:

- 1) Open the edited document.
- 2) Select **Edit > Compare Document**.
- 3) The Insert dialog box appears. Select the original document and click **Insert**.

Writer finds and marks the changes and displays the Accept or Reject Changes dialog box. From this point, you can go through and accept or reject changes procedure as described earlier.

## Tips and tricks

---

### Switching between insert and overwrite mode

With the keyboard, press *Insert* to toggle between overwrite mode and insert mode. In insert mode, any text after the cursor position moves forward to make room for the text you type; in overwrite mode, text after the cursor position is replaced by the text you type. The current mode is displayed on the Status Bar.

With the mouse, click in the area on the Status Bar that indicates the current mode in order to switch to the other mode.

## **Counting the words in a selection**

Select a block of text and choose **Tools > Word Count**. OOo displays the number of words and characters in the selection as well as the number of words in the document. You can also see the number of words and characters (and other information) in the entire document in **File > Properties > Statistics**.



# *Chapter 4*

## *Formatting Pages*

*Using Page Styles, Tables, Frames, Columns, and Sections*

# Introduction

Writer provides several ways for you to control page layouts:

- Page styles
- Columns
- Frames
- Tables
- Sections

This chapter describes these methods and some associated things:

- Headers and footers
- Numbering pages
- Changing page margins

---

**Tip** Page layout is usually easier if you select the options to show text, object, table, and section boundaries in **Tools > Options > OpenOffice.org > Appearance** and if you select the options for paragraph ends, tabs, breaks, and other items in **Tools > Options > OpenOffice.org Writer > Formatting Aids**.

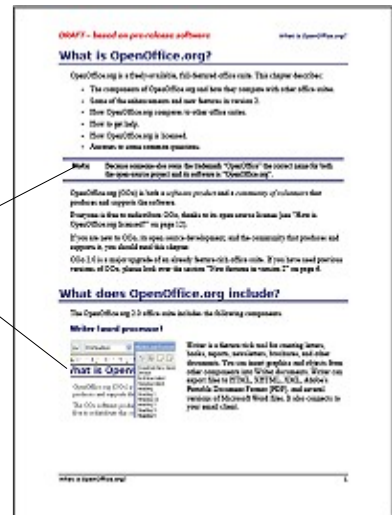
---

## Choosing a layout method

The best layout method depends on what the final document should look like and what sort of information will be in the document. Here are some examples. Do not worry if all this does not mean much to you now. The techniques mentioned are all described in this chapter.

For a book similar to this user guide with one column of text, some figures without text beside them, and some other figures with descriptive text, use page styles for basic layout, and use tables to place figures beside descriptive text, when necessary.

Items formatted as a table



Use page styles (with two columns) for an index or other document with two columns of text where the text continues from the left-hand column to the right-hand column and then to the next page, all in sequence (also known as “snaking columns” of text). If the title of the document (on the first page) is full-page width, put it in a single-column section.

Title is in a single-column section

Basic layout is in two columns

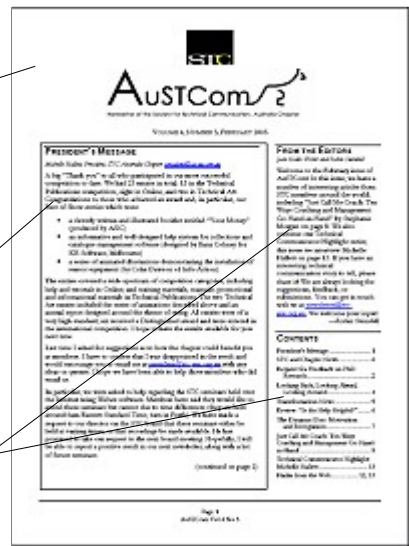


For a newsletter with a complex layout, two or three columns on the page, and some articles that continue from one page to some place several pages later, use page styles for basic layout. Place articles in linked frames and anchor graphics to fixed positions on the page, if necessary.

This is a header on the first page only

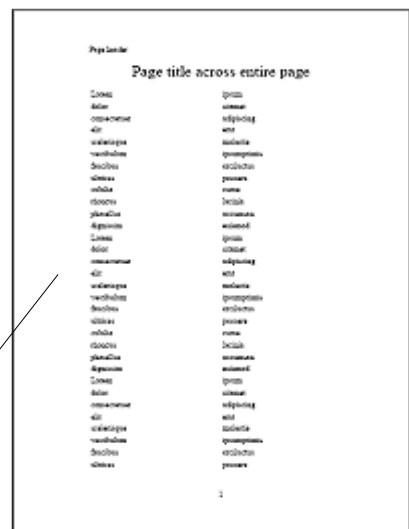
This frame is linked to a frame on another page

These frames are not linked to other frames



For a document with terms and translations to appear side-by-side in what appear to be columns, use a table to keep items lined up so you can type in both “columns”.

This is a borderless table. Each pair of words is in a separate row, and each word is in a cell of the table.



## Setting up basic page layout using styles

In Writer, *page styles* define the basic layout of all pages, including page size, margins, the placement of headers and footers, borders and backgrounds, number of columns, and so on.

Writer comes with several page styles, which you can build on or modify, and you can define new (custom) page styles. You can have one or many page styles in a single document.

---

**Note** All pages in a Writer document are based on styles. If you do not specify a page style, Writer uses the *Default* page style.

---

To change the layout of individual pages, either define a new page style or use one of the techniques (sections, frames, or tables) described later in this chapter.

This chapter describes some uses of page styles. Some other uses are discussed in Chapter 6, “Introduction to Styles”. The Page Style dialog box is covered in detail in Chapter 7, “Working with Styles”.

---

**Tip** Any modifications of page styles, including the *Default* page style, apply only to the document you are working on. If you want the changes to be the default for all documents, you need to put the changes into a template and make that template the default template. See Chapter 10, “Working with Templates”, for details.

---

## Inserting a page break without switching the style

In many documents (for example, a multi-page report), you may want the text to flow from one page to the next as you add or delete information. Writer does this automatically, unless you override the text flow using one of the techniques described earlier.

If you do want a page break in a particular place, for example, to put a heading at the top of a new page, here is how to do it:

- 1) Position the cursor in the paragraph you want to be at the start of the next page. Right-click and choose **Paragraph** in the pop-up menu.
- 2) On the *Text Flow* page of the Paragraph dialog box (Figure 76), in the *Breaks* section, check **Insert**. Do *not* check **With Page Style**.

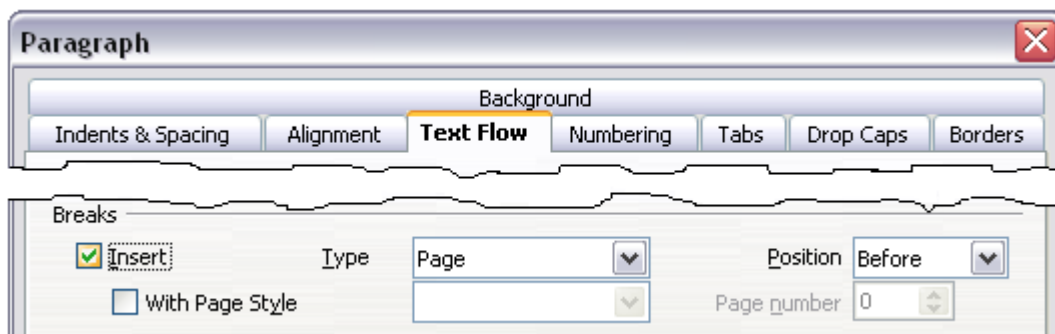


Figure 76: Inserting a manual page break

- 3) Click **OK** to position the paragraph at the start of the next page.

## Defining a different first page for a document

Many documents, such as letters and reports, have a first page that is different from the other pages in the document. For example, the first page of a letterhead typically has a different header, as shown in Figure 77, or the first page of a report might have no header or footer, while the other pages do. With OOO, you can define the style for the first page and specify the style for the following page to be applied automatically.

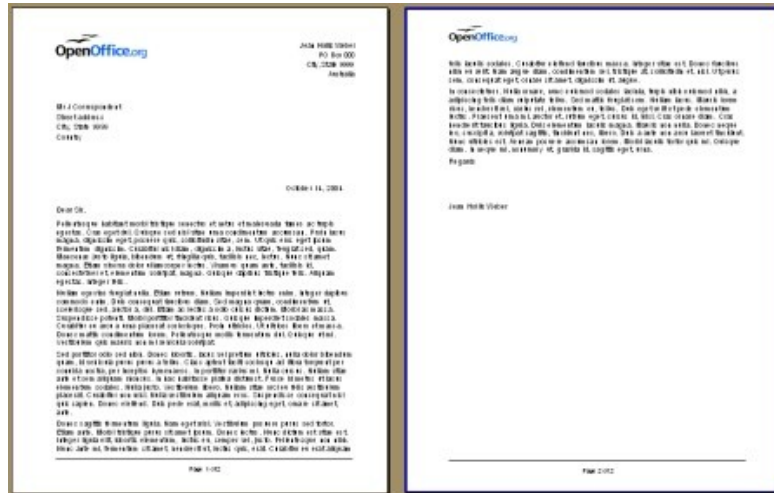


Figure 77: Letterhead with different page styles for first and following pages

As an example, we can use the *First Page* and *Default* page styles that come with OOO. Figure 78 shows what we want to happen: the first page is to be followed by the default page, and all the following pages are to be in the *Default* page style.

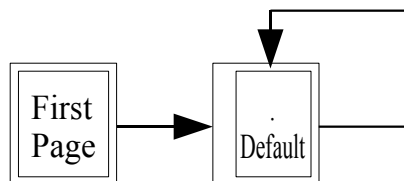




Figure 78: Flow of page styles

To set up this sequence:

- 1) Open the Styles and Formatting window. (You can choose one of the following: click the **Styles and Formatting** icon  located at the left-hand end of the object bar, choose **Format > Styles and Formatting**, or press *F11*.)
- 2) On the Styles and Formatting window (Figure 79), click on the **Page Styles** icon  (fourth from the left) to display a list of page styles.
- 3) Right-click on **First Page** and select **Modify** from the pop-up menu.



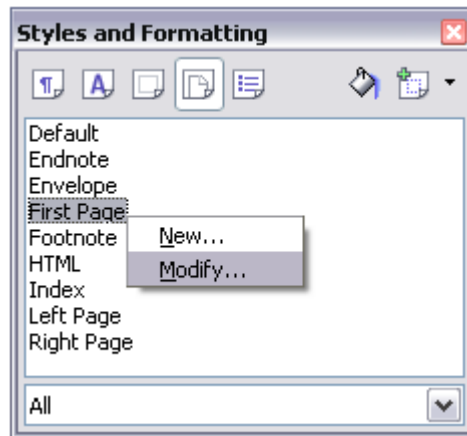


Figure 79: Modifying the First Page style

- 4) On the *Organizer* page of the Page Style dialog box (Figure 80), look at the *Next Style* property. This property defines what the page style for the next page will be. It should be set to **Default**, but if it is not, you can change the next style by clicking on the drop-down button and choosing **Default** from the list of page styles.

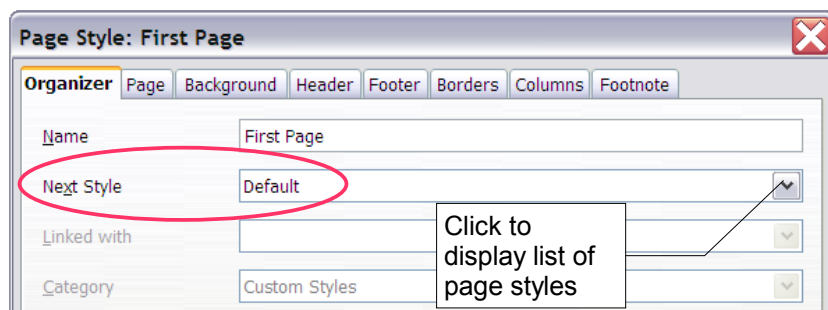


Figure 80: Setting the Next Style property for a page style

- 5) On the other pages of this dialog box, you can turn on or off the header and footer for the first page and define other characteristics, such as columns, a page border, or a page background. For more information, see Chapter 7, “Working with Styles”.
- 6) Click **OK** to save the changes.

---

**Note** You can override the *Next Style* property by manually inserting a page break and specifying a page style or by starting a page with a paragraph or table that has its own page style property defined. These techniques are described in “Inserting a landscape page into a portrait document” on page 81.

---

## Changing page orientation within a document

A document can contain pages in more than one orientation. A common scenario is to have a landscape page in the middle of a document, whereas the other pages are in a portrait orientation. Here are the steps to achieve it.

### Setting up a landscape page style

- 1) Note the page style that is current and the margin settings. (You can find the margin settings on the *Page* page of the Page Style dialog box, as shown in Figure 83.)
- 2) Create a new style. (Right-click on the current page style in the Styles and Formatting window and choose **New**, as shown in Figure 81.)

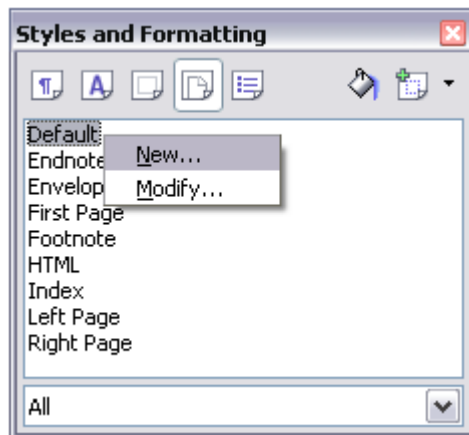


Figure 81: Starting a new page style

- 3) On the *Organizer* page of the Page Style dialog box (Figure 82), name (by typing in the *Name* field) this new style **Landscape** and set the *Next Style* property to **Landscape** (to allow for having more than one sequential landscape page).

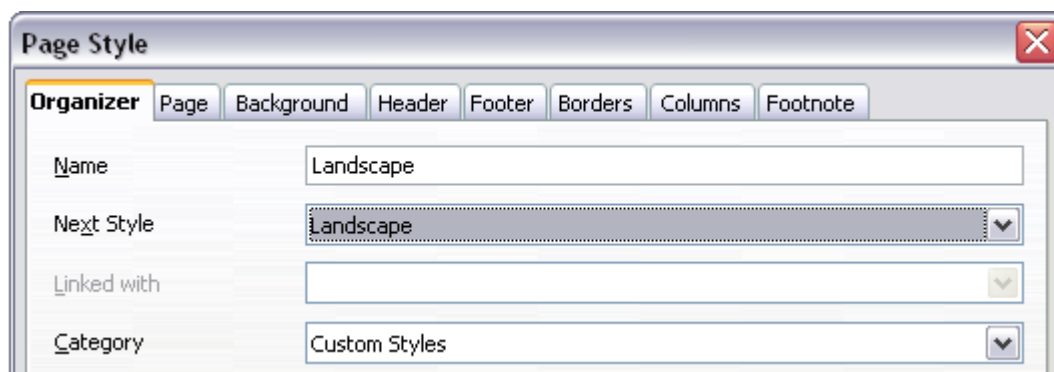


Figure 82: Naming the new style and setting the next page style to Landscape

- 4) On the *Page* page of the Page Style dialog box (Figure 83), set the *Orientation* to **Landscape**. The width and height attributes of the page will automatically change.
- 5) Change the margins so that they correspond with the margins of the portrait page. That is, the portrait top margin becomes the landscape left margin, and so on.
- 6) Click **OK** to save the changes.

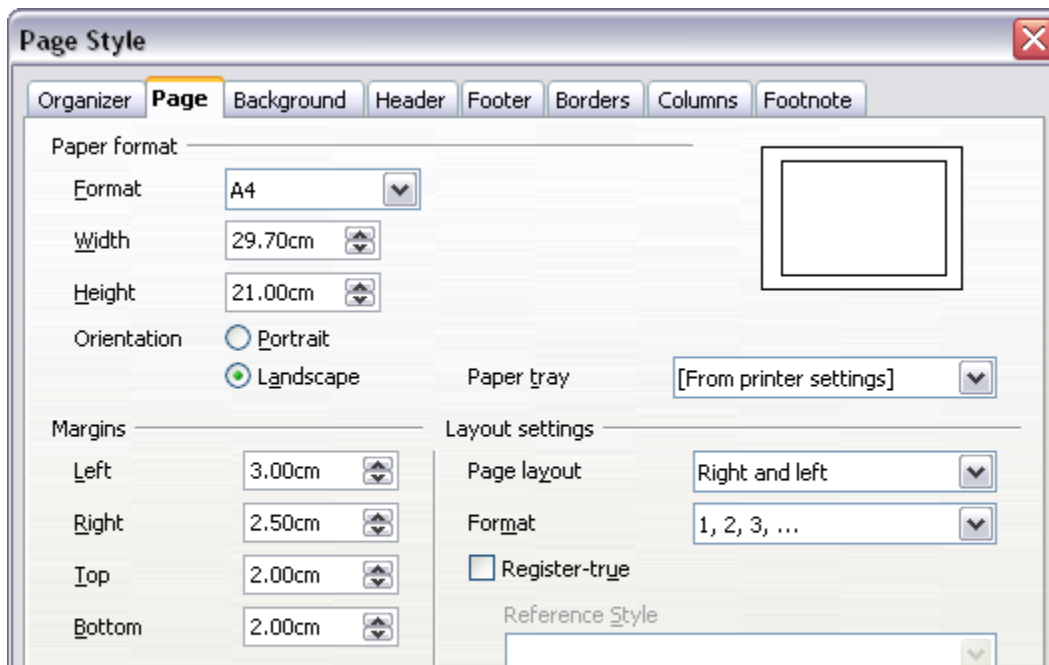


Figure 83: Setting orientation and margins for a landscape page

### Inserting a landscape page into a portrait document

Now that you have defined the *Landscape* page style, here is how to apply it.

- 1) Position the cursor in the paragraph or table at the start of the page that is to be set to landscape. Right-click and choose **Paragraph** or **Table**, respectively, in the pop-up menu.
- 2) On the *Text Flow* page of the Paragraph dialog box (Figure 84) or the Table Format dialog box (Figure 85), select **Insert** (or **Break** for a table) and **With Page Style**. Set the *Page Style* property to **Landscape**. Click **OK** to close the dialog box and to apply the new page style.

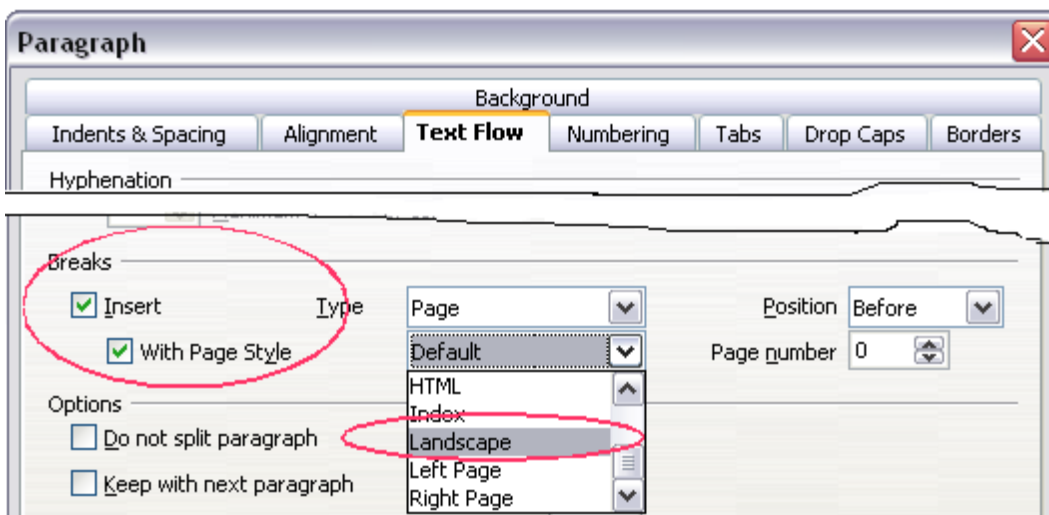


Figure 84: Specifying a page break before a paragraph

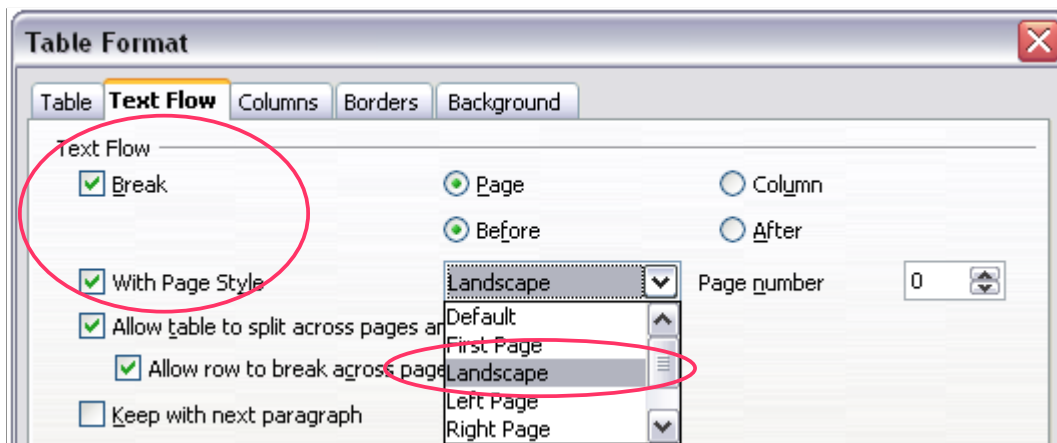


Figure 85: Specifying a page break before a table

- 3) Position the cursor in the paragraph or table where the page is to return to portrait orientation and change the properties of that paragraph or table properties so that *With Page Style* is the portrait page style that was used before the *Landscape* page style.
- 4) Click **OK** to return to the previous portrait page style.

---

**Tip** If you need the headers or footers on the landscape pages to be in portrait orientation, see “Portrait headers on landscape pages” on page 105.

---

## Changing page margins

---

You can change page margins in two ways:

- Using the page rulers—quick and easy, but does not have fine control.
- Using the Page Style dialog box—can specify margins to two (fractional) decimal places.

---

**Note** If you change the margins using the rulers, the new margins affect the page style and will be shown in the Page Style dialog box the next time you open it.

---

To change margins using the rulers:

- 1) The shaded sections of the rulers are the margins (see Figure 86). Put the mouse cursor over the line between the gray and white sections. The pointer turns into a double-headed arrow.
- 2) Hold down the left mouse button and drag the mouse to move the margin.

---

**Tip** The small arrows on the ruler are used for indenting paragraphs. They are often in the same place as the page margins, so you need to be careful to move the margin marker, not the arrows. Place the mouse pointer between the arrows and, when the pointer turns into a double-headed arrow, you can move the margin (the indent arrows will move with it).

---

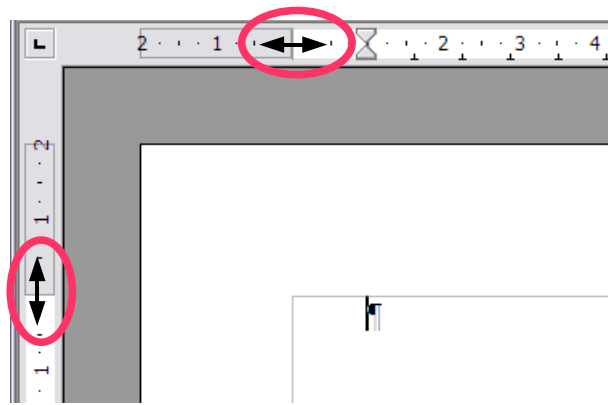


Figure 86: Moving the margins

To change margins using the Page Style dialog box (Figure 83):

- 1) Right-click anywhere on the page and select **Page** from the pop-up menu.
- 2) On the *Page* page of the dialog box, type the required distances in the *Margins* boxes.

## Using columns to define the page layout

---

You can use columns for page layout in several ways:

- Define the number of columns on a page, using page styles.
- Switch between one-column and multiple-column layouts on the same page.
- Select existing text and change the number of columns.

### Defining the number of columns on a page

It is a good idea to define your basic page style (such as *Default*) with the most common layout to be used in your document, either single-column or multiple-column. You can then either define extra page styles for pages with different numbers of columns or use sections (described in “Using sections for page layout” starting on page 95) for pages or parts of pages with different numbers of columns.

To define the number of columns on a page:

- 1) Choose **Format > Columns** or go to the *Columns* page of the Page Style dialog box.
- 2) On the Columns dialog box (Figure 87), choose the number of columns and specify any spacing between the columns and whether you want a vertical separator line to appear between the columns. You can use one of Writer’s predefined column layouts, or you can create a customized column layout. The preview box, located to the right of the *Settings* area, shows how the column layout will look.
- 3) Notice the *Apply to* box on the right-hand side of the dialog box. In this case, the changes are being applied to the *Default* page style.
- 4) Click **OK** to save the changes.

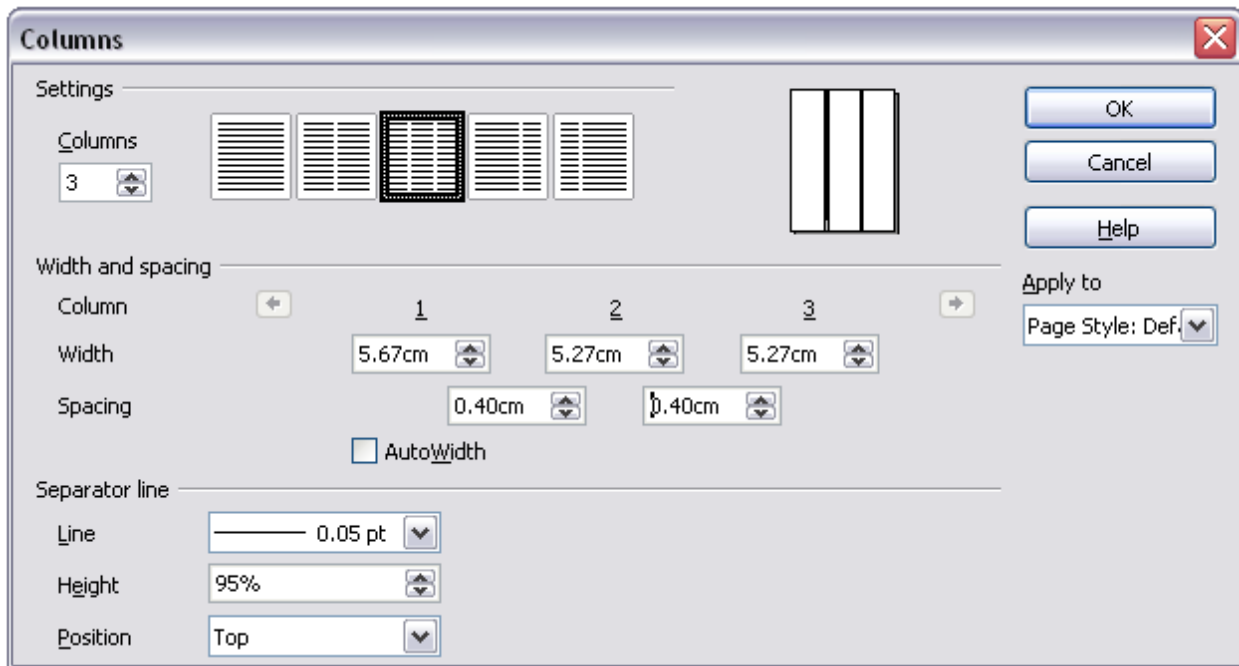


Figure 87: Defining the number of columns on a page

### Using a predefined column layout

The *Settings* area displays five predefined column layouts. To use one of them, click the desired layout.

### Specifying the number of columns

If you prefer to create a customized column layout, you must specify the number of columns that you want. Enter the desired number in the *Columns* box in the *Settings* area.

### Distributing text across columns

You can distribute text across the columns in one of two ways:

- **Evenly**—If you choose to distribute text evenly, Writer will fill the first line of each column, followed by the second line of each column, and so on.
- **Newspaper-style**—If you choose to distribute text newspaper-style, Writer will fill the columns one at a time, beginning with the first column.

To distribute text evenly, check the **Evenly distribute contents to all columns** check box in the *Settings* area. Clear this check box if you want to distribute text newspaper-style.

---

**Note** This check box is not always displayed in the *Settings* area. See “Changing the number of columns for existing text” on page 85.

---

### Formatting column width and spacing

To create evenly-spaced columns that are all the same width, check the **AutoWidth** check box in the *Width and spacing* area.

To customize the width and spacing of the columns, follow these steps:

- 1) In the *Width and spacing* area, clear the **AutoWidth** check box.
- 2) On the *Width* line, enter a width for each column.
- 3) On the *Spacing* line, enter the amount of space that you want between each pair of columns.

If you specify more than three columns, use the arrow keys on the *Column* line to scroll among the columns.

### Formatting separator lines

To display separator lines between the columns:

- 1) Eighteen separator line options exist: None or various lines of thicknesses which range from 0.05 to 9 pt). From the *Line* drop-down list in the *Separator line* area, select the type of line that you want. (1 pt = 1 point = 1/12 pica =  $\frac{1}{72}$  inch =  $\frac{127}{360}$  mm = 0.3527 mm.)
- 2) The default format is for the separator lines to have the same height as the columns. If you want the separator lines to be shorter than the columns, use the *Height* box to enter the height of the separator lines as a percentage of the height of the columns. For example, if you enter **50%**, the separator lines will be half as high as the columns.
- 3) If you entered a height of less than 100%, use the *Position* drop-down list to select a vertical alignment for the separator lines. The vertical-positioning options are: **Top**, **Centered**, or **Bottom**.

### Reverting to a single-column layout

To revert to a single-column layout, go to the *Settings* area and either reset the number in the *Columns* box to **1** or click the single-column layout icon.

## Changing the number of columns for existing text

You might want some parts of a page to have one column and other parts of the page to have two or more columns. For example, you might have a page-width headline over a three-column news story.

You can create columns and then type or paste text into them, or you can select some existing text and change the number of columns for displaying it.

When you select text and change the number of columns for that text, Writer turns the selected text into a *section*, as described in “Using sections for page layout” on page 95.

Figure 88 shows the Columns dialog box for a selection. Notice that the *Apply to* box on the right-hand side has **Selection** highlighted and an extra check box (**Evenly distribute contents to all columns**) appears in the upper left-hand part of the dialog box.

As you add text to the section, you will see that the text flows from one column to the next so that all the columns adjust to the same height. If this is not what you want, click anywhere in the section, then choose **Format > Columns** to reopen the Columns dialog box, deselect the **Evenly distribute contents to all columns** check box, and click **OK** to effect the change.

**Tip** Choose **View > Nonprinting Characters** (or press *Ctrl+F10*) to display end of paragraph markers (¶). Often, unexpected behavior of columns is due to extra paragraphs that are normally invisible to the user but are taking up space.

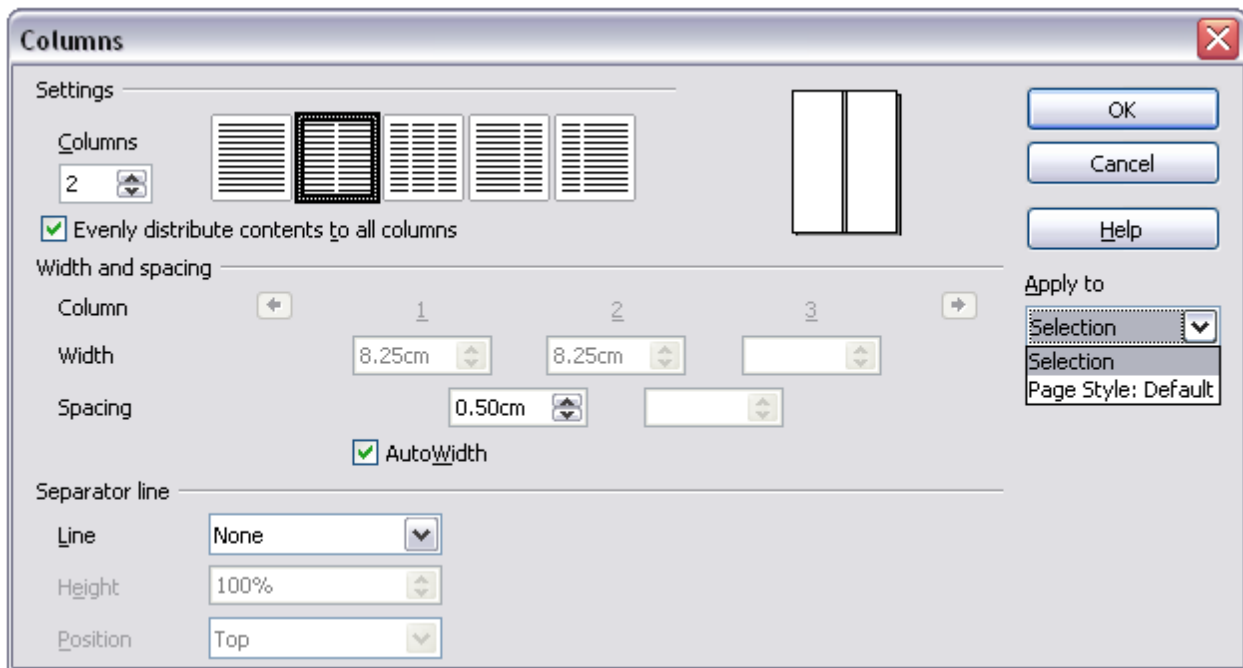


Figure 88: Specifying columns for a selection

## Using frames for page layout

Frames can be very useful when producing a newsletter or other layout-intensive documents. Frames can contain text, tables, multiple columns, pictures, and other objects.

Use frames when you need to:

- Position something in a particular place on a page, for example, a logo or a “stop press” news box in one corner of a page.
- Allow text on one page to continue on another page somewhere else in the document (other than the next page), by linking the content of one frame to another so the contents flow between them as you edit the text.
- Wrap text around an object, such as a photograph.



Because OpenOffice.org does not allow you to define page styles with recurring frames, consider doing some quick sketches of the basic page layouts you need, indicating the approximate positions of different frames and their purposes. Try to keep the number of different page layouts as low as possible in order to avoid chaos in your design.

Pay special attention to the positioning of frames. Many of the predefined styles default to a center alignment. This is the lowest common denominator of design; centering all frames looks reasonably good in most cases but is rarely the best choice.

One of the most visually effective ways to position a frame is to align its left margin with that of the paragraph above it. To achieve this effect, insert the frame in a blank paragraph of the same style as the paragraph above. Then, select **Insert > Frame > Type > Position > Horizontal > From Left** to position the frame exactly where you want it.

You also should think about the type of wrap and the spacing between the frame and text. Instead of cramming a frame close to the text, use the *Wrap* tab to place some white space between them.

You can format frames individually or define and apply frame styles (see Chapter 7, “Working with Styles”).

---

**Tip** The Help uses the phrase “text frame” for two quite different things with very different characteristics: frames (as discussed here) and text objects, which are drawing objects similar to lines and boxes.

---

## Creating frames

You can create a frame in several ways, depending on your needs.

- Choose **Insert > Frame**) to create an empty frame. The Frame dialog box (Figure 90) appears. You can click **OK** and come back to customize it later, or you can set the frame’s characteristics at this stage.
- Select text or a graphic, choose **Insert > Frame**, and click **OK** to create a frame containing the selection. The selected text is automatically deleted from the normal text flow and inserted into the frame, and the Frame dialog box appears.
- Insert a picture or other object by selecting **Insert > Picture > From file** or **Insert > Object** to start the process to insert a picture or object. The item inserted automatically appears in a frame, but the Frame dialog box does not appear.
- Use the **Insert Frame Manually** icon on the Insert toolbar (go to **View > Toolbars > Insert** to display it), select the number of frames in the drop-down menu, and drag the mouse to draw the frame.

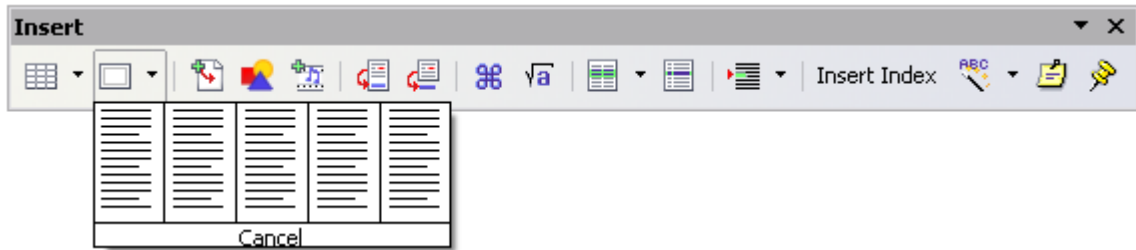


Figure 89: Using an icon on the Insert toolbar to create a frame

When you release the mouse button, a box appears where the cursor is located in the document. This box represents the frame: an area isolated from the main document.



To add content to a frame, first deselect the frame by clicking somewhere else on the page. Then, click inside the frame so that the cursor shifts its focus there. Now add content just like you would on the main page. When you are done, deselect the frame.

## Moving, resizing, and changing frame attributes

When an object is added to Writer, it is automatically enclosed in a frame of a predetermined type. The frame sets how the object is placed on the page, as well as how it interacts with other elements in the document. You can edit the frame by modifying the frame style it uses or by using a manual override when a frame is added to the document. Frame styles are discussed in Chapter 7, “Working with Styles”.

To change the size or location of a frame, first select the frame, then use either the mouse or the Frame dialog box (Figure 90). Using the mouse is faster but less accurate. You might use the mouse for gross layout and the dialog box for fine-tuning.

You can resize the frame manually (by clicking on the green squares and dragging to the appropriate size) or start adding content to it (the frame will resize automatically if you, for example, add a large picture to it) or go back to the Frame dialog box and set the size and other characteristics.

To change the location of the frame using the mouse, drag and drop one of the edges or having the cursor anywhere within the frame. (The I-bar cursor changes to a four-headed arrow when properly positioned for a drag-and-drop move.) To change the size of the frame, drag one of the handles. Drag a handle on one of the sides to enlarge or reduce the text frame in one dimension only; drag a corner handle to enlarge or reduce it in both dimensions.

These resizing actions distort the proportions of the frame. Holding down the *Shift* key while dragging one of the handles makes the frame keep the same proportions.

You can open the Frame dialog box (Figure 90) at any time by selecting the frame, right-clicking, and choosing **Frame** from the pop-up menu.

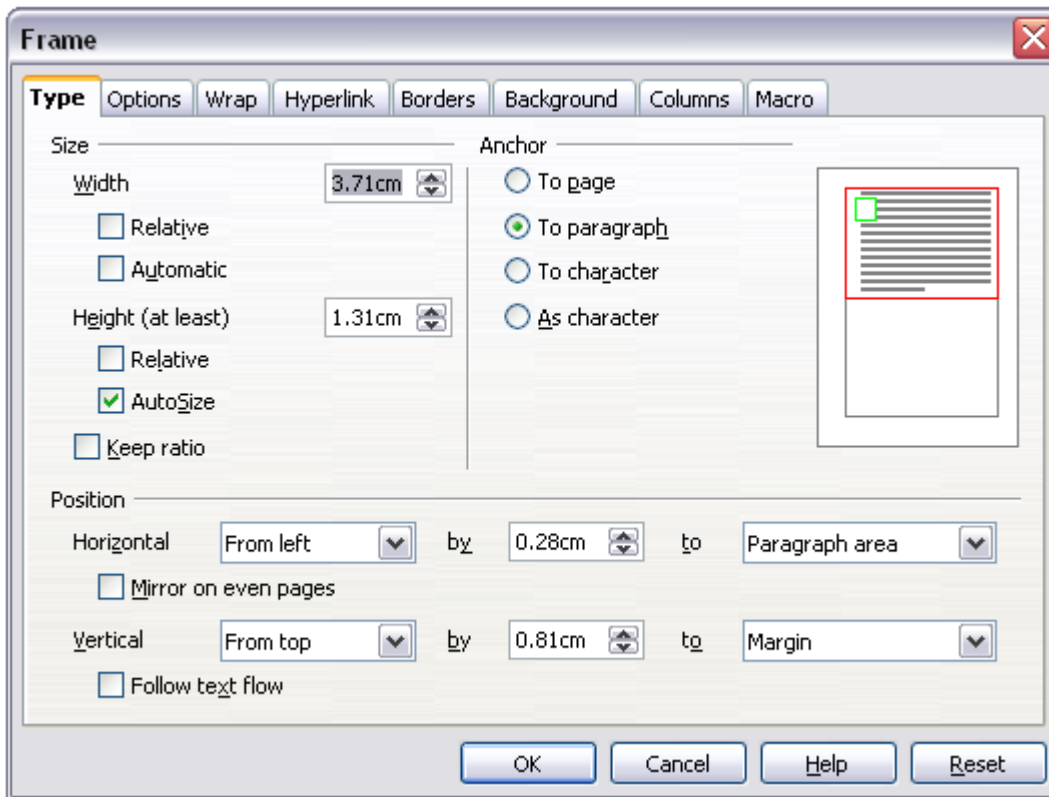


Figure 90: Frame dialog box

To remove the default border on a newly created frame, open the Frame dialog box, go to the *Borders* page, and under *Line*, select **None**. Alternatively, you can assign a borderless frame style to the frame; see the Chapter 7, “Working with Styles”, for information on frame styles.

**Caution** Do not confuse a frame’s border with the text boundaries that are made visible using the View menu (by checking **View > Text Boundaries**).

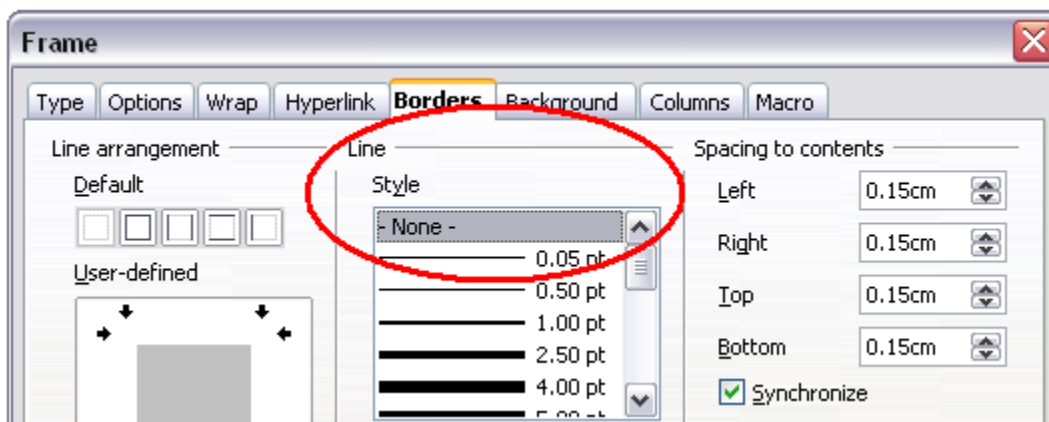


Figure 91: Removing the border from a frame

## Anchoring a frame

Using the Frame dialog box (or by right-clicking and pointing to **Anchor**), you can anchor a frame to a page, paragraph, or character, or you can anchor it as a character.

### To Page

The frame keeps the same position in relation to the page margins. It does not move as you add or delete text. This method is useful when the frame does not need to be visually associated with a particular piece of text. It is often used when producing newsletters or other documents that are very layout-intensive.

### To Paragraph

The frame is associated with a paragraph and moves with the paragraph. It may be placed in the margin or another location. This method is useful as an alternative to a table for placing icons beside paragraphs.

### To Character

The frame is associated with a character but is not in the text sequence. It moves with the paragraph but may be placed in the margin or another location. This method is similar to anchoring to a paragraph.


### As Character

The frame is placed in the document like any other character and, therefore, affects the height of the text line and the line break. The frame moves with the paragraph as you add or delete text before the paragraph. This method is useful for adding a small icon in sequence in a sentence. It is also the best method for anchoring a graphic to an empty paragraph so it does not move around the page in unexpected ways.

## Linking frames

You can link several frames to each other even when they are on different pages of a document. The contents will automatically flow from one to the next. This technique is very useful when designing newsletters, where articles may need to be continued on a different page.

To link one frame to another:

- 1) Select the frame to be linked from.
- 2) Click the **Link Frames** icon  on the object bar.
- 3) Click the next frame in the series (which must be empty).

When a linked frame is selected, any existing links are indicated by a connecting line, as shown in Figure 92.

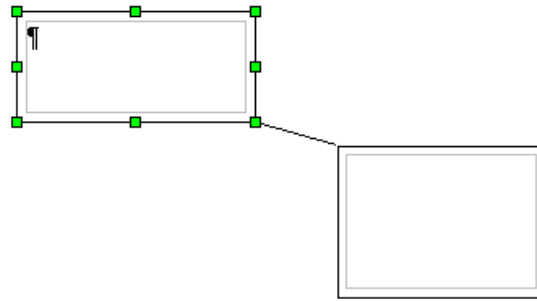


Figure 92: Linked frames

---

**Note** You cannot link from a frame to more than one other frame.

---

The height of a frame that is being linked from is fixed; you can change this height manually or by using the Frame dialog box, but it does not automatically adjust to the size of the contents (that is, the `AutoHeight` attribute is disabled). Only the last frame of a chain can adapt its height to the content.

The *Options* page of the Frame dialog box (Figure 93) shows the names of the selected frame and any frames it is linked to or from. You can change this information here. On this page, you can also select check boxes to protect the contents, position, and size of the frame.

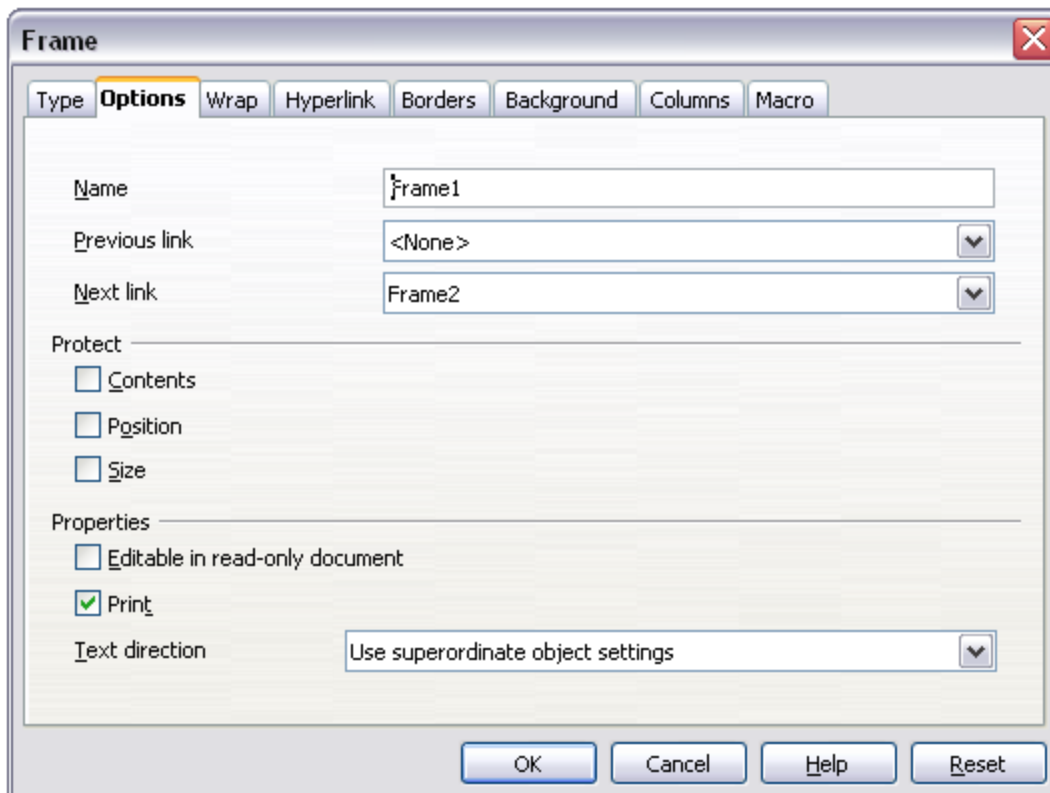


Figure 93: Options page of the Frame dialog box

On the *Hyperlink* page (Figure 94), you can specify the file for the hyperlink to open. This file can be on your machine, a network, or the Internet.

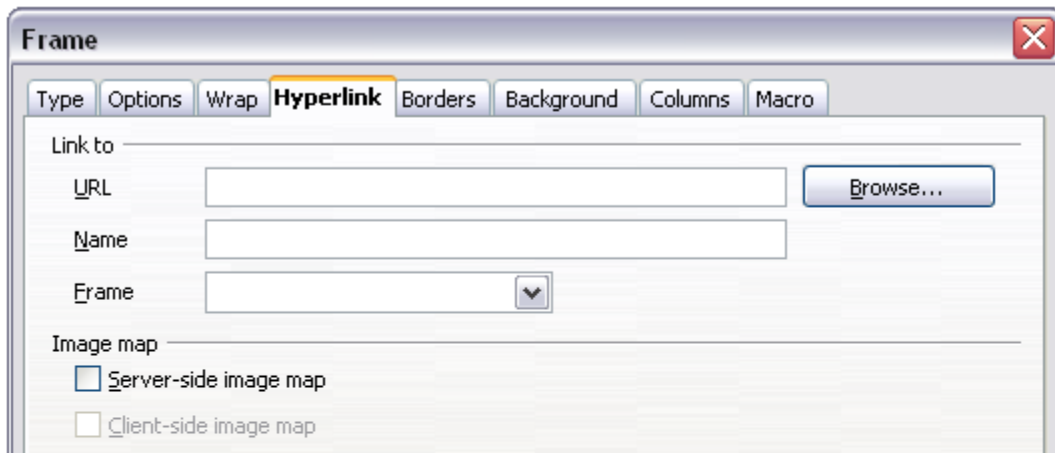


Figure 94: Hyperlink page of the Frame dialog box

The *Wrap*, *Borders*, *Background*, *Columns*, and *Macro* pages of the Frame dialog box are the same as those for frame styles. Refer to the Chapter 7, “Working with Styles”, for details.

## Using tables for page layout

Writer’s tables can serve several purposes, such as holding data as you might see it in a spreadsheet, lining up material, and creating more complex page layouts. For information about using tables of data, see Chapter 9, “Working with Tables”.

This topic describes how to achieve some common layouts by using tables.

### Example: Creating sideheads using tables

Sideheads and marginal notes are commonly used in documents from resumes to computer user guides. The main body of the text is offset to leave white space (usually on the left-hand side) in which the sideheads or notes are placed. The first paragraph is aligned beside the sidehead, as in Figure 95.

<p><b><i>Example of a sidehead</i></b></p> <hr style="width: 100%;"/>	<p>In some cases you may want to put only one or two paragraphs in the table itself and the rest of the text and graphics in ordinary paragraphs (formatted to line up with the paragraphs in the table) so that text and graphics will flow more easily from one page to another when you add or delete material.</p> <p>In other cases, you might put each paragraph in a separate row of the table and allow the table to break between pages.</p>
---	---

Figure 95: Example of a sidehead

---

**Note** Sideheads can also be created by placing text in a frame using the *Marginalia* frame style, as described in the Chapter 7, “Working with Styles”.

---

To create a table for use with a sidehead:

- 1) Place the cursor where you want the table to appear and choose **Insert > Table** (*Ctrl+F12*).
- 2) In the Insert Table dialog box (Figure 96), define a one-row, two-column table with no border and no heading. Click **OK** to create the table.

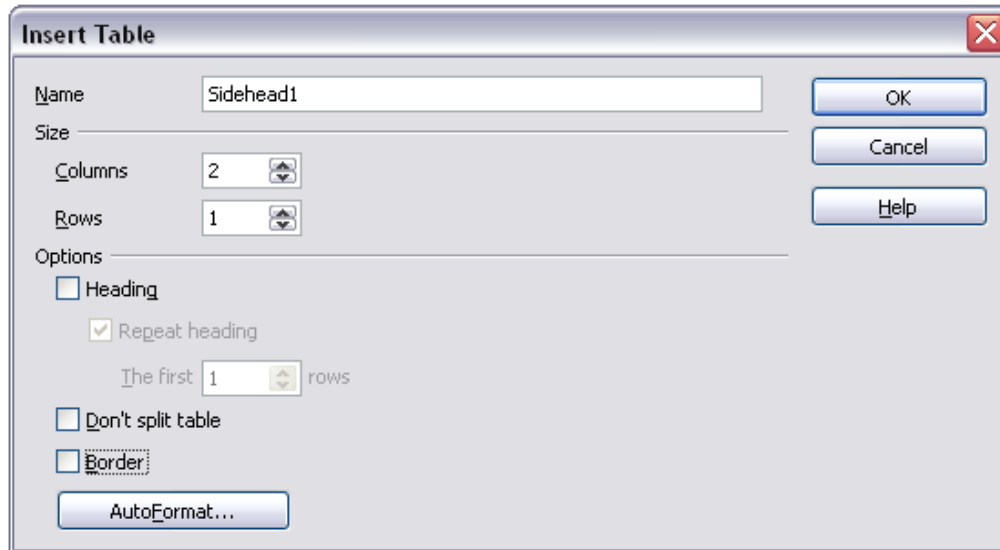


Figure 96: Defining a two-column borderless table with no header

- 3) Position the cursor over the central dividing line in the table. The cursor turns into a double-headed arrow. Left-click and drag to resize the columns. Alternatively, right-click and choose **Table** from the pop-up menu; on the *Columns* page (Figure 97), make the columns the required width.

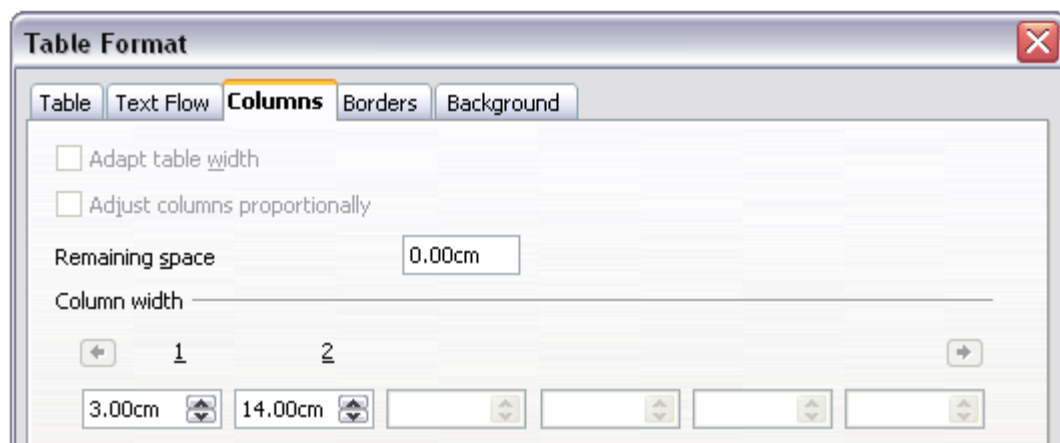


Figure 97: Defining a two-column table to line up with text offset at 3 cm

- 4) On the *Table* page of the Table Format dialog box (Figure 98), in the *Spacing* section, make the *Above* and *Below* values the same as the *Top* and *Bottom* spacing you have defined for ordinary paragraphs of text. Click **OK** to save your settings.

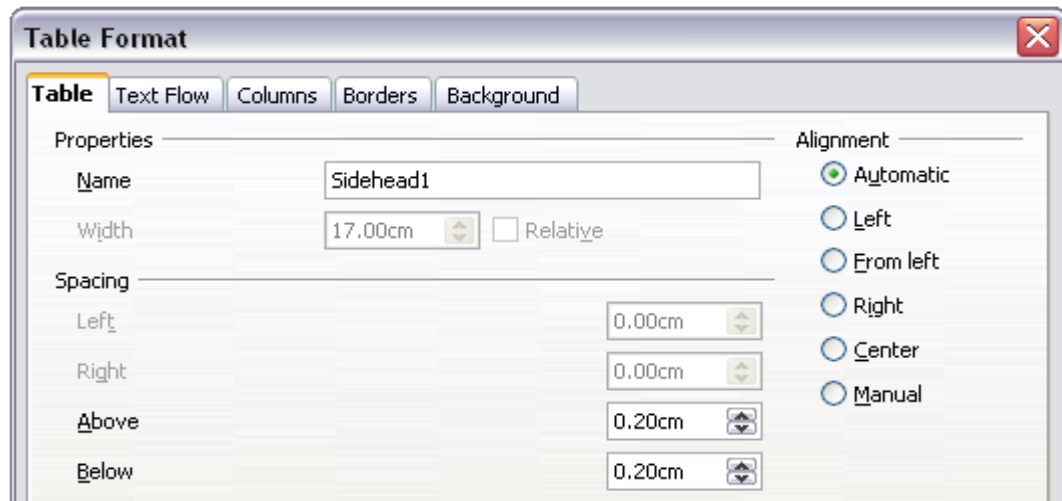


Figure 98: Defining the space above and below a table

### Tip

To check the top and bottom spacing for ordinary paragraphs:

- 1) Position the cursor in a paragraph and press *F11* (unless the Styles and Formatting window is already open). Check that the Styles and Formatting window shows paragraph styles (top left button).
- 2) The current style should be highlighted. If no paragraph style is highlighted, select **All Styles** in the bottom drop-down list. Right-click on it and select **Modify** from the pop-up list.
- 3) Go to the *Indents & Spacing* page and look in the *Spacing* area for the values in *Above paragraph* and *Below paragraph*.

You may also want to turn off number recognition so that Writer will not try to format numbers if you want them to be plain text. To turn number recognition off:

- 1) Right-click in the table and then click **Number Format** on the pop-up menu.
- 2) On the Number Format dialog box (Figure 99), make sure the *Category* is set to **Text**. Click **OK**.

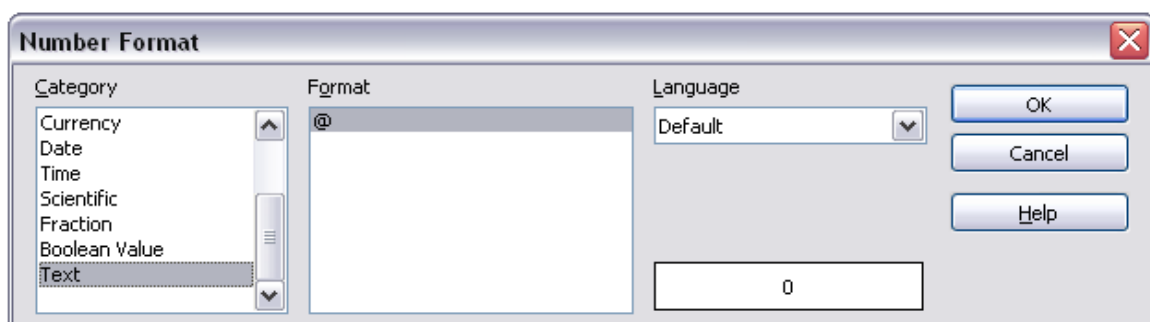


Figure 99: Setting number format to Text

### Tip

If you use this table format often, you may want to save it as AutoText, as described in Chapter 3, “Working with Text”. Select the table (not just the contents) to assign the shortcut.



## Using sections for page layout

---

A section is a block of text that has special attributes and formatting. You can use sections to:

- Write-protect text
- Hide text
- Dynamically insert the contents of another document
- Add columns, margin indents, a background color, or a background graphic to a portion of your document
- Customize the footnotes and endnotes for a portion of your document

### Creating sections

To create a section:

- 1) Place the cursor at the point in your document where you want to insert the new section. Or, select the text that you want to place in the new section.
- 2) From the main menu, choose **Insert > Section**. The Insert Section dialog box opens.
- 3) Click the **Section** tab, if it is not already displayed. (See Figure 100.)

The Insert Section dialog box has five tabbed pages:

- Use the *Section* page to set the section's attributes.
- Use the *Columns* page to format the section into columns.
- Use the *Indents* page to set indents in the right and left margins of the section.
- Use the *Background* page to add color or a graphic to the section's background.
- Use the *Footnotes/Endnotes* page to customize the section's footnotes and endnotes.

At any time, you can reset a tabbed page to its default settings by clicking the **Reset** button. (Note, however, that you cannot reset the *Section* page. If you wish to undo changes to the *Section* page, you must do so manually.)

### Using the Section page

Use the *Section* page (Figure 100) to set the attributes of the current section.

#### Naming sections

Writer automatically enters a name for the current section in the top box of the *New section* area. To change the name, select it and type over it. The name is displayed in the *Sections* category of the Navigator window. If you give your sections meaningful names, you can navigate to them more easily.

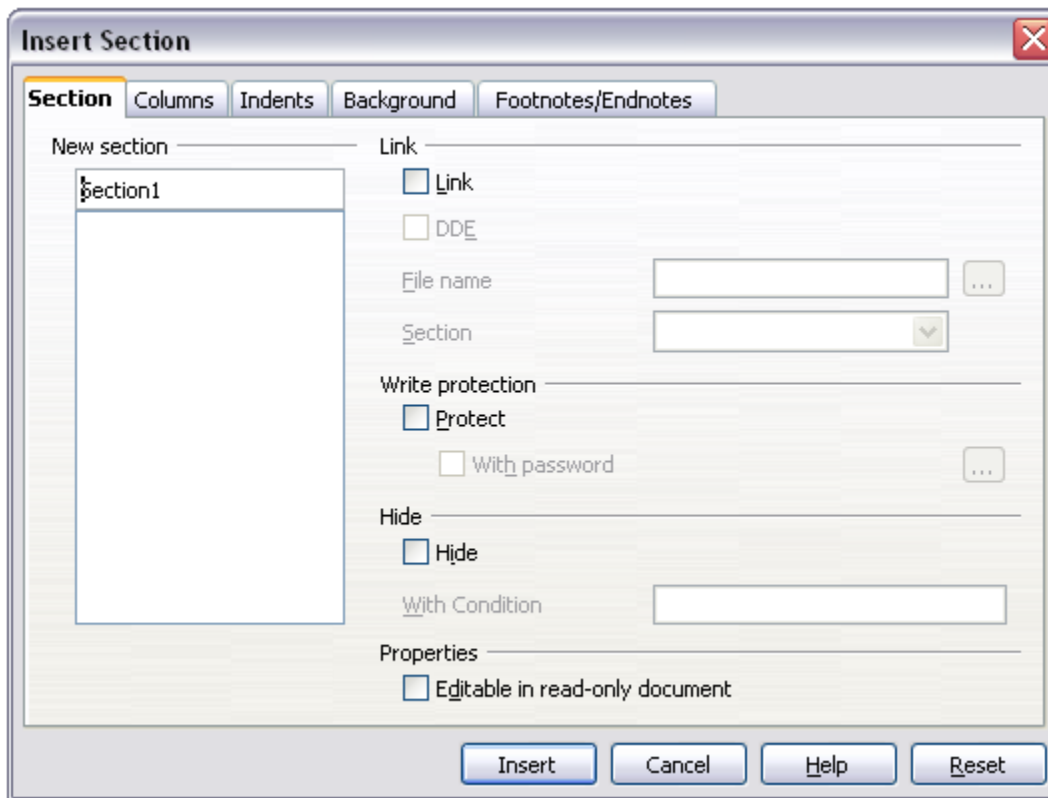


Figure 100: Inserting a section using the Insert Section dialog box

## Linking sections

You can insert the contents of another document into the current section and then have Writer update the section whenever the other document is updated. This is called *linking* the section to the other document.

To link the current section to another document, follow these steps:

- 1) In the *Link* area (see Figure 101), check the **Link** check box.

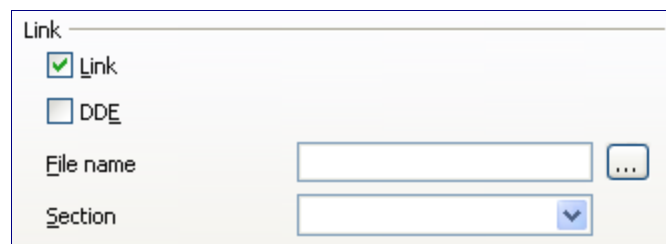


Figure 101: Linking sections

- 2) Click the (...) button to the right of the *File name* field. The Insert dialog box opens.
- 3) Find and select the document you want to insert and then click the **Insert** button. The Insert dialog box closes and the name of the selected document appears in the *File name* field.
- 4) If you want to insert only a section of the selected document, select the desired section from the *Section* drop-down list.

---

**Note** The section must already exist in the selected document. You cannot create a section in the selected document at this point.

---

You can update links automatically or manually. See “Updating links” on page 103.

### Write-protecting sections

To write-protect the current section so that its contents cannot be edited, check the **Protect** check box in the *Write protection* area ( Figure 102).

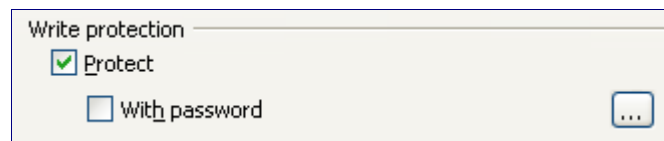


Figure 102: Write-protecting sections

---

**Note** Write-protection protects only the section’s contents, not its attributes or format.

---

### Password-protecting sections

To prevent others from editing the section’s attributes or format, protect the section with a password, as follows:

- 1) Check the **With password** check box. The Enter Password dialog box (Figure 103) opens.
- 2) Type a password in the *Password* field and then confirm the password by typing it again in the *Confirm* field.
- 3) Click **OK**. The Enter Password dialog box closes. Anyone who tries to edit the section’s attributes or format will be prompted to enter the password.

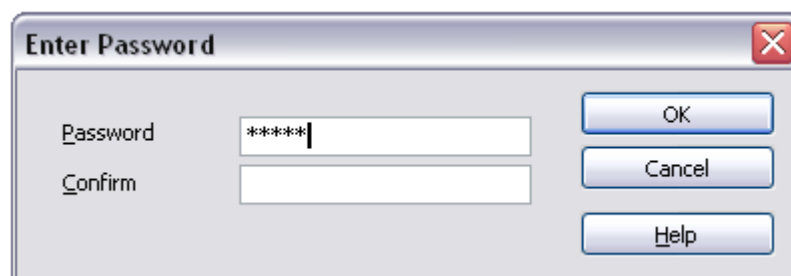


Figure 103: Password-protecting a section

---

**Note** Passwords must contain at least five characters. The **OK** button remains inactive until you have typed five characters.

---

### Hiding sections

You can hide the current section so that it will not be displayed on the screen or printed. You can also specify conditions for hiding the section. For example, you can hide the section only from certain users.

---

**Note** You cannot hide a section if it is the only content on the page or if the section is in a header, footer, footnote, endnote, frame, or table cell.

---

To hide a section, check the **Hide** check box in the *Hide* area (Figure 104).

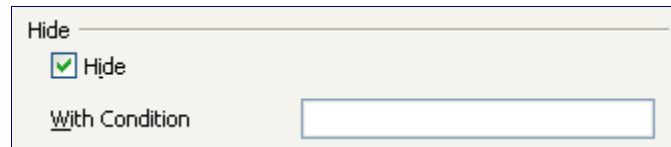


Figure 104: Hiding sections

To hide the section only under certain conditions, enter the desired conditions in the *With Condition* field. The syntax and operators that you use to enter conditions are the same ones that you use to enter formulas. For syntax and a list of operators, see Writer’s online help under “**conditions**”.

If the section is write-protected with a password, the password must be entered to hide or reveal the text.

---

**Note** Hiding text is not a secure way to stop someone else reading it. It will stop the casual reader but will not prevent someone who actively wants to find out what you have hidden—even if it is password protected.

---

## Using the Columns page

Use the *Columns* page of the Insert Section dialog box to format the current section into columns. This page is very similar to the Columns dialog box shown in Figure 88 on page 86. Please refer to that topic for details.

## Using the Indents page

Use the *Indents* page, pictured in Figure 105, to set indents in the right and left margins of the current section. Enter the desired left-margin indent in the *Before section* spin box. Enter the desired right-margin indent in the *After section* spin box. The preview box on the right-hand side of the page shows you how the section will look with the indents applied.

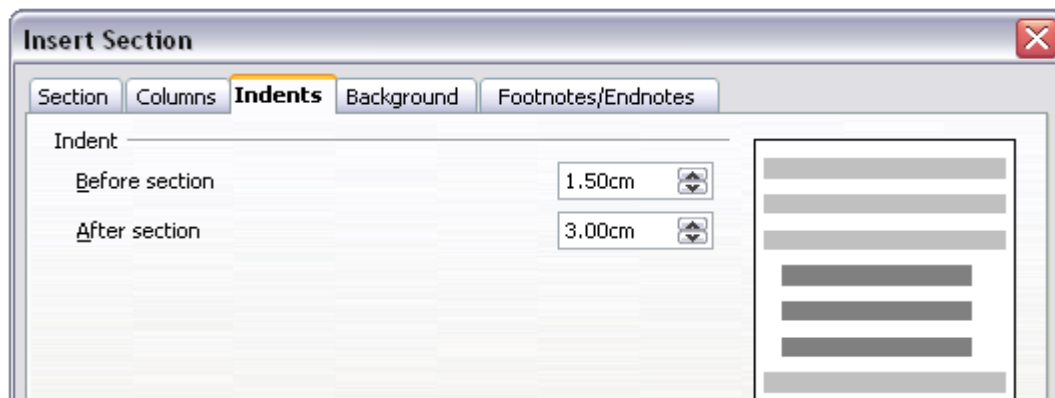


Figure 105: Indenting sections

## Using the Footnotes/Endnotes page

Use the *Footnotes/Endnotes* page, pictured in Figure 106, to customize the current section's footnotes and endnotes.

### Customizing footnotes

If you want the current section's footnotes to appear separately from the other footnotes in the document, check the **Collect at end of text** check box in the *Footnotes* area.

To number the current section's footnotes separately from the other footnotes in the document, follow these steps:

- 1) In the *Footnotes* area, make sure that the **Collect at end of text** check box is checked.
- 2) Check the **Restart numbering** check box.
- 3) If you want the section's footnotes to start at a number other than 1, enter the desired starting number in the *Start at* spin box.

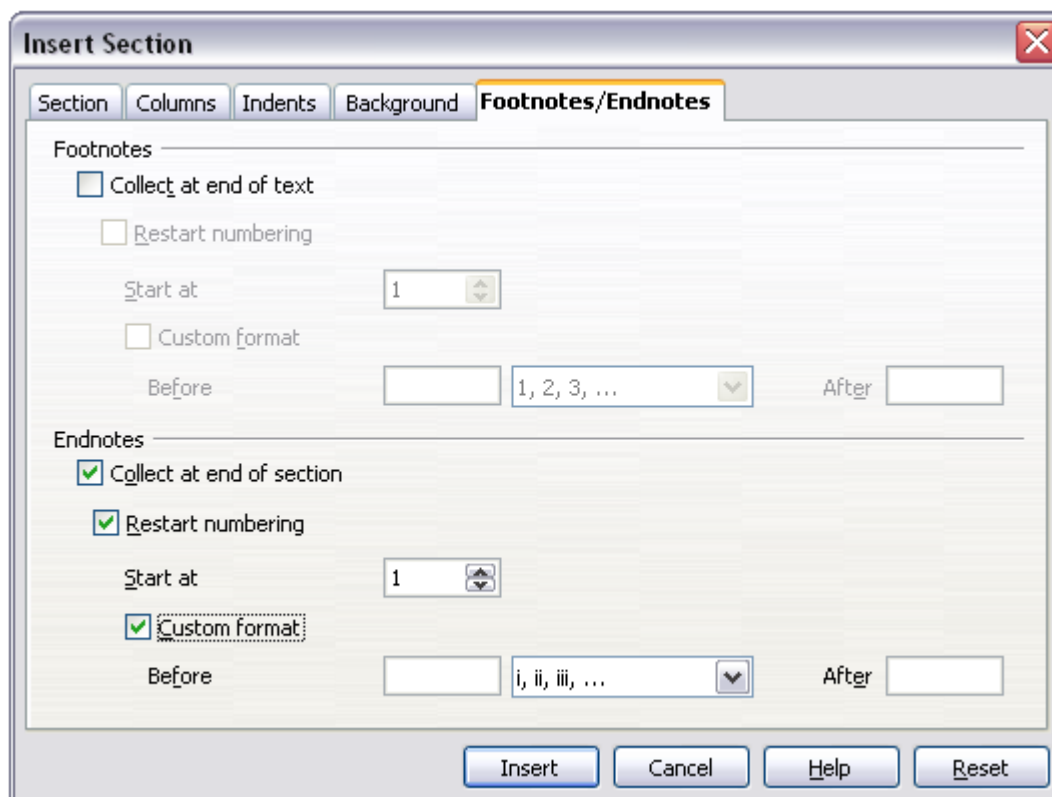


Figure 106: Setting footnotes and endnotes for sections

To edit the format of the section's footnotes, follow these steps:

- 1) In the *Footnotes* area, make sure that the **Collect at end of text** and **Restart numbering** check boxes are checked.
- 2) Check the **Custom format** check box.

- 3) From the drop-down list under and to the right of the **Custom format** check box, select a numbering format for the footnotes.
- 4) To add text to the selected numbering format, use the *Before* and *After* fields. For example, if you want the footnote numbers to be preceded by the word “Note” and followed by a colon, fill the *Before* and *After* fields like this:

The screenshot shows the 'Footnotes' dialog box. It has the following settings:

- Collect at end of text
- Restart numbering
- Start at: 1
- Custom format
- Before: Note
- Numbering format: 1, 2, 3, ...
- After: :

Figure 107: Numbering footnotes for sections

### Customizing endnotes

If you want the current section’s endnotes to appear at the end of the section rather than at the end of the document, check the **Collect at end of section** check box in the *Endnotes* area.

To number the current section’s endnotes separately from the other endnotes in the document, follow these steps:

- 1) In the *Endnotes* area, make sure that the **Collect at end of section** check box is checked.
- 2) Check the **Restart numbering** check box.
- 3) If you want the section’s endnotes to start at a number other than 1, enter the desired starting number in the *Start at* spin box.

To edit the format of the section’s endnotes, follow these steps:

- 1) In the *Endnotes* area, make sure that the **Collect at end of section** and **Restart numbering** check boxes are checked.
- 2) Check the **Custom format** check box.
- 3) From the drop-down list under and to the right of the **Custom format** check box, select a numbering format for the endnotes.
- 4) To add text to the selected numbering format, use the *Before* and *After* fields, as shown above for footnotes (Figure 107).

### Using the Background page

Use the *Background* page to add color or a graphic to the background of the current section. This page is similar to the Background pages for paragraphs, frames, tables, and other objects in OOo. For more information, refer to Chapter 7, “Working with Styles”.

## Saving a new section

To save a new section so that it appears in your document, click the **Insert** button. The Insert Section dialog box closes and the new section appears in your document.

## Editing and deleting sections

You can edit a section's attributes and formatting, and you can also delete sections.

### Selecting a section

To select the section that you want to edit or delete, follow these steps:

- 1) From the main menu, choose **Format > Sections**. The Edit Sections dialog box (Figure 108) opens.
- 2) The name of the current section appears in the *Section* area, in the field above the list box. If you want to edit or delete a different section, click the name of the desired section in the list. The selected section becomes the current section, and its name appears in the field above the list box.

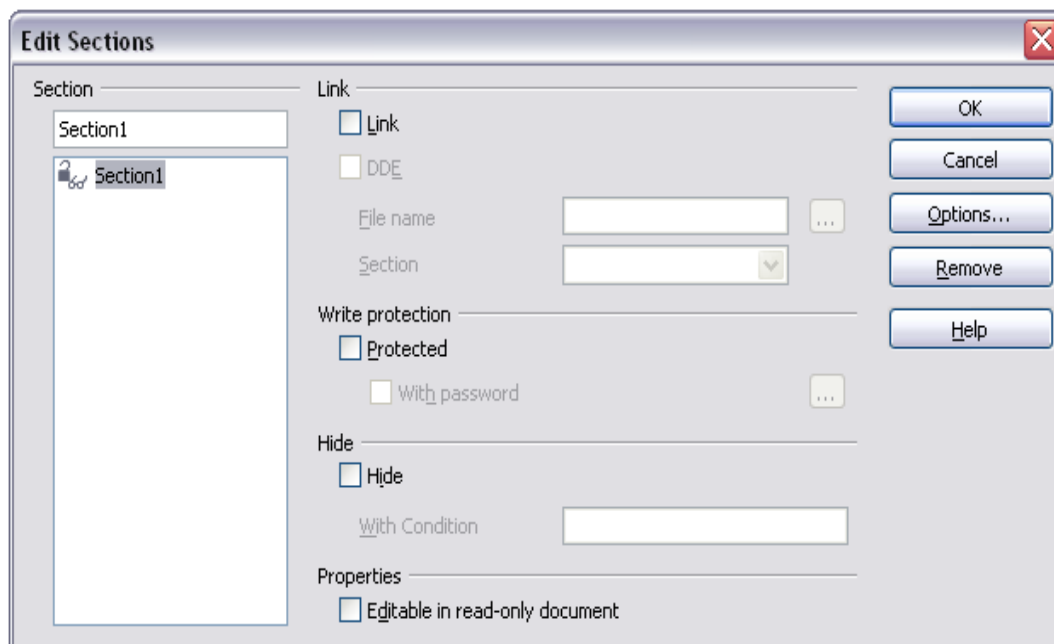


Figure 108: Edit Sections dialog box

### Editing section attributes

To rename the current section, simply type over its name in the *Section* area.

From the Edit Sections dialog box, you can also edit the current section's link, write-protect, and hide attributes. To learn how to edit these attributes, see:

“Linking sections” on page 96.

“Write-protecting sections” on page 97.

“Hiding sections” on page 97.

## Deleting sections

To delete the current section, click the **Remove** button.

---

**Note** Writer will not prompt you to confirm the delete! To undo a delete, click the **Cancel** button.

---

## Editing the format of a section

To edit the format of the current section, click the **Options** button. The Options dialog box (Figure 108) opens.

The Options dialog box has four tabbed pages: *Columns*, *Indents*, *Background*, and *Footnotes/Endnotes*. To learn how to use these pages, see:

“Using the Columns page” on page 98.

“Using the Indents page” on page 98.

“Using the Background page” on page 100.

“Using the Footnotes/Endnotes page” on page 99.

To reset a page to its most recently saved settings, click the **Reset** button.

To save your Options settings and return to the Edit Sections dialog box, click **OK**.

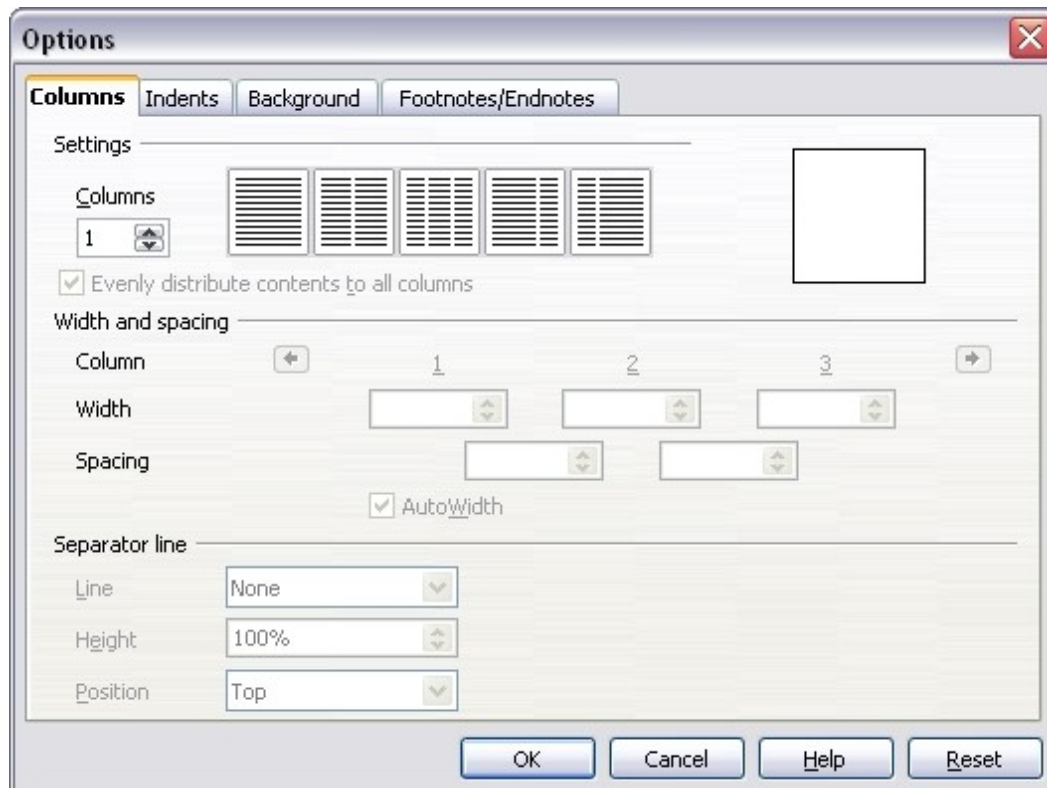


Figure 109. Options dialog box for sections



## Updating links

You can have Writer update linked sections automatically, and you can also update links manually.

### Updating links automatically

The default behavior, whenever you open a document that contains links, is for Writer to prompt you to update the links. To have Writer update links without prompting you or to turn off automatic updating, follow these steps:

- 1) Choose **Tools > Options > OpenOffice.org Writer > General**. The dialog box displays general text document settings.
- 2) In the *Update* area (Figure 110), under *Update links when loading*, select one of the following three options:

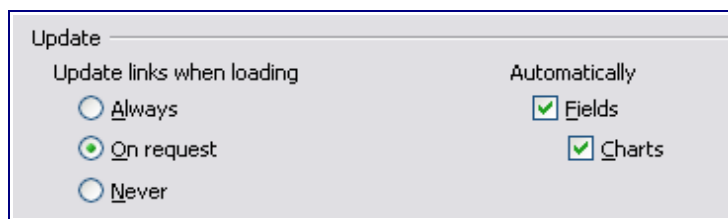


Figure 110: Writer > General options settings

- Select **Always** if you want Writer to update links automatically, without prompting you, whenever you open a document that contains links.
  - Select **On request** if you want Writer to prompt you before updating links.
  - Select **Never** if you do not want Writer to update links.
- 3) Click **OK** to save your settings. The Options dialog box closes.

### Updating links manually

To update a link manually:

- 1) Open the document that contains the link.
- 2) Choose **Edit > Links**. The Edit Links dialog box opens. (See Figure 111.)
- 3) The list in the Edit Links dialog box displays the names of all the files that are linked to the current document. Click the file that corresponds to the link that you want to update.
- 4) Click the **Update** button. The most recently saved contents of the linked file appear in the current document.
- 5) To close the Edit Links dialog box, click **Close**.

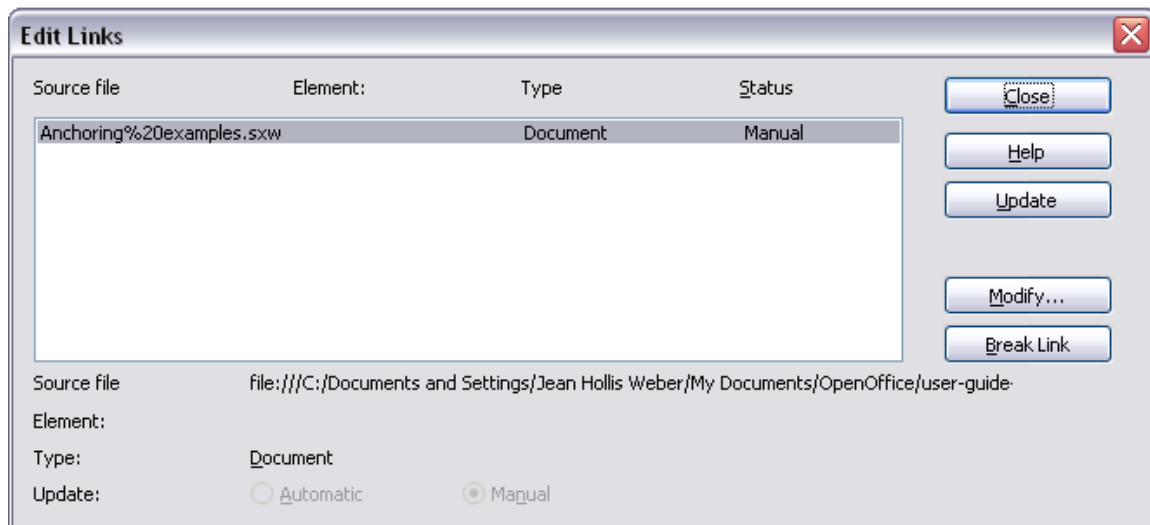


Figure 111: Edit Links dialog box

## Creating headers and footers

Headers are portions of a document that always appear at the top of a page; footers appear at the bottom of a page. Typically, headers display the title or chapter name of a document. To insert a header, choose **Insert > Header**.

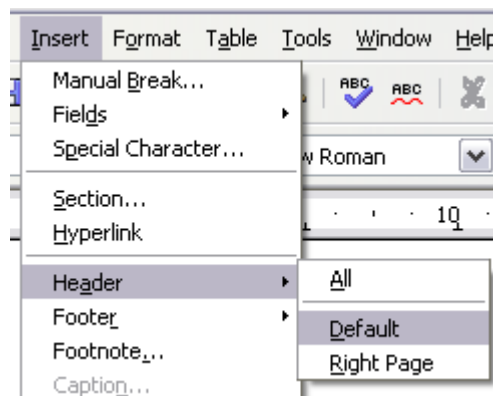


Figure 112: Inserting headers and footers

Similarly, to insert a footer, choose **Footer**.

Depending on which option you choose, an area will appear at the top or bottom of the page where you can enter text. This text will appear at the top or bottom of every page.

Items, such as document titles, chapter titles, and page numbers, which often go into headers and footers, are best added as fields. That way, if something changes, the headers and footers are all updated automatically.

Fields are covered in Chapter 14, “Working with Fields”, but one example here may be useful. To insert the document title into the header:

- 1) Select **File > Properties > Description**, enter a title for your document in the *Title* area, and click **OK** to close the dialog box.
- 2) Add a header (**Insert > Header > Default**).
- 3) Place the cursor in the header part of the page.
- 4) Select **Insert > Fields > Title**. The title should appear on a gray background (which does not show when printed and can be turned off).
- 5) To change the title for the whole document, choose **File > Properties > Description**.

## Portrait headers on landscape pages

When you define a header and footer on a landscape page, they will be aligned with the long side of the page. If your landscape pages are going to be inserted between portrait pages, you might want the headers and footers to be on the short sides of the landscape pages, so the final printed product looks like the contents of the landscape pages have been rotated 90 degrees on portrait pages.

You can set up portrait headers and footers on landscape pages by using a trick involving frames. These are a bit tedious to set up, but once you have done so, you can copy and paste them to other landscape pages. There does not appear to be a way to make this part of the landscape page style.

To set up portrait headers and footers on landscape pages:

- 1) Calculate the required margins so the text area of the landscape page is the same size as the text area on the portrait pages, taking into account the space for headers and footers on the portrait pages. For example, this book uses the margins shown in the following table. The landscape right and left margins are 1 cm larger than the portrait top and bottom margins, respectively. This difference accounts for the extra space used by the portrait header and footer (0.5 cm for the height of the header or footer and a 0.5 cm gap between the header or footer and the main text).

<b>Portrait page (right page)</b>		<b>Landscape page (right page)</b>	
Top margin	1.5 cm	Right margin	2.5 cm
Bottom margin	1.5 cm	Left margin	2.5 cm
Left (inner) margin	2.8 cm	Top margin	2.8 cm
Right (outer) margin	1.8 cm	Bottom margin	1.8 cm

- 2) Create the landscape page style.
- 3) Measure the distance from the upper and left edges of the page to the upper left-hand corner of the space where you want the footer to appear. Measure the width and length of the space the footer will occupy (to match footers on portrait pages). See Figure 113.

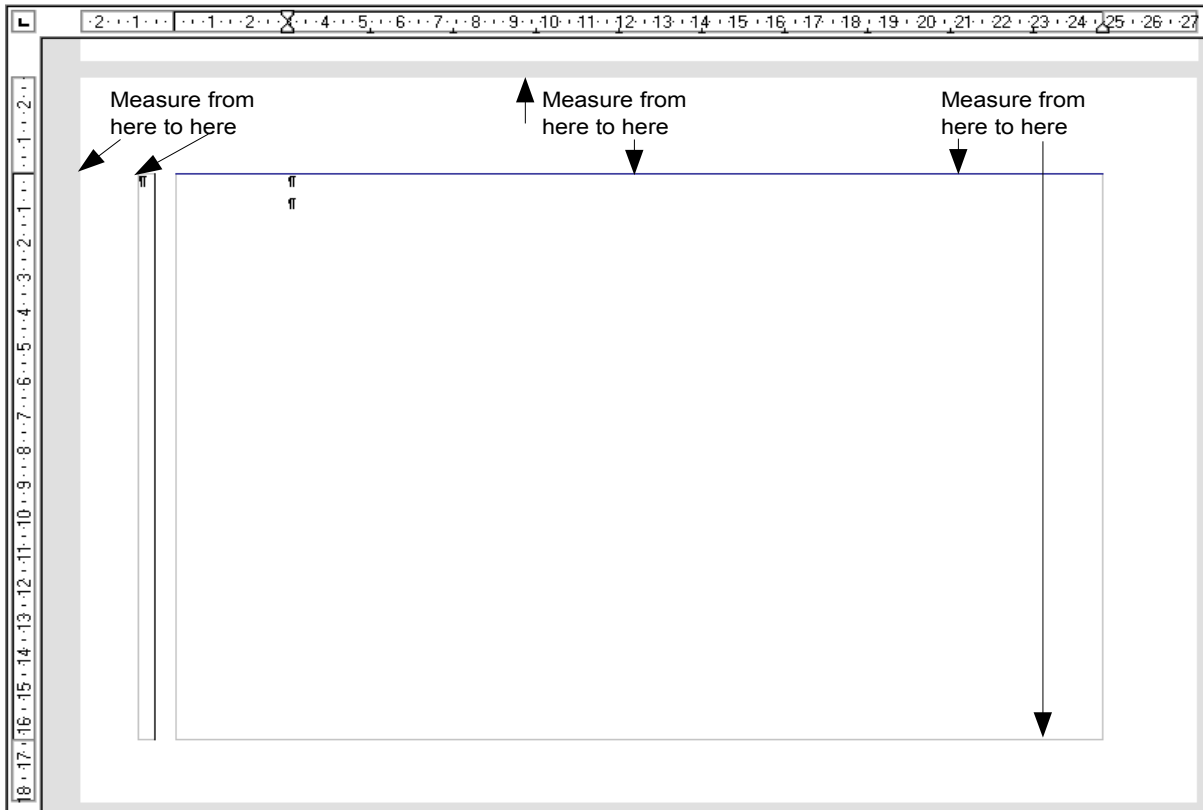


Figure 113: Measuring the location and size of the footer frame

- 4) In a blank paragraph in the text, type the footer text or insert fields such as the page number or the chapter number and name—to match the footer text and fields on the portrait pages. Assign the *Footer* style to this paragraph so the typeface, font size, and tab settings match those of the footers on the portrait pages.
- 5) Select the text (including the fields) you just entered. Choose **Format > Character**. On the Character dialog box, choose the *Position* tab (Figure 114) and set *Rotation / Scaling* to **270 degrees** (counter clockwise). Click **OK**.

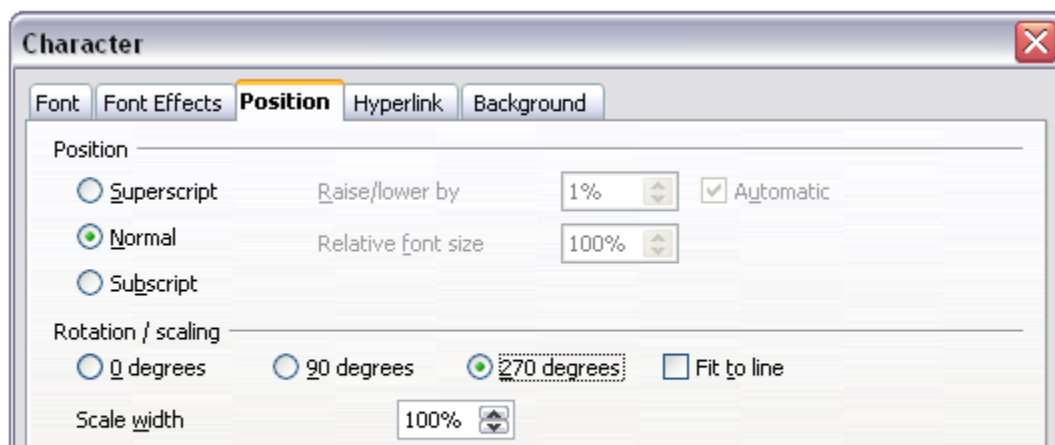


Figure 114: Rotating the footer text 270 degrees CCW

- 6) With the text still selected, choose **Insert > Frame**. In the Frame dialog box, choose the *Type* tab (Figure 115) and enter the width, height, and horizontal and vertical position for the footer.

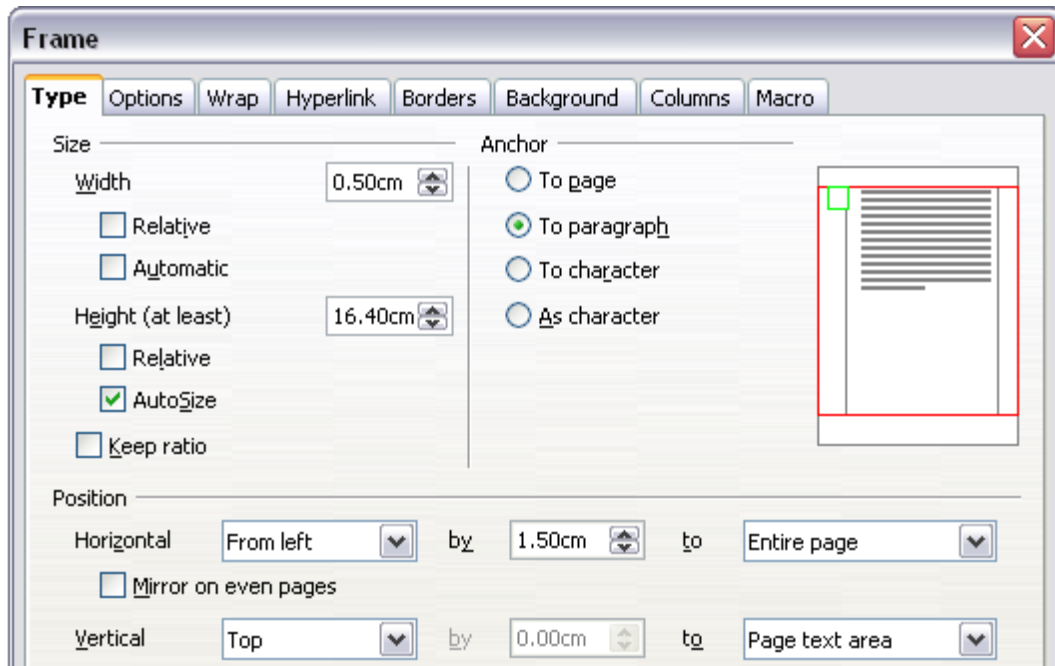


Figure 115: Defining the size and position of the footer frame

- 7) If your footer has a line above the text, as in this book, on the *Borders* page (Figure 116), select a right border and specify the line width and spacing to the frame's contents.

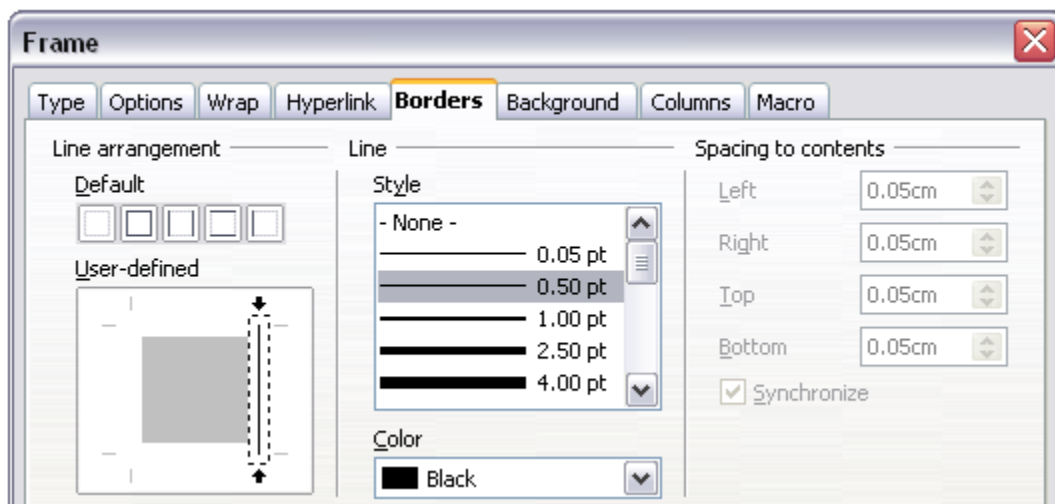


Figure 116: Specifying the border position, line width, and spacing to contents

- 8) Click **OK** to save these settings. The footer should now appear in the required position and orientation.

Repeat these steps (using appropriate measurements) to set up a portrait header on the landscape page.

## Numbering pages

---

To automatically number pages:

- 1) Insert a header or footer, as described in “Creating headers and footers” on page 104.
- 2) Place the cursor in the header or footer where you want the page number to appear and choose **Insert > Fields > Page Number**.

### Including the total number of pages

To include the total number of pages (as in **page 1 of 12**):

- 1) Type the word *page* and a space; then insert the page number as above.
- 2) Press the spacebar once, type the word *of* and add a space; then choose **Insert > Fields > Page Count**.

---

**Note** The *Page Count* field inserts the total number of pages in the document, as shown on the *Statistics* page of the document’s Properties dialog box (**File > Properties**). If you restart page numbering anywhere in the document, then the total page count may not be what you want. See “Problems with restarting page numbering” on page 110.

---

### Restarting page numbering

Often you will want to restart the page numbering at 1, for example, on the page following a title page or a table of contents. In addition, many documents have the *front matter* (such as the table of contents) numbered with Roman numerals and the main body of the document numbered in Arabic numerals, starting with 1.

You can restart page numbering in two ways.

#### Method 1:

- 1) Place the cursor in the first paragraph of the new page.
- 2) Choose **Format > Paragraph**.
- 3) On the *Text Flow* page of the Paragraph dialog box (Figure 84 on page 81), check **Insert** in the *Breaks* area.
- 4) In the *Type* drop-down list, select **Page**.
- 5) In the *Position* drop-down list, select **Before** or **After** to position where you want to insert the page break.
- 6) Check **With Page Style** and specify the page style to use.
- 7) Specify the page number to start from and then click **OK**.

**Method 2:**

- 1) Place the cursor in the first paragraph of the new page.
- 2) Choose **Insert > Manual break**.
- 3) **Page break** is the default selected on the Insert Break dialog box (Figure 117).

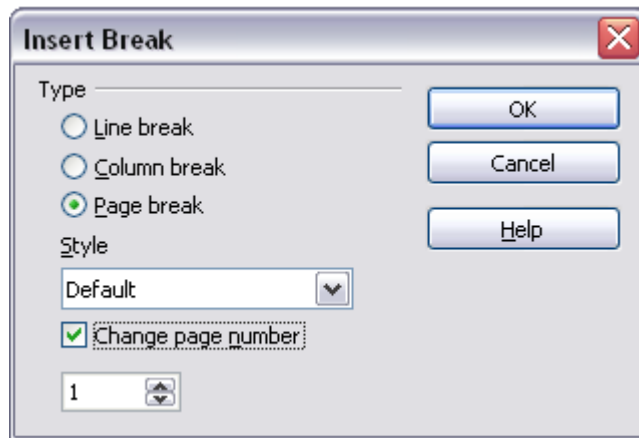


Figure 117: Restarting page numbering after a manual page break

- 4) Choose the required page in the *Style* drop-down list.
- 5) Check **Change page number**.
- 6) Specify the page number to start from and then click **OK**.

## Changing the format of page numbers

To set the page number to display in Roman numerals, you need to specify the format of numbers in the page style.

On the *Page* page of the Page Style dialog box, in the *Layout settings* section (Figure 118), select **i, ii, iii, ...** from the *Format* drop-down list.

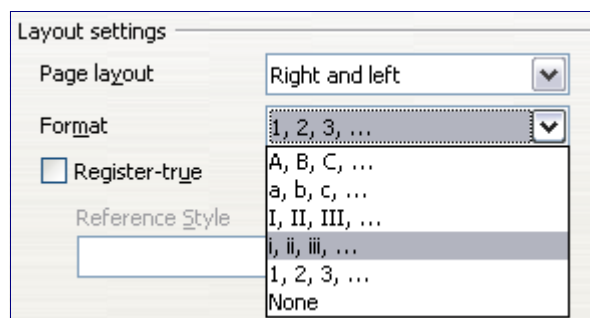


Figure 118: Changing format of page numbers

## Problems with restarting page numbering

Restarting page numbering may lead to two problems.

- The *Statistics* page in the document's **Properties (File > Properties)** always displays the total number of pages in the document, which may not be what you want to appear in the *Page Count* field.
- When page numbering is restarted, OOO always make sure that an odd-numbered page is a right page and an even-numbered page is a left page. It does this by inserting a blank page, if necessary. Sometimes this blank page is not desired, particularly when creating PDFs or when printing single sided.

### Solving the page count problem

Suppose you know exactly how many pages are not to be included in the page count. (You want one page to be excluded in the page count for the following example.)

Instead of inserting a *Page Count* field, you can do the following:

- 1) Position the cursor where you want the page count to appear.
- 2) Press *F2* to open the formula bar, just above the horizontal ruler in the main Writer window (see Figure 119).

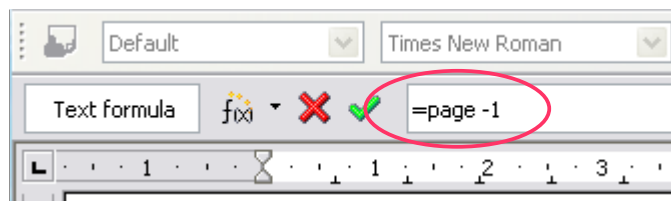


Figure 119: Formula bar

- 3) After the equal sign, type *page -1*. If you want to exclude multiple pages, substitute the number of excluded pages for 1 in the formula.
- 4) Press *Enter* to close the formula bar and insert the resulting field into the document.

If you do not know the total number of pages in advance, then one approach is to create a set reference on the last page and then insert a cross reference to it. (Refer to Chapter 14, “Working with Fields”, for more information on setting references and inserting cross references.)

To create a set reference on the last page:

- 1) Go to the last page (*Ctrl+End*).
- 2) Choose **Insert > Cross-reference**.
- 3) On the *References* page of the Fields dialog box (Figure 120), select **Set Reference** in the *Type* column.



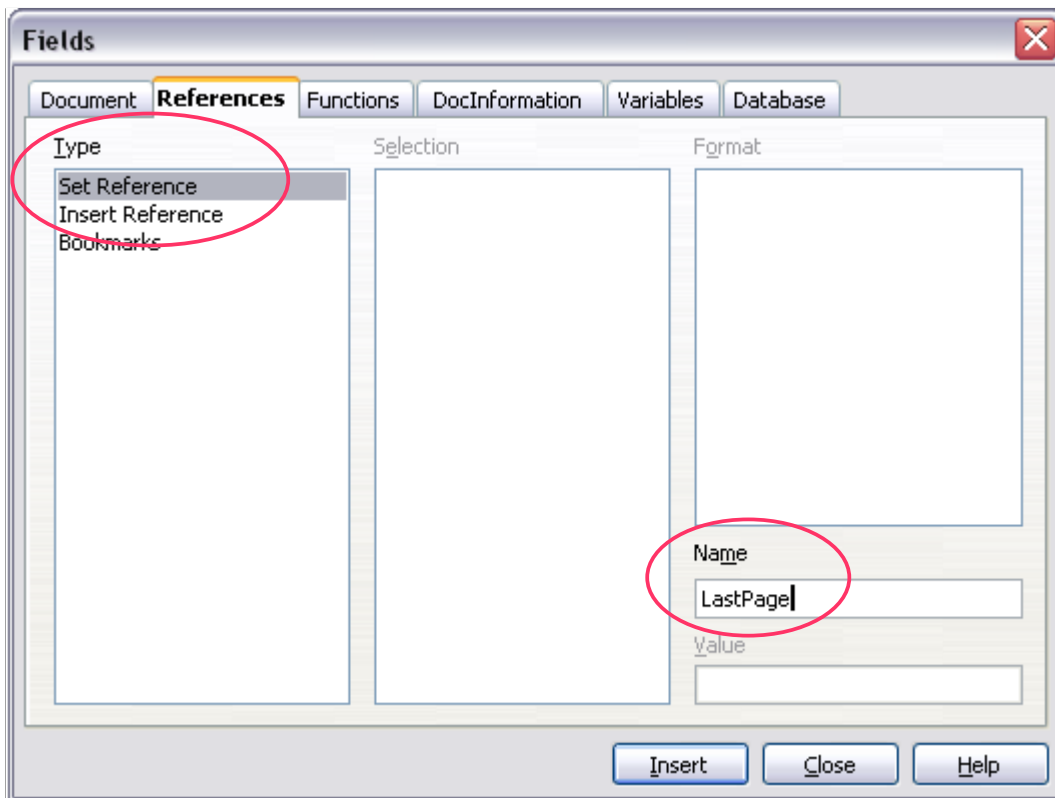


Figure 120: Setting a reference on the last page of the document

- 4) In the *Name* box, enter **LastPage**.
- 5) Click **Insert**. **LastPage** is now listed in the *Selection* column.

To insert a cross-reference to the last page in the header or footer where you want to refer to the total number of pages:

- 1) Position the cursor at the desired location—for example after the space added after **of** in the header or footer, as in **page xx of yy**.
- 2) Choose **Insert > Cross-reference**.
- 3) On the *References* page of the Fields dialog box (Figure 121), select **Insert Reference** in the *Type* column and **LastPage** in the *Selection* column. **LastPage** now appears in the *Name* box.
- 4) In the *Format* column, select **As page style**. Click **Insert**.

---

**Notes** Do not delete the reference set at the end of the document. If you do, the cross-reference will not work.

If a field, such as a cross-reference, does not automatically update, select the text containing the field and press *F9*.

---

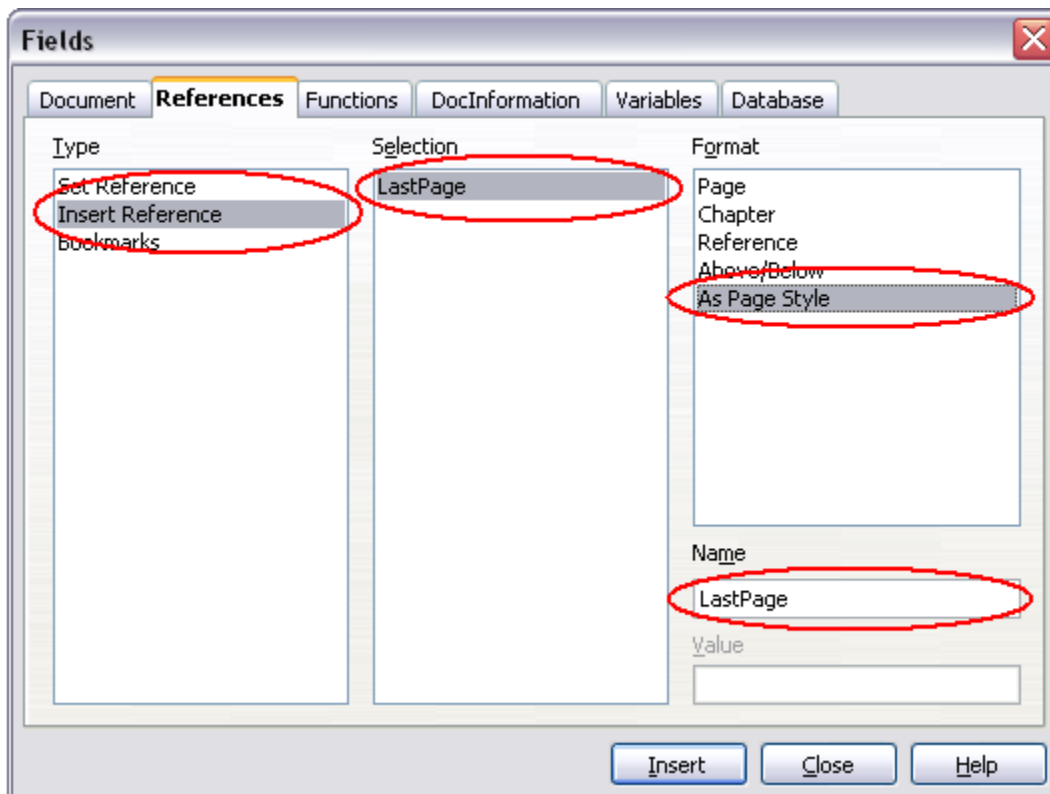


Figure 121: Inserting a cross-reference to the last page of a document

## Numbering portrait and landscape pages

To create page numbers on portrait and landscape pages in the same place and orientation:

- 1) Refer to “Portrait headers on landscape pages” on page 105 to create a landscape page style and landscape header or footer styles. When creating the page style, check the **Use dynamic spacing** check box in the *Spacing* area in the *Header* or *Footer* pages of the Page Style dialog box.
- 2) Insert the page break and choose the landscape page style; do not change the page numbering.
- 3) In the relevant header or footer, insert the page number field (**Insert > Fields > Page Number**).

## Numbering the first page something other than 1

Sometimes you may want to start a document with a page number greater than 1. For example, you may be writing a book, with each chapter in a separate file. Chapter 1 may start with page 1, but Chapter 2 could begin with page 25 and Chapter 3 with page 51.

Follow these instructions to start the page numbering in a document at a number greater than 1. (These instructions are for a page number in a footer, but you could use a header instead.)

---

**Tip** Do not set a starting page number that is an even number because you will end up with a blank page before the first page when you print the file or export it as a PDF.

---

- 1) Choose **Insert > Footer > [page style]** to activate the footer. (If the page style is already checked in the Footer menu, point to it and click **OK** in the OpenOffice.org 2.0 dialog box that appears. Then point to that page style again to select it.)
- 2) The cursor is now in the footer. To insert the page number, choose **Insert > Fields > Page Number**. The page number will be 1.
- 3) Click in the first paragraph in the text area or type a paragraph of text.
- 4) Choose **Format > Paragraph** (or right-click and choose **Paragraph** from the pop-up menu) to display the Paragraph dialog box.
- 5) On the *Text Flow* page (Figure 84 on page 81), in the *Breaks* section, select **Insert** and select **Page** in the *Type* drop-down list. Select **With Page Style** and the page style you are using for the first page of the document.
- 6) The *Page number* field is now active. Type the page number you want to start with. Click **OK** to close the Paragraph dialog box.

## Numbering pages by chapter

Technical documents often include the chapter number with the page number in the header or footer. For example, 1-1, 1-2, 1-3, ...; 2-1, 2-2, 2-3, ...

To set up this type of page numbering in OOo, you need to do three things:

- 1) Ensure that your chapter titles are all identified by the same paragraph style, for example, the *Heading1* style.
- 2) Use **Tools > Outline Numbering** to tell OOo what paragraph style you are using for Level 1 in your outline, and specify “1,2,3” in the Number box. (See Figure 122.)
- 3) Insert the chapter number in your document. To do this:
  - 1) Place the cursor in the header or footer just before the page number you inserted earlier, and choose **Insert > Fields > Other** from the menu bar.
  - 2) On the Fields dialog (Figure 123), go to the *Document* page. Select **Chapter** in the *Type* list, **Chapter number** in the *Format* list, and **1** in the *Layer* box. Click **Insert**.
  - 3) Type a hyphen or other punctuation between the chapter number and the page number.

For more information, see “Choosing paragraph styles for outline levels” and “Including chapter or section information in page headers” in Chapter 7, “Working with Styles”.

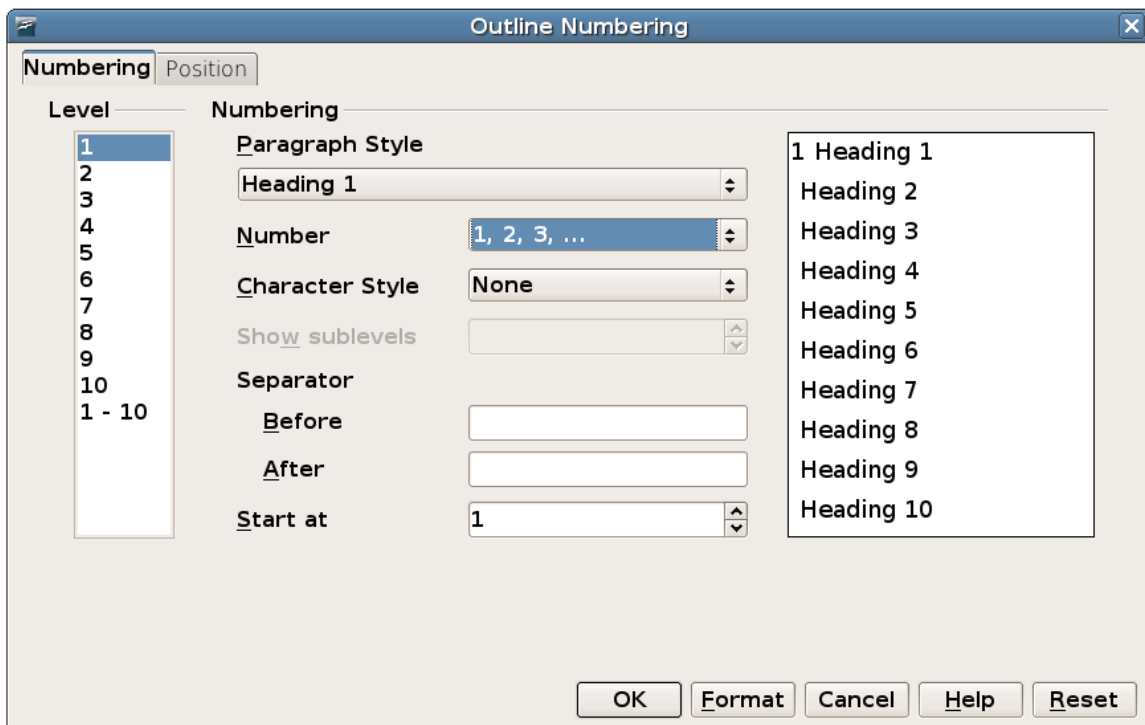


Figure 122: Specifying paragraph style and numbering for chapter titles

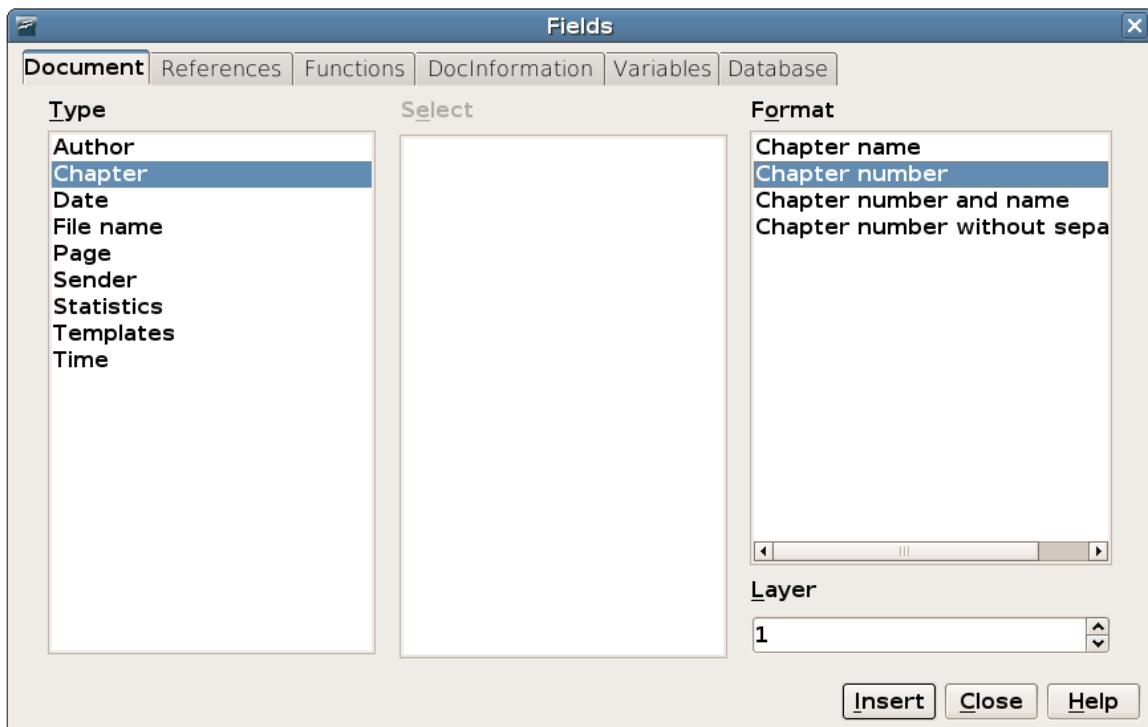



Figure 123: Inserting a chapter number field




*Chapter 5*  
*Printing, Faxing, Exporting,*  
*and E-mailing*

## Introduction

General information about printing and faxing documents from OOo is provided in the *Getting Started* guide. This chapter describes some items of particular interest to users of Writer.

## Quick printing

Click the **Print File Directly** icon  to send the entire document to the default printer defined for your computer.

## Controlling printing

For more control over printing, use **File > Print** to display the Print dialog box (Figure 124).

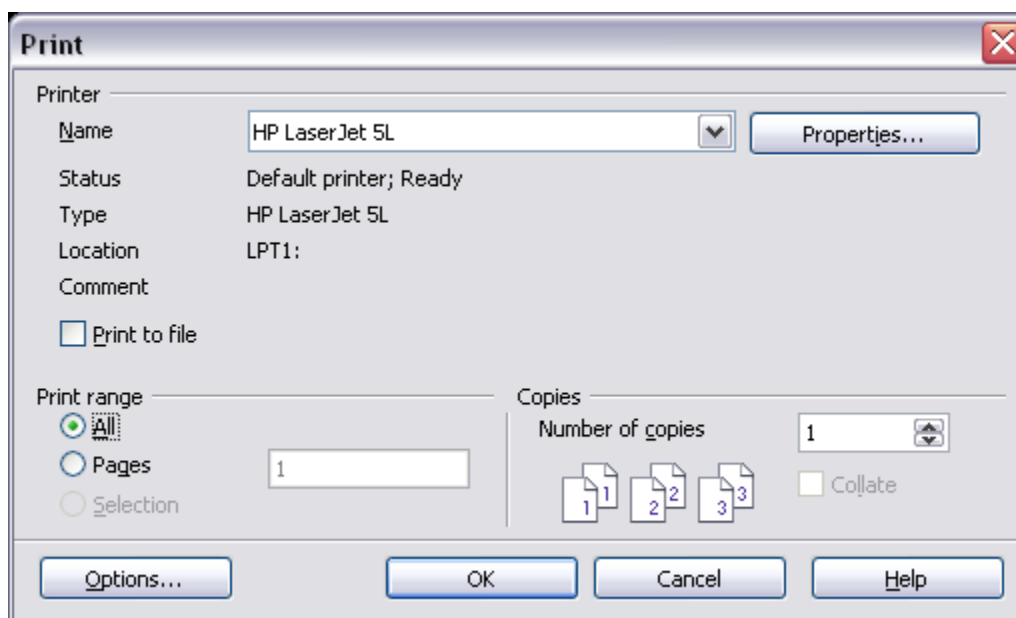


Figure 124. The Print dialog box

On the Print dialog box, you can choose:

- Which printer to use (if more than one are installed on your system) and the properties of the printer—for example, orientation (portrait or landscape), which paper tray to use, and what paper size to print on. The properties available depend on the selected printer; consult the printer’s documentation for details.
- What pages to print, how many copies to print, and in what order to print them.
  - Use dashes to specify page ranges and commas or semicolons to separate ranges; for example: 1, 5, 11-14, 34-40.
  - *Selection* is the highlighted part of a page or pages.

- What items to print. Click the **Options** button to display the Printer Options dialog box (Figure 125).

## Selecting print options for a document

Selections on the Printer Options dialog box (Figure 125) apply to this printing of this document only. To specify default printing options for Writer, see “Selecting default print options” on page 118.

Some items of interest on the Printer Options dialog box include:

- In the *Contents* section, you might choose not to print graphics or page background in drafts, for example (to save toner or ink)
- In the *Pages* section, you can choose:
  - Print only left (even-numbered) pages or only right (odd-numbered) pages. These settings are useful when you want to print on both sides of the page, but do not have a printer that handles this automatically.
  - Print in reversed page order.
  - *Brochure*—the results of this selection are discussed in “Printing a brochure” on page 120.
- In the *Notes* section, you can choose whether to print any notes that have been added to your document (using **Insert > Note**), and where to print the notes.

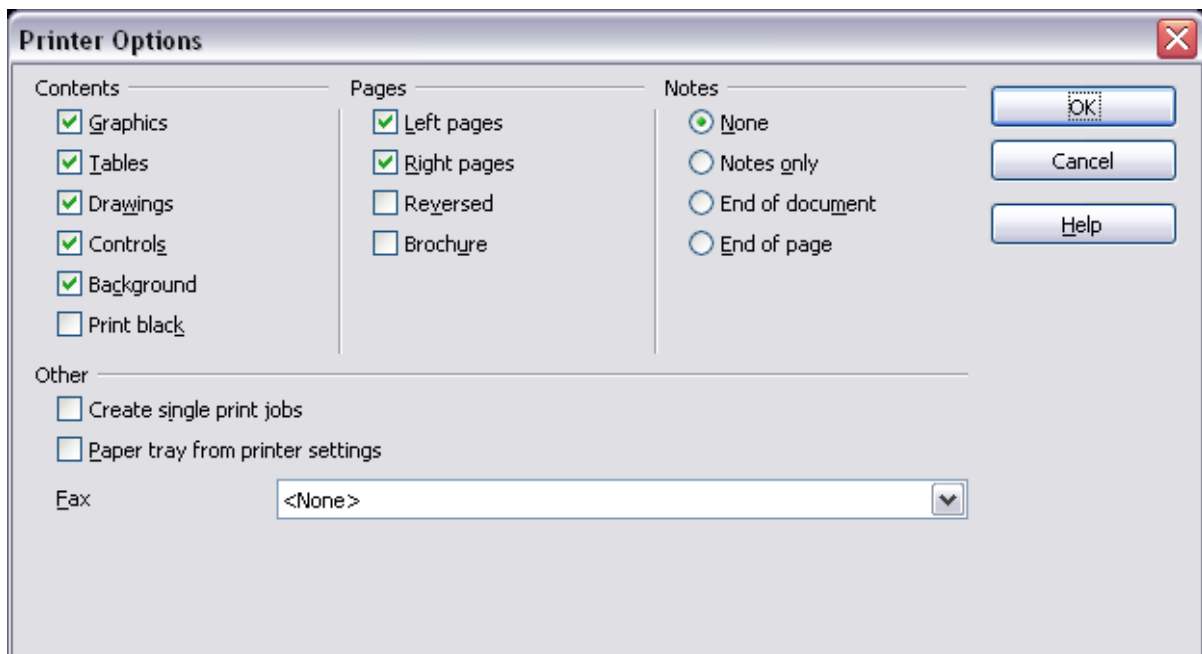


Figure 125. Printer Options dialog box

## Selecting default print options

Selections on the Printer Options dialog box over-ride any default settings. To specify default settings for printing, use **Tools > Options > OpenOffice.org Writer > Print**. The page displayed contains the same choices as the Printer Options dialog box.

Other printer settings are found in **Tools > Options > OpenOffice.org > Print**, as shown in Figure 126. Use this page to specify quality settings for printing, and whether to have OOo warn you if the paper size or orientation of your document does not match the printer settings.

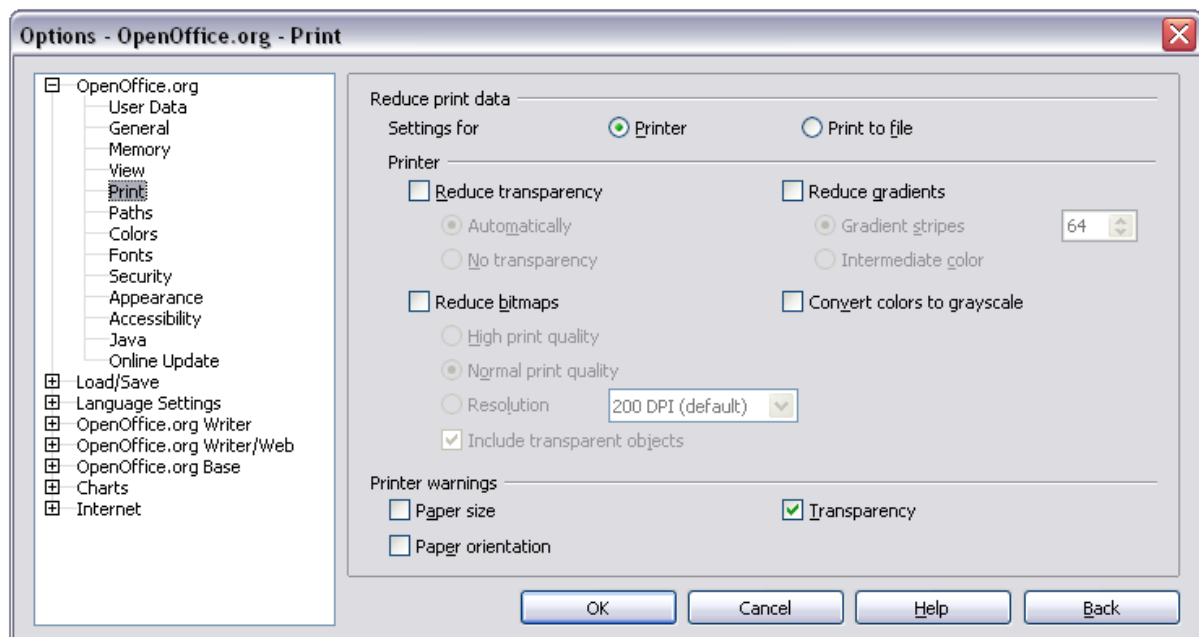


Figure 126. Printer options for OpenOffice.org

## Printing in black and white on a color printer

You may wish to print documents in black and white on a color printer, to save expensive color ink or toner. Common uses are for drafts or documents to be photocopied in black and white. Several choices are available.

To print the current document in black and white or grayscale:

- 1) Click **File > Print** to open the Print dialog box (Figure 124).
- 2) Click **Properties** to open the properties dialog box for the printer. The available choices vary from one printer to another, but you should find an option for Color. See your printer's help or user manual for more information.
- 3) The choices for color may include *black and white* or *grayscale*. Choose one of these. Grayscale is best if you have any graphics in the document. Click **OK** to confirm your choice and return to the Print dialog box, then click **OK** again to print the document.



To set up OOO to print all color text and graphics as grayscale:


- 1) Click **Tools > Options > OpenOffice.org > Print** to display the dialog box shown in Figure 126.
- 2) Select the **Convert colors to grayscale** checkbox. Click **OK** to save the change.

To set up OOO Writer to print all color text as black, and all graphics as grayscale:

- 1) Click **Tools > Options > OpenOffice.org Writer > Print**.
- 2) Under *Contents*, select the **Print black** checkbox. Click **OK** to save the change.

## Previewing pages before printing

The normal page view in Writer shows you what each page will look like when printed, but it shows only one page at a time. If you are designing a document to be printed double-sided, you may want to see what facing pages look like. OOO provides a way to do this in Page Preview.

- 1) Click **File > Page Preview**, or click the **Page Preview** button .

The Writer window changes to display the current page and the following page, and shows the **Page Preview** toolbar (Figure 127) in place of the Formatting toolbar.

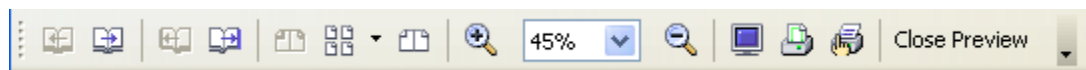





Figure 127. Page Preview toolbar

- 2) Click the **Book Preview** icon  to display left and right pages in their correct orientation.
- 3) To print the document in this page view, click the **Print Page View** icon  to open the Print dialog box (Figure 124). Choose your options and click **OK** to print as usual.
- 4) To choose margins and other options for the printout, click the **Print Options Page View** icon  to display the Print Options dialog box (Figure 128).

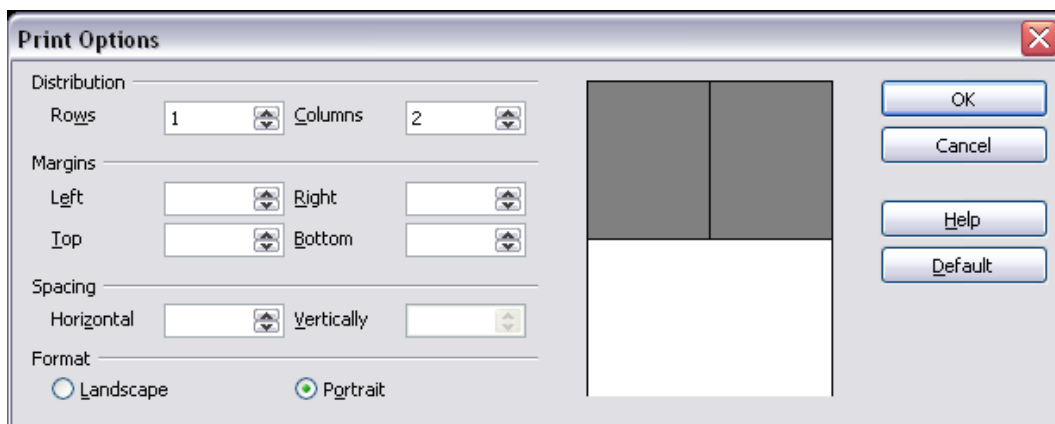


Figure 128. Print Options dialog box

## Printing a brochure

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You can print a document with two pages on each side of a sheet of paper, arranged so that when the printed pages are folded in half, the pages are in the correct order to form a booklet or brochure.

To print a brochure on a single-sided printer:

- 1) Plan your document so it will look good when printed half size (choose appropriate margins, font sizes, and so on). Click **File > Print**. In the Print dialog box (Figure 124), click **Properties** and be sure the printer is set to the same orientation (portrait or landscape) as specified in the page setup for your document. (Usually the orientation does not matter, but it does for brochures.)
- 2) Click **Options**. In the Pages section of the Printer Options dialog box (Figure 125), choose **Brochure** and **Right pages**. Click **OK** twice to print the first side of each page.
- 3) Flip the pages and put them back into the printer, new side up, and in the correct orientation. You may need to experiment a bit to find out what the correct arrangement is for your printer.
- 4) Click **File > Print** and check **Properties** to make sure the printer setup is still correct.
- 5) Click **Options** again. In the Pages section of the Printer Options dialog box, choose **Brochure** and **Left page**. Click **OK** twice to print those second sides.
- 6) If your printer can do double-sided, then click on the checks for both left and right along with Brochure and it should not only do those but collate too.

## Printing envelopes

---

Printing envelopes involves two steps: setup and printing.

To set up an envelope to be printed by itself or with your document:

- 1) Click **Insert > Envelope** from the menu bar.
- 2) In the Envelope dialog box, start with the **Envelope** tab (Figure 129). Verify, add, or edit the information in the Addressee and Sender boxes (the “from” on the envelope).  

You can use the right-hand dropdown lists to select the database or table from which you can draw the envelope information, if desired. See “Setting up envelope details from a database” on page 123 for details.
- 3) On the **Format** tab (Figure 130), verify or edit the positioning of the addressee and the sender information. The preview area on the lower right shows the effect of your positioning choices.

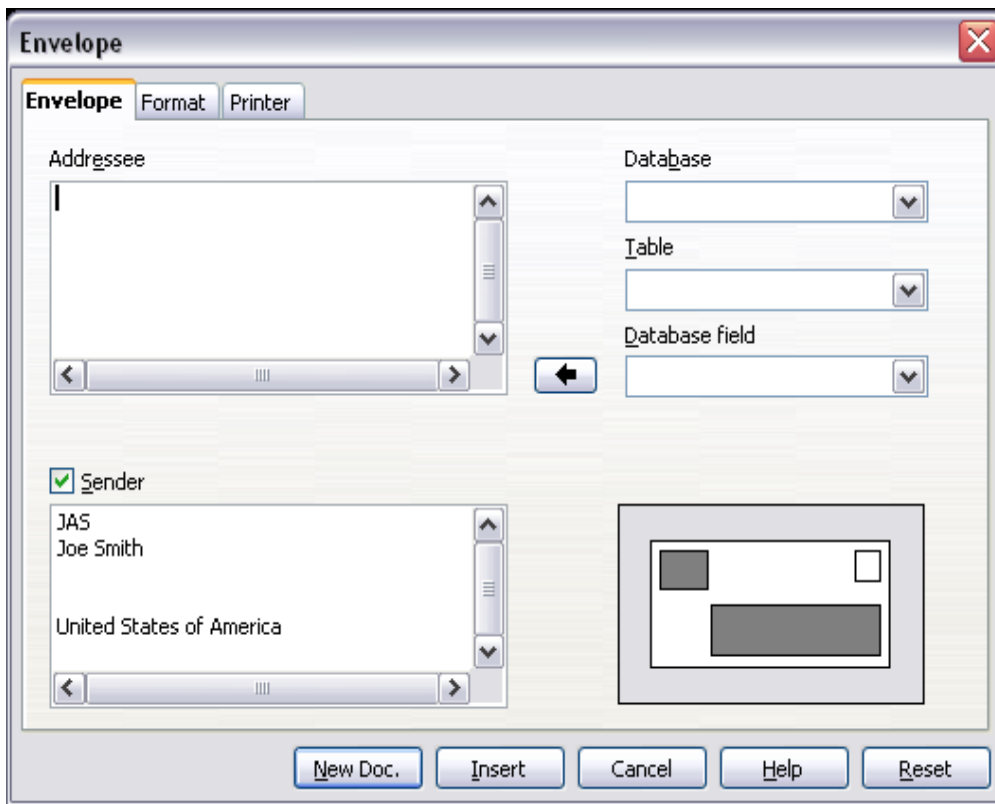


Figure 129. Choosing addressee and sender information for an envelope

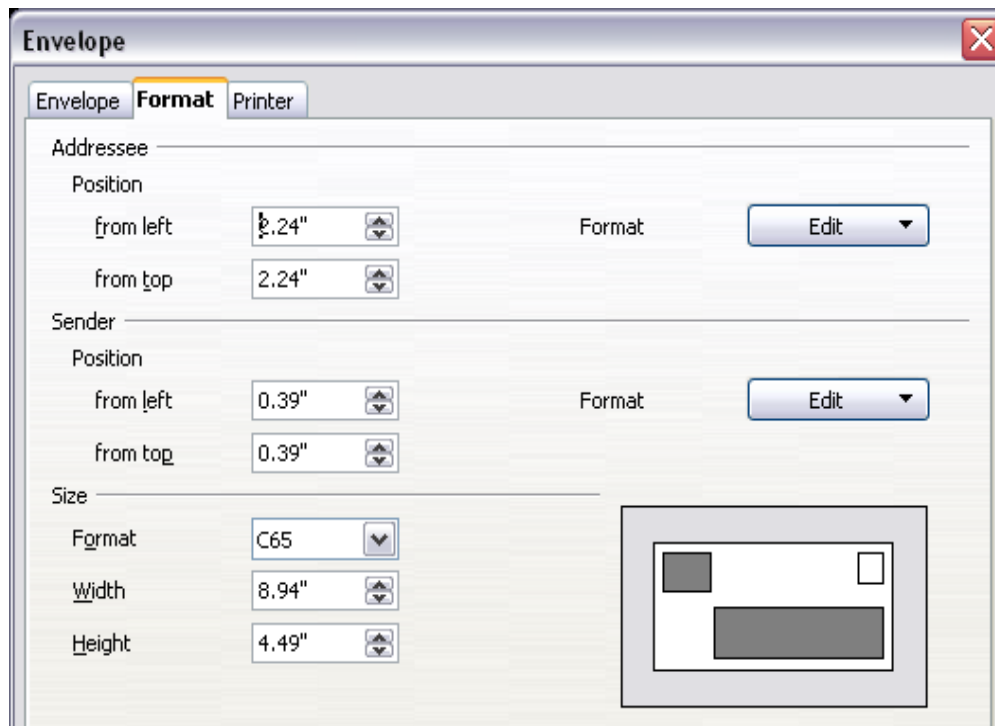


Figure 130. Choosing positioning and size of elements for an envelope

To format the text of these blocks, click the **Edit** buttons to the right.

- In Character , you can choose fonts, sizes, underlines or color, rotating/scaling, backgrounds and more.

In Paragraph, you can choose indenting, alignment, flow, tabs and more.

- 4) In the lower left of this tab, choose the envelope format from the dropdown list. The width and height of the selected envelope then show in the boxes below the selected format. If you chose a pre-existing format, just verify these sizes. If you chose *User defined* in the Format list, edit the sizes.
- 5) After formatting, select the **Printer** tab (Figure 131) to choose printer options such as envelope orientation and shifting. You may need to experiment a bit to see what works best for your printer.

You can also choose a different printer or alter printer setup (for example, specify the tray that holds envelopes) for this print job.

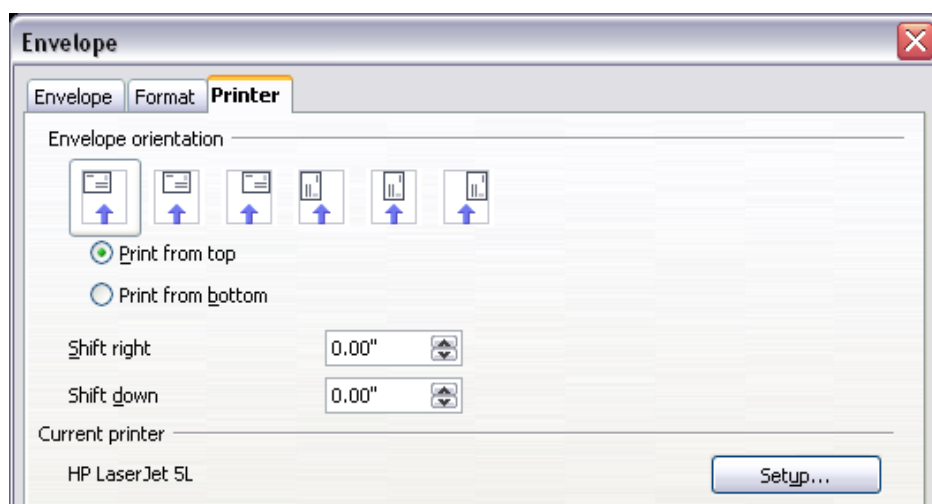


Figure 131. Choosing printer options for an envelope

- 6) When you have finished formatting and are ready to print, click either the **New Doc** or **Insert** button to finish. **New Doc** makes only an envelope or starts a new document with the envelope. **Insert** inserts the envelope into your existing document as page 1.

To not proceed with this envelope, click **Cancel** or press the *Esc* key. You can also click **Reset** to remove your changes and return to the original settings when the dialog box opened.

When the Envelope dialog box closes, you are returned to your document, which now has the envelope in the same file as the document. Save this file before you do anything else.

To print the envelope:

- 1) Choose **File > Print** from the menu bar.
- 2) On the Print dialog box, under **Print range**, choose **Pages** and type 1 in the box. Click **OK** to print.

## Setting up envelope details from a database

You can use a database as a source of name and address details for printing one or a series of envelopes, either alone or with accompanying letters. Mozilla address books, dBase databases, spreadsheets, databases created by OOO Base, and others can be used as data sources.

After you have set up a data source (see Chapter 10, “Getting Started with Base” in the *Getting Started* guide), you need to register it with OOO so OOO can access it.

To register a data source, select **File > New > Database**, select **Connect to an existing database**, and select the type of data source to connect to. The exact source can then be chosen in the wizard.

For more details on how to set up a database or address book as a data source, see the chapter titled “Getting Started with Base” in the *Getting Started* guide.

To use the database when printing envelopes:

- 1) Click **Insert > Envelope** from the menu bar.
- 2) On the Envelope dialog box (Figure 132), select from the Database list the name of the data source. In the Table list, select the database table or sheet containing the address data that you want to insert. The Database field list will now show a list of the fields in the selected database.

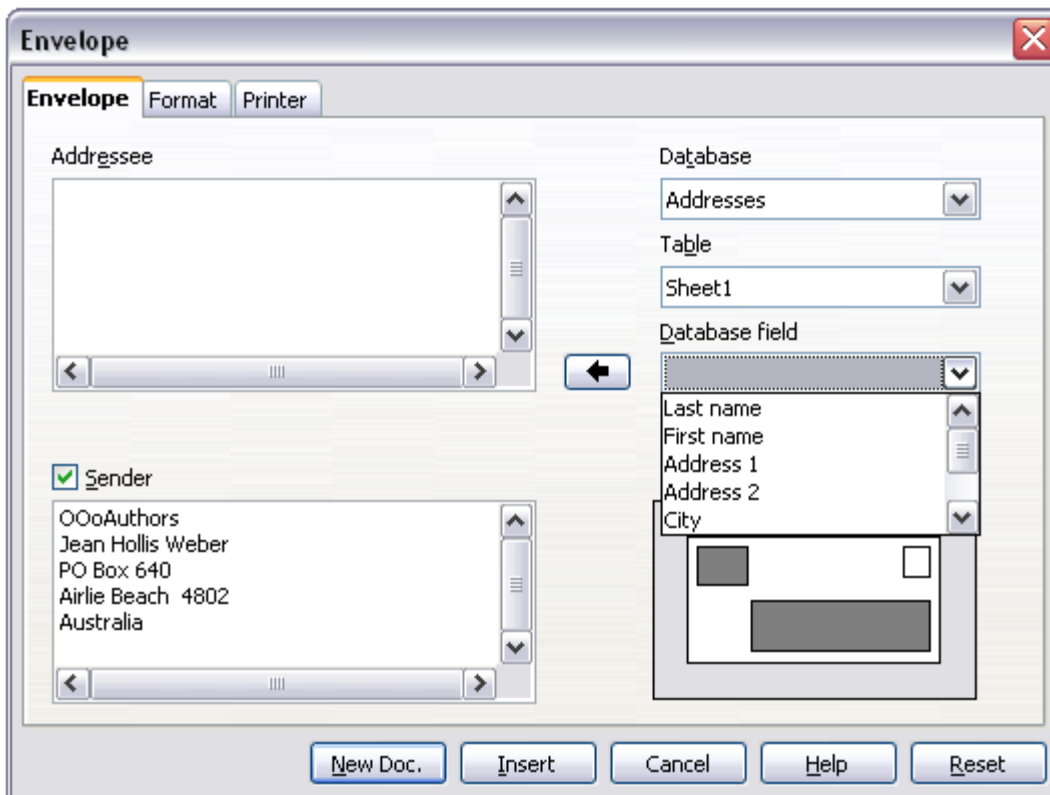


Figure 132: Choosing a database and table from which to use addressee details

- 3) Select the field containing the first piece of data (for example, first name) that you want to insert, then click the left arrow button to add the data to the Addressee box.
- 4) To put another field on the same line in the Addressee box, select that field and click the left arrow button again. Be sure to include punctuation or spaces between fields in the Addressee box as needed.
- 5) To put a field (for example, the address) on a new line, press **Enter** at the end of the previous line in the Addressee box. When you are finished selecting fields, the Envelope dialog box will look something like Figure 133.

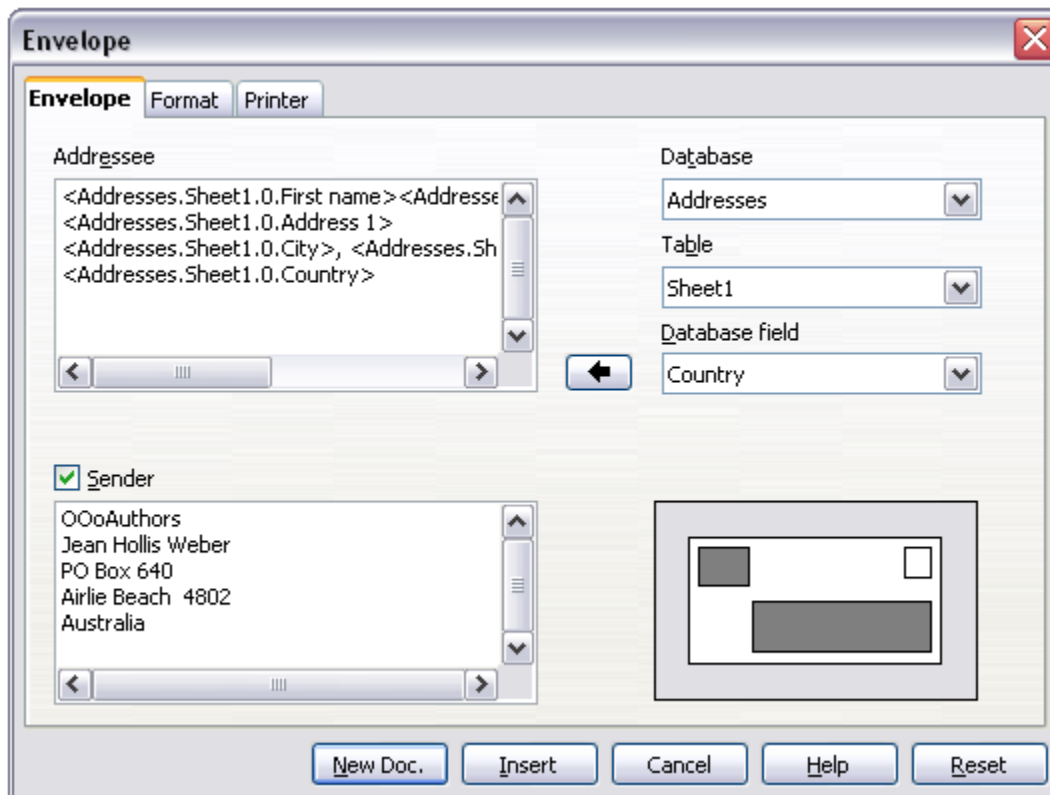


Figure 133: The Envelope dialog box after choosing database fields for addressee

- 6) Click **Insert** or **New Doc.** A formatted envelope is now visible in your document
- 7) Click **File > Print** from the menu bar. The dialog box shown in Figure 134 appears. Click **Yes**.

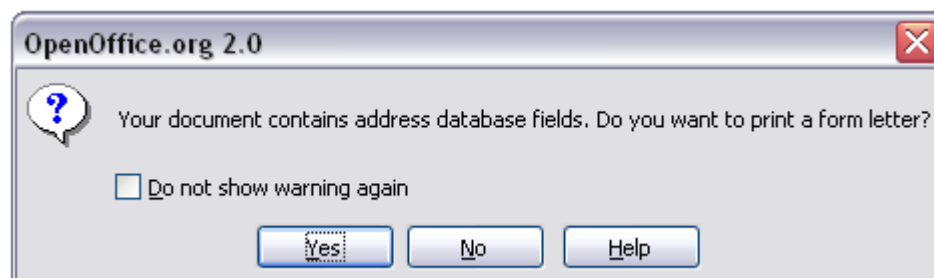


Figure 134: Confirmation dialog box for merging database fields

- 8) The Mail Merge dialog box (Figure 135) appears. Here you can choose to print envelopes addresses to one, several or all address records in the database. For more about using mail merge, see the chapter titled “Using Mail Merge” in this *Writer Guide*.
- 9) Make your selections and then click **OK** to begin printing.

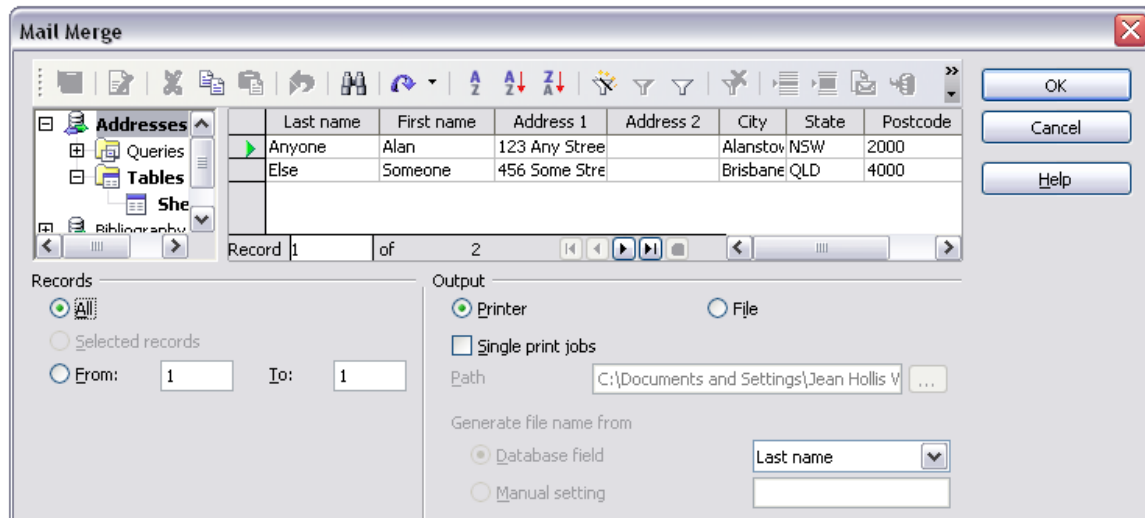


Figure 135: Choosing records to use when printing envelopes

## Printing labels

To print labels:

- 1) Choose **File > New > Labels** on the menu bar. The Labels dialog box opens.
- 2) On the Labels tab (Figure 136), fill in your own label text in the Inscription box, or use the Database and Table dropdown lists to choose the required information as described in “Setting up envelope details from a database” on page 123.

*Select the label stock in the **Brand** dropdown list. The types for that brand then appear in the Type dropdown list. Select the size and type of labels required. You can also select User type and then make specific selections on the Format tab (Figure 137).*

- 3) Click the Format tab (Figure 137) to choose the pitch, sizes, margins and columns for user-defined labels, or just verify with a brand of label stock you have loaded into the printer.
- 4) Click **Save** to save your new format.
- 5) On the Options tab (Figure 138), choose to print the entire page of labels or one single label, then select which one by the column and row. You can also change printer setup.
- 6) When you have finished formatting and you are ready, click **New Document** to make your sheet of labels or click **Cancel** (or press the *Esc* key). You can also click **Reset** to remove your changes and return to the original settings when the dialog box opened.

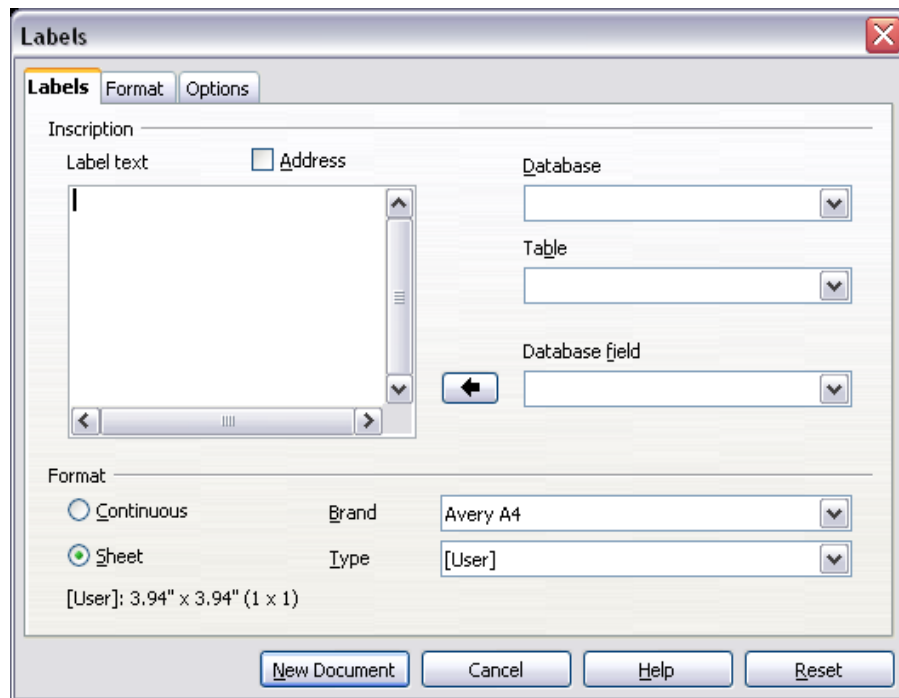


Figure 136. Labels dialog box, Labels tab

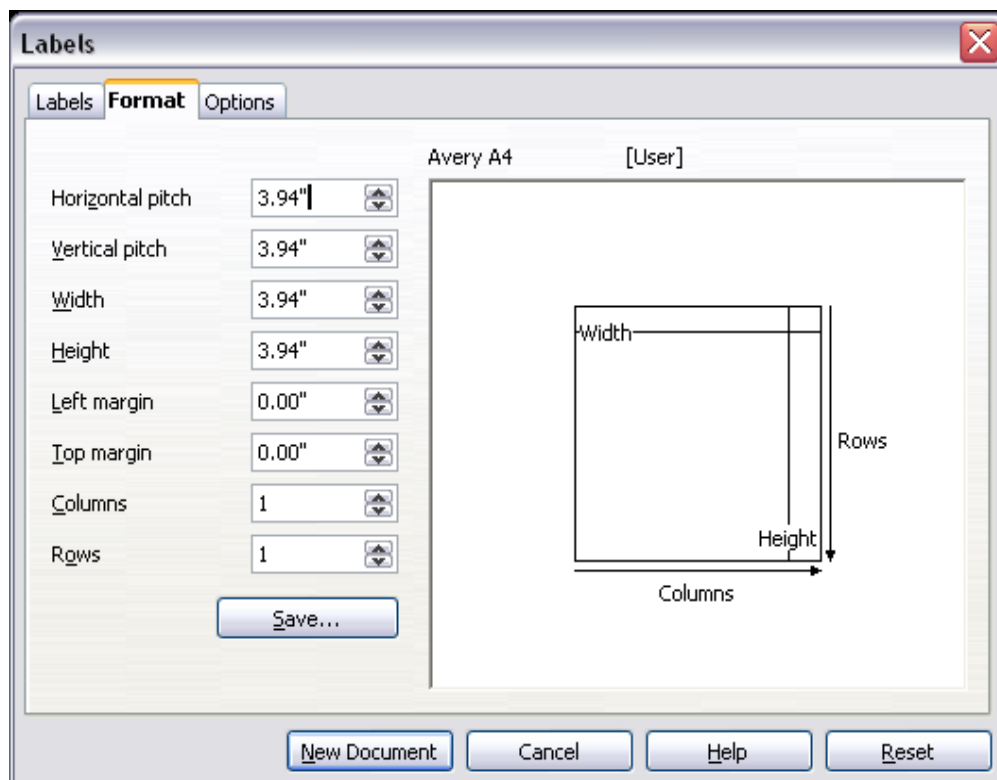


Figure 137. Labels dialog box, Format tab

- 7) You can print right away using the Print File Directly button on toolbar or by choosing **File > Print** from the menu bar, or you can save the file to print later.



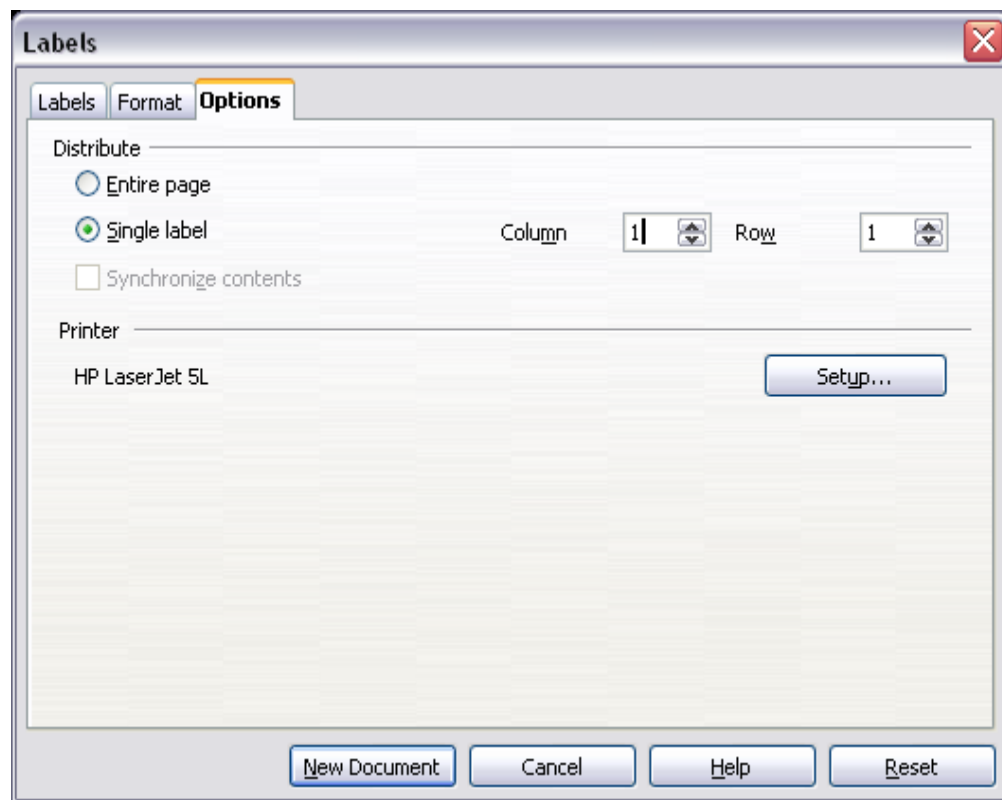


Figure 138. Labels dialog box, Options tab

## Sending a fax

To send a fax directly from OpenOffice.org, you need a fax modem and a fax driver that allows applications to communicate with the fax modem.

### Sending a fax through the Print dialog box

- 1) Open the Print dialog box (Figure 124) by choosing **File > Print** and select the fax driver in the Name list box.
- 2) Click **OK** to open the dialog box for your fax driver, where you can select the fax recipient.

### Adding a Fax icon to the toolbar (advanced)

You can configure OpenOffice.org so that a single click on an icon automatically sends the current document as a fax.

- 1) Be sure the fax driver is installed. Consult the documentation for your fax modem for more information.
- 2) Choose **Tools > Options > OpenOffice.org Writer > Print**. The dialog box shown in Figure 139 opens.

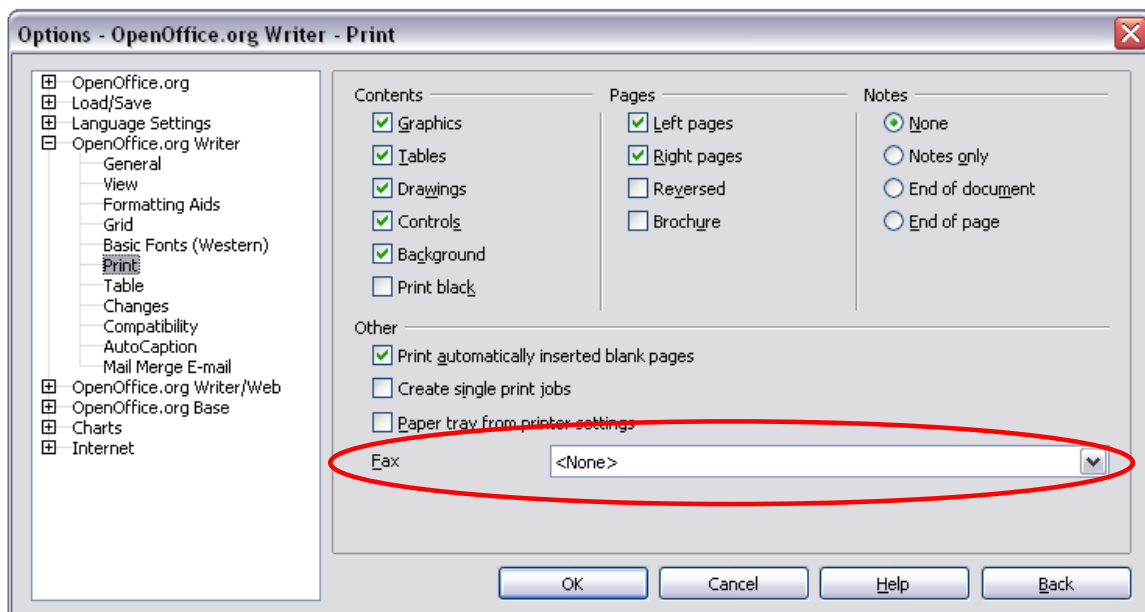


Figure 139: Setting up OOo for sending faxes

- 3) Select the fax driver from the Fax list box and click **OK**.
- 4) Click the arrow icon at the end of the Standard toolbar. In the drop-down menu, choose **Customize Toolbar**. The Toolbars page of the Customize dialog box appears (Figure 140). Click **Add**.

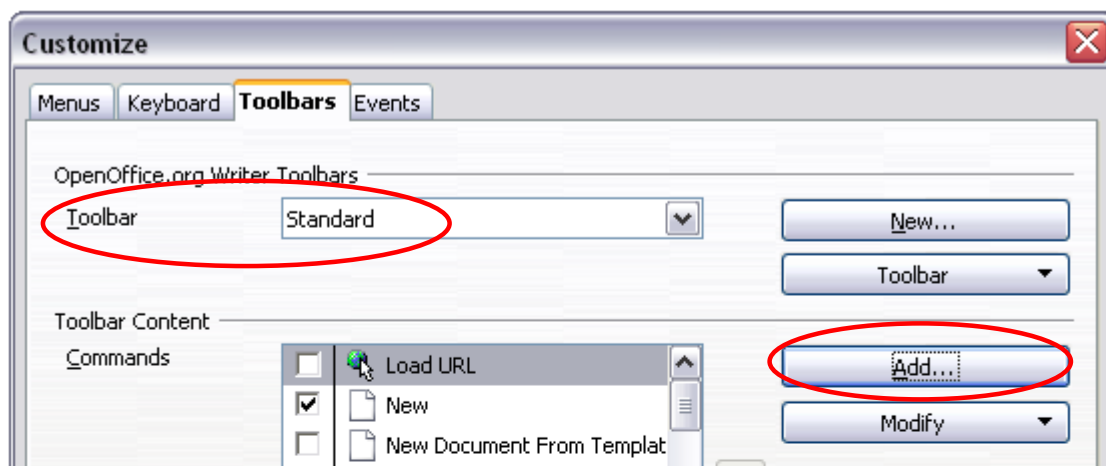


Figure 140: Customizing a toolbar

- 5) On the Add Commands dialog box (Figure 141), select the *Documents* category, then select the *Send Default Fax* command. Click **Add** and then click **Close**.
- 6) On the Toolbars page, click the down arrow button to position the new icon where you want it. Click **OK**.

Your toolbar now has a new icon to send the current document as a fax.

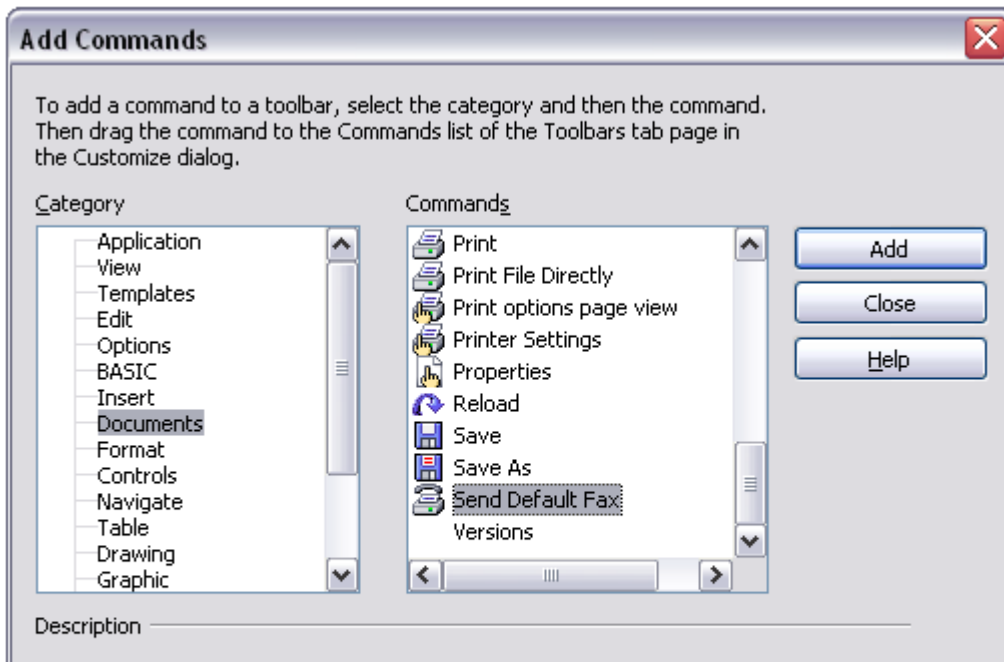



Figure 141: Adding a command to a toolbar

## Exporting to PDF

OpenOffice.org can export documents to PDF (Portable Document Format). This industry-standard file format for file viewing is ideal for sending the file to someone else to view using Acrobat Reader or other PDF viewers.

### Quick export to PDF

Click the **Export Directly as PDF** icon  to export the entire document using the default PDF settings. You are asked to enter the file name and location for the PDF file, but you do not get a chance to choose a page range or the print quality.

### Controlling PDF content and quality

For more control over the content and quality of the resulting PDF, use **File > Export as PDF**. You are asked to enter the location and file name of the PDF to be created, and then the PDF Options dialog box opens. This dialog box has four pages. Make your selections, and then click **Export**.

#### General page of PDF Options dialog box

On the General page (Figure 142), you can choose which pages to include in the PDF, the type of compression to use for images (which affects the quality of images in the PDF), and other options.

### Pages section

- **All:** Exports the entire document.
- **Pages:** To export a range of pages, use the format **3-6** (pages 3 to 6). To export single pages, use the format **7;9;11** (pages 7, 9, and 11). You can also export a combination of page ranges and single pages, by using a format like **3-6;8;10;12**.
- **Selection:** Exports whatever material is selected.

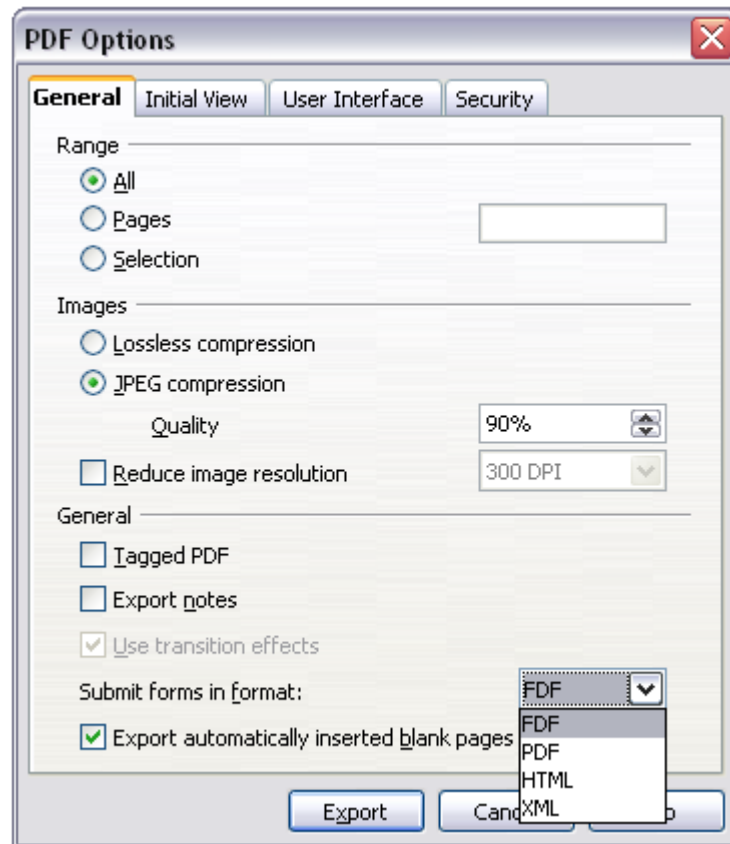


Figure 142: General page of PDF Options dialog box

### Images section

- **Lossless compression:** Images are stored without any loss of quality. Tends to make large files when used with photographs. Recommended for other images.
- **JPEG compression:** Allows for varying degrees of quality. A setting of 90% tends to work well with photographs (small file size, little perceptible loss).
- **Reduce image resolution:** Lower-DPI (dots per inch) images have lower quality.

---

**Note** EPS images with embedded previews are exported only as previews. EPS images without embedded previews are exported as empty placeholders.

---

### General section

- **Tagged PDF:** Includes special tags into the corresponding PDF tags. Some tags that are exported are table of contents, hyperlinks, and controls. This option can increase file sizes significantly.
- **Export notes:** Exports notes in Writer and Calc documents as PDF notes. You may not want this!
- **Use transition effects:** Not available in Writer; in Impress, this option exports slide transition effects in their respective PDF effects.
- **Submit forms in format:** Choose the format of submitting forms from within the PDF file. This setting overrides the control's URL property that you set in the document. There is only one common setting valid for the whole PDF document: PDF (sends the whole document), FDF (sends the control contents), HTML, and XML. Most often you will choose the PDF format.
- **Export automatically inserted blank pages:** If selected, automatically inserted blank pages are exported to the PDF. This is best if you are printing the PDF double-sided. For example, books usually have chapters set to always start on an odd-numbered (right-hand) page. When the previous chapter ends on an odd page, OOo inserts a blank page between the two odd pages. This option controls whether to export that blank page.

### Initial View page of PDF Options dialog box

On the Initial View page (Figure 143), you can choose how the PDF opens by default in a PDF viewer. The selections should be self-explanatory.

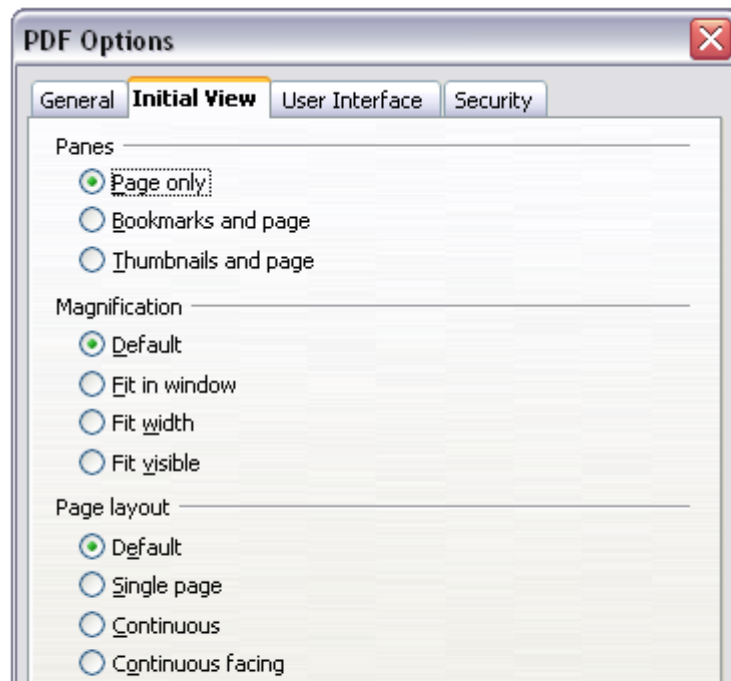


Figure 143: Initial View page of PDF Options dialog box

## User Interface page of PDF Options dialog box

On the User Interface page (Figure 144), you can choose more settings to control how a PDF viewer displays the file. Some of these choices are particularly useful when you are creating a PDF to be used as a presentation or a kiosk-type display.



Figure 144: User Interface page of PDF Options dialog box

### Window options section

- **Resize window to initial page.** Causes the PDF viewer window to resize to fit the first page of the PDF.
- **Center window on screen.** Causes the PDF viewer window to be centered on the computer screen.
- **Open in full screen mode.** Causes the PDF viewer to open full-screen instead of in a smaller window.
- **Display document title.** Causes the PDF viewer to display the document's title in the title bar.

### User interface options section

- **Hide menubar.** Causes the PDF viewer to hide the menu bar.
- **Hide toolbar.** Causes the PDF viewer to hide the toolbar.
- **Hide window controls.** Causes the PDF viewer to hide other window controls.

## Security page of PDF Options dialog box

As of OoO 2.0.4, PDF export includes options to encrypt the PDF (so it cannot be opened without a password) and apply some digital rights management (DRM) features.



Figure 145: Security page of PDF Options dialog box

- With an *open password* set, the PDF can only be opened with the password. Once opened, there are no restrictions on what the user can do with the document (for example, print, copy, or change it).
- With a *permissions password* set, the PDF can be opened by anyone, but its permissions can be restricted. See Figure 145.
- With *both* the open password and permission password set, the PDF can only be opened with the correct password, and its permissions can be restricted.

---

**Note** Permissions settings are effective only if the user's PDF viewer respects the settings.

---

Figure 146 shows the pop-up dialog box displayed when you click the **Set open password** button on the Security page of the PDF Options dialog box.

After you set a password for permissions, the other choices on the Security page (shown in Figure 145) become available. These selections should be self-explanatory.

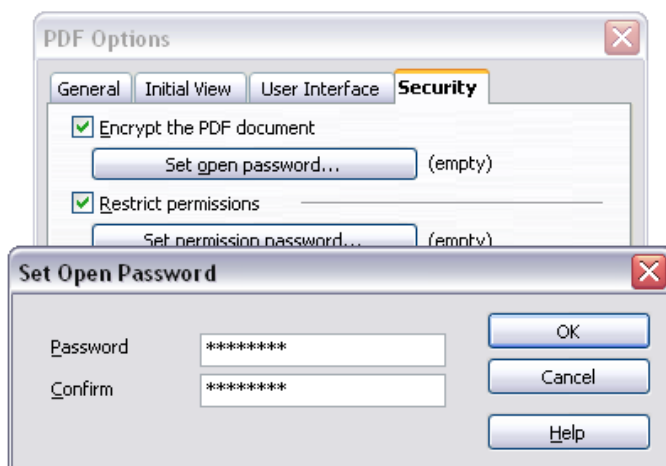


Figure 146: Setting a password to encrypt a PDF

## E-mailing Writer documents

OOo provides several ways to quickly and easily send a Writer document as an e-mail attachment in one of three formats: .ODT (OpenDocument Text, OOo's default format), .DOC (Microsoft Word format), or PDF.

To send the current document in .ODT format.

- 1) Choose **File > Send > Document as E-mail**. OpenOffice.org opens the e-mail program specified in **Tools > Options > Internet > E-mail**. The document is attached.
- 2) In your e-mail program, enter the recipient, subject and any text you want to add, then send the e-mail.

**File > Send > E-mail as OpenDocument Text** has the same effect.

If you choose **E-mail as Microsoft Word**, OOo first creates a .DOC file and then opens your e-mail program with the .DOC file attached. Similarly, if you choose **E-mail as PDF**, OOo first creates a PDF using your default PDF settings (as when using the **Export Directly as PDF** toolbar button) and then opens your email program with the .PDF file attached.

### E-mailing a document to several recipients

To e-mail a document to several recipients, you can use the features in your e-mail program or you can use OOo's mail merge facilities to extract email addresses from an address book.

You can use OOo's mail merge to send e-mail in two ways:

- Use the Mail Merge Wizard to create the document and send it. See Chapter 11, "Using Mail Merge" for details.
- Create the document in Writer without using the Wizard, then use the Wizard to send it. This method is described here.

To use the Mail Merge Wizard to send a Writer document:



- 1) Click **Tools > Mail Merge Wizard**. On the first page of the wizard (Figure 147), select **Use the current document** and click **Next**.

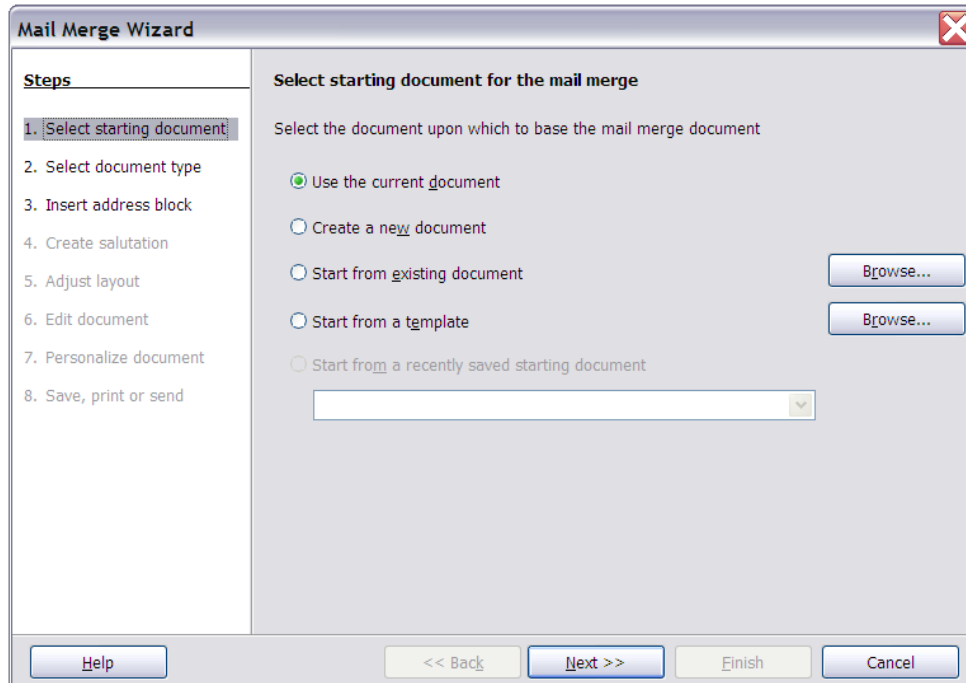


Figure 147: Select starting document

- 2) On the next page (Figure 148), select **E-mail message** and click **Next**.

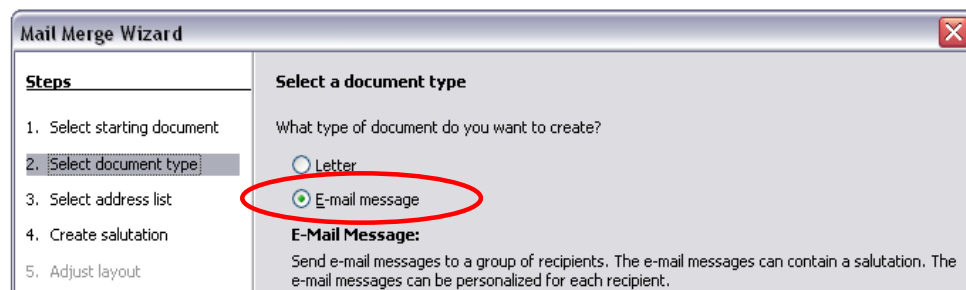


Figure 148: Choose document type

- 3) On the next page (Figure 149), click **Select Address List**. Select the required address list (even if only one is shown) and then click **OK**. (If the address list you need is not shown here, you can click **Add** to find and add it to the list.)

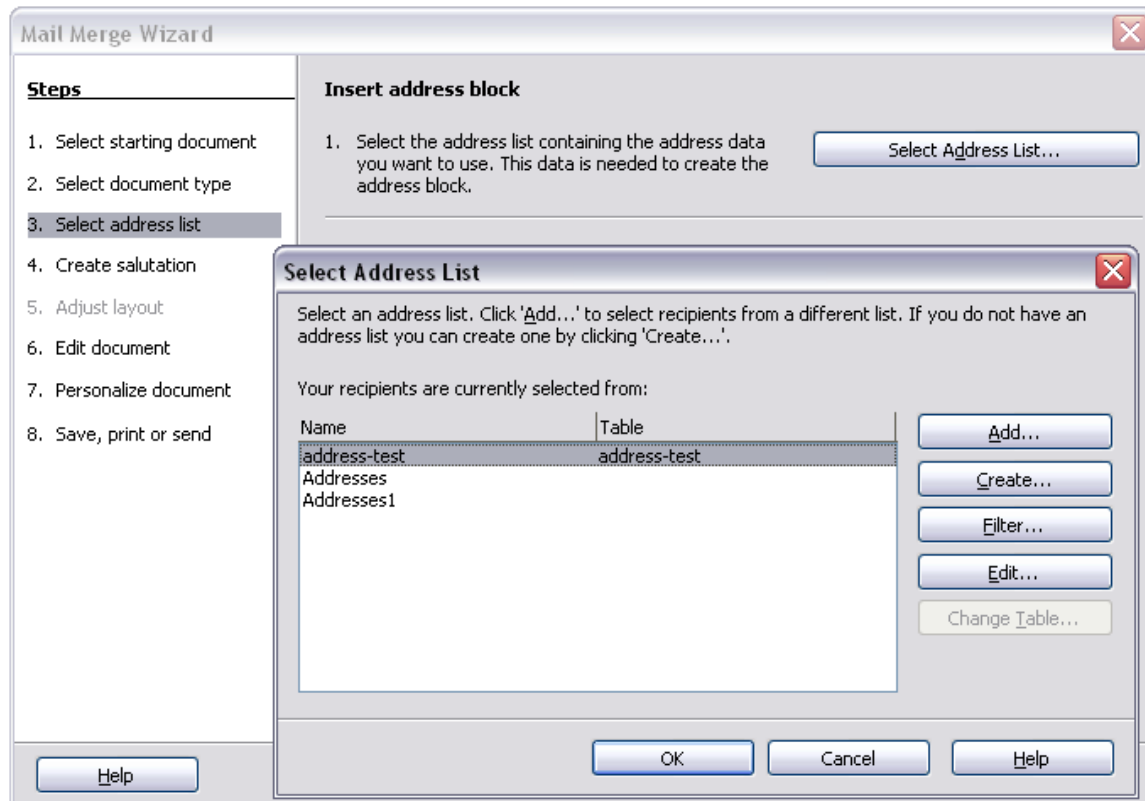


Figure 149: Selecting an address list

- 4) Back on the Select address list page, click **Next**. On the Create salutation page (Figure 150), deselect the checkbox by **This document should contain a salutation**.

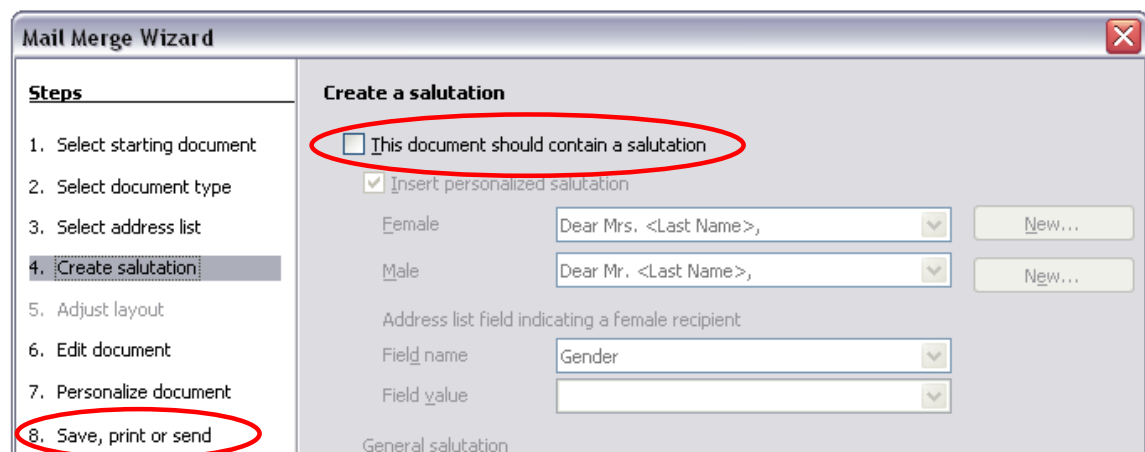


Figure 150: Deselecting a salutation

- 5) In the left-hand list, click **8 Save, print or send**. OOo displays a “Creating documents” message and then displays the Save, print or send page of the Wizard.
- 6) Select Send merged document as E-Mail. The lower part of the page changes to show e-mail settings choices (see Figure 151).
- 7) Type a subject for your email and click **Send documents**. OOo sends the e-mails.

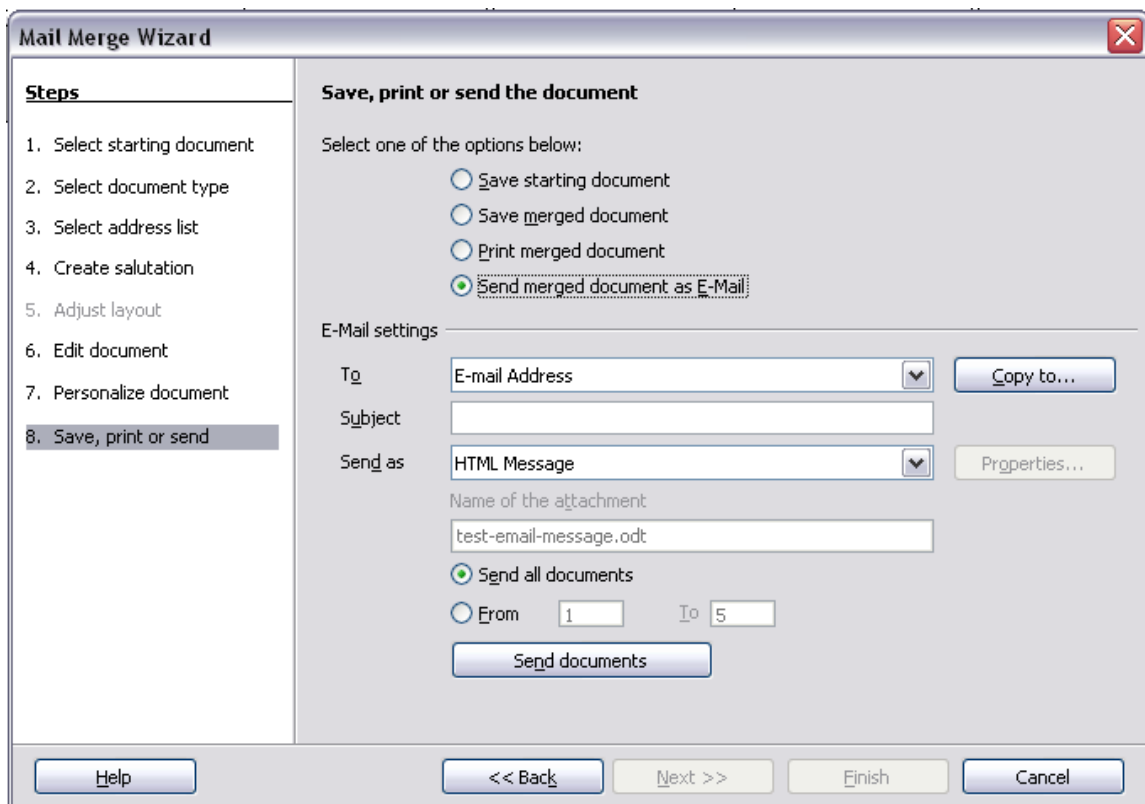


Figure 151: Sending a document as an email message

## Digital signing of documents

To sign a document digitally, you need a personal key, the certificate. A personal key is stored on your computer as a combination of a private key, which must be kept secret, and a public key, which you add to your documents when you sign them. You can get a certificate from a certification authority, which may be a private company or a governmental institution.

When you apply a digital signature to a document, a kind of checksum is computed from the document's content plus your personal key. The checksum and your public key are stored together with the document.


When someone later opens the document on any computer with a recent version of OpenOffice.org, the program will compute the checksum again and compare it with the stored checksum. If both are the same, the program will signal that you see the original, unchanged document. In addition, the program can show you the public key information from the certificate. You can compare the public key with the public key that is published on the web site of the certificate authority.

Whenever someone changes something in the document, this change breaks the digital signature.

On Windows operating systems, the Windows features of validating a signature are used. On Solaris and Linux systems, files that are supplied by Thunderbird, Mozilla or Firefox are used. For a more detailed description of how to get and manage a certificate, and signature validation, see “Using Digital Signatures” in the OOo Help.

To sign a document:

- 1) Choose **File > Digital Signatures**.
- 2) If you have not saved the document since the last change, a message box appears. Click **Yes** to save the file.
- 3) After saving, you see the Digital Signatures dialog box. Click **Add** to add a public key to the document.
- 4) In the Select Certificate dialog box, select your certificate and click **OK**.
- 5) You see again the Digital Signatures dialog box, where you can add more certificates if you want. Click **OK** to add the public key to the saved file.

A signed document shows an icon  in the status bar. You can double-click the icon to view the certificate.



*Chapter 6*  
*Introduction to Styles*  
*Paragraph, Page and Character Styles*

# Introduction

---

## What are styles?

Most people are used to writing documents according to *physical* attributes. For example, you might specify the font family, font size and weight (say, Helvetica 12pt, bold).

Styles are *logical* attributes. We use styles every day. For example, there are two styles of computers: desktop and laptop. Each has its own distinctive set of properties. You never say “my computer is a low-weight, one-piece unit with an LCD screen attached to a rectangular casing containing the computing components and the keyboard”. Instead, you say “I have a laptop”.

OpenOffice.org styles are a way to do the same thing for your document. Using styles means that you stop saying “font size 14pt, Times New Roman, bold, centered”, and you start saying “title”. In other words, styles means that you shift the emphasis from what the text looks like, to what the text *is*.

## Why use styles?

OpenOffice.org (OOo) brings a powerful notion of styles. Styles help improve consistency in a document. They also make major formatting changes easy. For example, you may decide to change the indentation of all paragraphs or change the font of all titles. For a long document, this simple task can be prohibitive. Styles make the task easy.

The time is 9:50 A.M. and Jane is finishing the 30-page paper for school that is due at 10:00 A.M. She looks over the assignment one more time, and suddenly she realizes that:

- The text must use Arial font instead of Times New Roman.
- The headings must be dark blue and indented.
- The title must appear at the top-right of every page except the first.
- Even numbered pages must have a wider right margin, and odd numbered pages must have a wider left margin.

Thankfully, Jane used OpenOffice.org and styles. She makes all the changes in two minutes and hands in the paper on time.

## Types of styles

OpenOffice.org Writer has five types of styles:

- *Paragraph* styles affect an entire paragraph.
- *Character* styles affect a block of text inside a paragraph.
- *Page* styles affect page formatting (page size, margin, and the like).
- *Frame* styles affect frames and graphics.
- *List* styles affect numbered lists and bulleted lists.

The first three styles are the most used. Those are the styles covered in this chapter. Frame styles and list styles are discussed in Chapter 7, “Working with Styles”.

These styles are available through a floating window called Styles and Formatting, shown in Figure 152. (Press *F11* to see it.) The Styles and Formatting window is discussed in the next section.

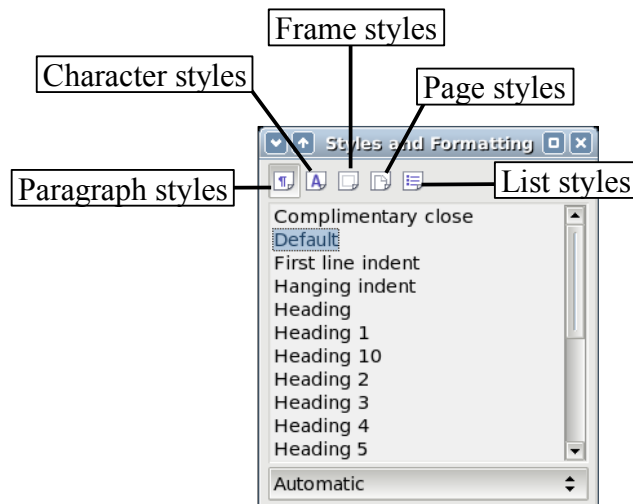


Figure 152. Styles and Formatting window and the types of styles

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**Note** Styles and Formatting is a floating window. You can drag it around the screen using the mouse, or you can dock it to the left or right side of the screen.

---

# Using paragraph styles

## First steps

OpenOffice.org uses a tool called Styles and Formatting to manage styles. The concept of styles and the Styles and Formatting window is best explained through an example.

- 1) Create a new document (choose **File > New > Text Document** or press *Control+N*).
- 2) Type **Heading 1** in it. *Make sure that the cursor remains in that same line.*
- 3) Press the **Styles and Formatting** icon  located on the Formatting Bar or press the *F11* key. This brings up a window called Styles and Formatting (see Figure 153).
- 4) Make sure the window is showing the *Paragraph Styles* section (click on the top-left icon of the Styles and Formatting window .

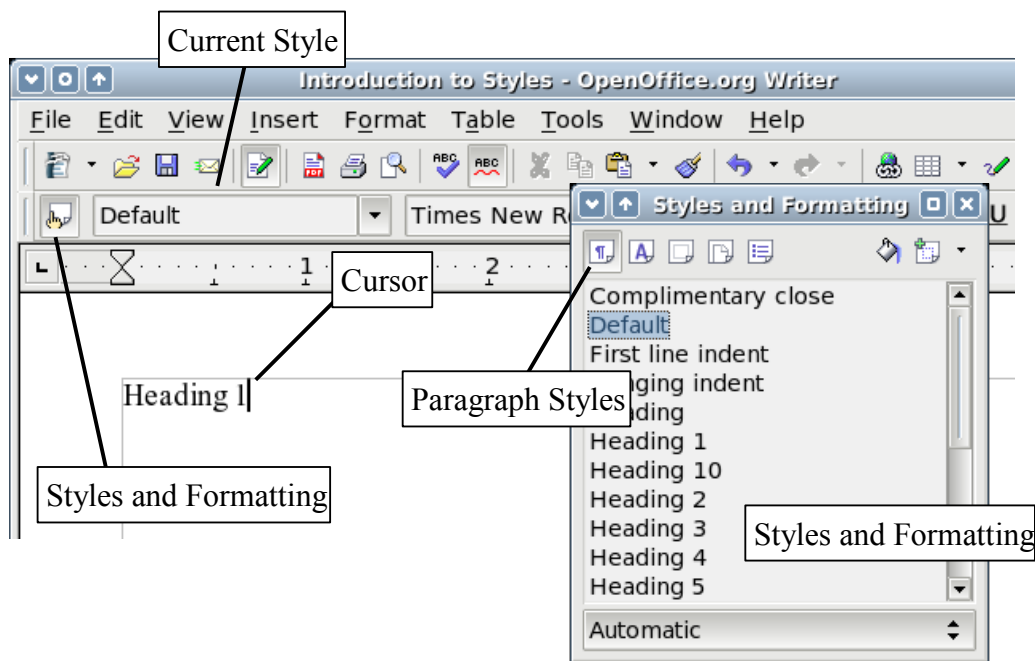


Figure 153. Click on the **Styles and Formatting** icon  to bring up the window.

Double-click the **Heading 1** entry of Styles and Formatting. This will do two things:

- Give the line you typed the *Heading 1* style.
- Add **Heading 1** to the *Apply Style* menu.

The Apply Style menu is illustrated in Figure 154. It provides direct access to the styles that are currently in use in the document.



## Using the Apply Style menu

The Apply Style menu lists the paragraph styles that are currently in use in the document. You can select styles from this menu, just like with the Styles and Formatting window. As an exercise, press *Enter*, type some text and select **Heading 1** in the *Apply Styles* list. The text acquires the properties of the *Heading 1* style.

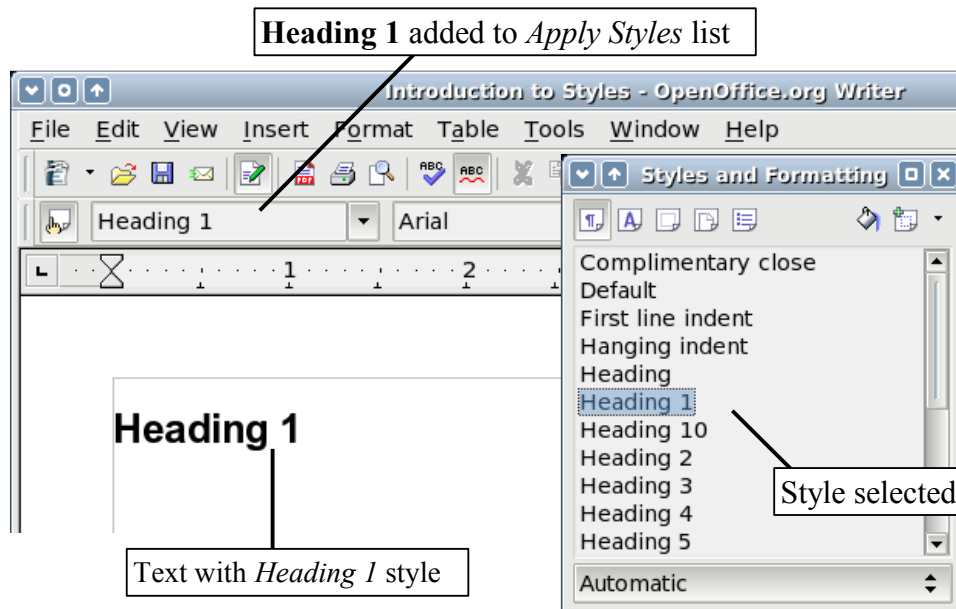


Figure 154. Applying paragraph styles

## Modifying paragraph styles

The power of styles lies in the ability to modify them to suit your needs. For the next example, we will need three lines of text with three OOO-supplied paragraph styles: *Heading 1*, *Heading 2*, and *Heading 3*. These paragraph styles could be used in formatting headings in the framework for a document that will be “fleshed out” afterwards. Your document should resemble Figure 155.

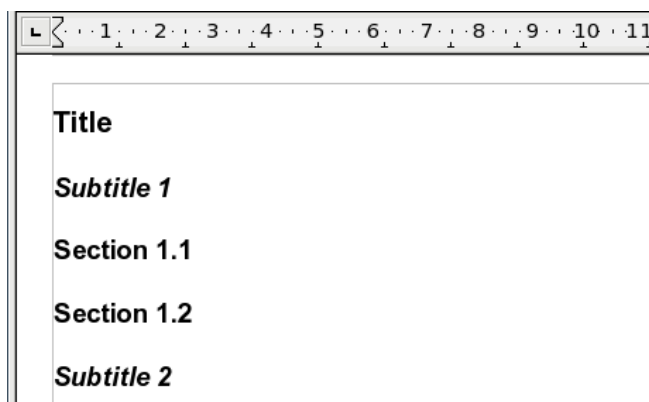


Figure 155. Headings 1–3 with default styles

Open a new text document for this exercise and type *Title* on the first line, press the **Paragraph Styles** icon on the Styles and Formatting window, and double-click **Heading 1** in the drop-down list. Repeat this procedure for the other entries, using the proper paragraph style for each. The *Heading 1* style should be applied to the “paragraph” containing the word “**Title**”, *Heading 2* to “**Subtitle 1**”, and so on.

---

**Note** *Heading 1* uses a bold font typeface, *Heading 2* uses a 14pt bold italic typeface, and *Heading 3* uses a 14pt bold typeface.

---

Suppose you decide to make some changes to these styles:

- *Heading 1* should be centered.
- *Heading 3* should be indented.

### Center Heading 1

On the Styles and Formatting window, select the **Paragraph Styles** icon (if it isn’t already chosen), right-click on **Heading 1**, and choose **Modify** (as shown in Figure 156).

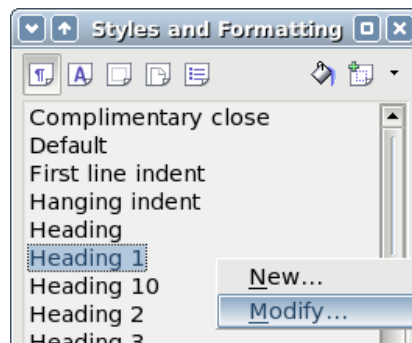


Figure 156. Modifying a style

When the Paragraph Style window opens, choose the **Alignment** tab, select **Center** (as shown in Figure 157), and click **OK**.

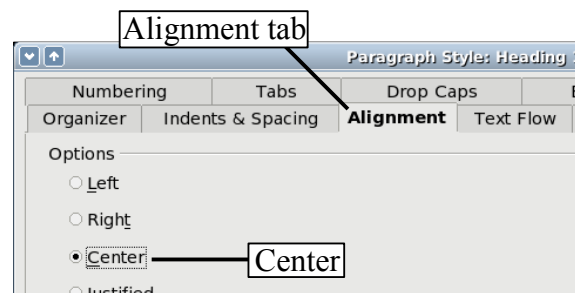


Figure 157. Center Heading 1

Now, everything marked as *Heading 1* will be centered (as shown in Figure 158). If you make another *Heading 1* entry, it will be centered as well.

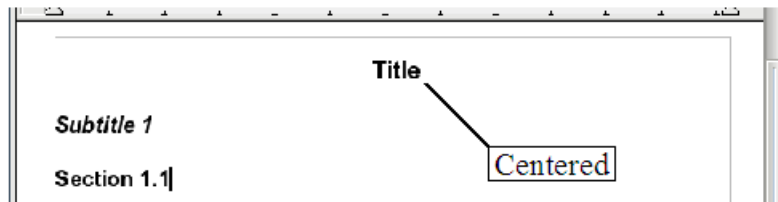


Figure 158. Text with the Heading 1 style is centered

### Indent Heading 3

On the Styles and Formatting window, right-click on the **Heading 3** paragraph style and choose **Modify** (as before). When the Paragraph Style window opens, follow the steps below:

- 1) Click the **Indents & Spacing** tab.
- 2) Under the *Indent* section, set the indentation before the text to **1.50cm** (0.6 in), as shown in Figure 159.

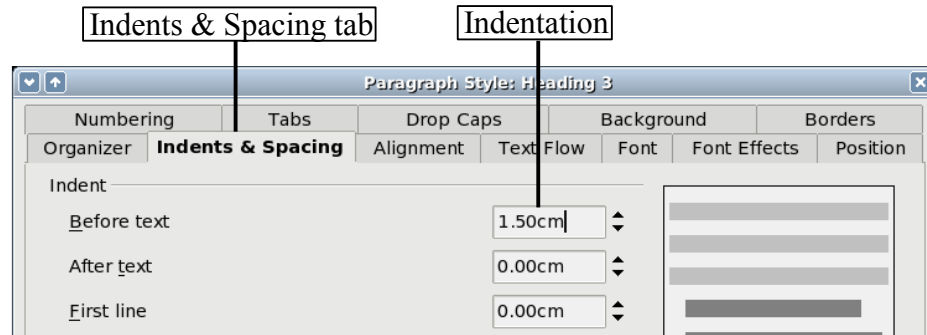


Figure 159. Set indentation

The result should resemble Figure 160.

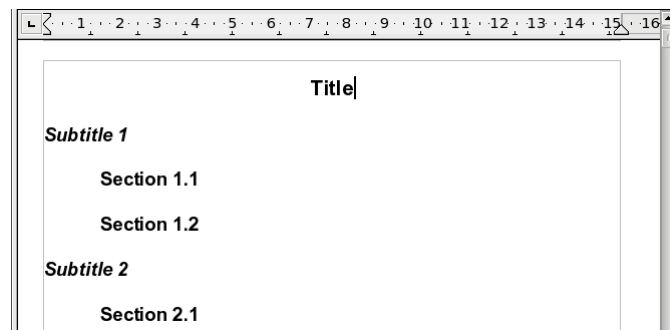


Figure 160. The text with Heading 3 style is indented.

## Linked styles

Some OpenOffice.org styles are *linked* together. This means that a change in one style affects every style linked to it. For example, every *Heading* style (such as *Heading 1*, *Heading 2*) is linked with a style called *Heading*. This relationship is illustrated in Figure 161.

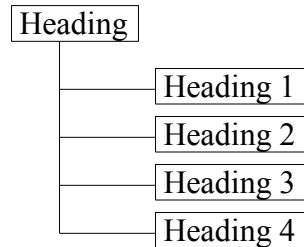


Figure 161. Linked styles

As an example, suppose you want to change the font of not only *Heading 1*, or *Heading 2*, but *all* headings. The easiest way to do that is to take advantage of this *linking*. Open the Styles and Formatting window (press *F11*) and select **Heading** (see Figure 162).

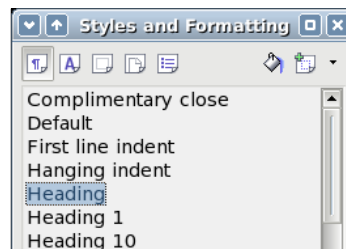


Figure 162. Select Heading style.

Open the Paragraph Style dialog box for the *Heading* style (right-click > **Modify**) and select the *Font* tab. Select a font and click **OK** (see Figure 163).

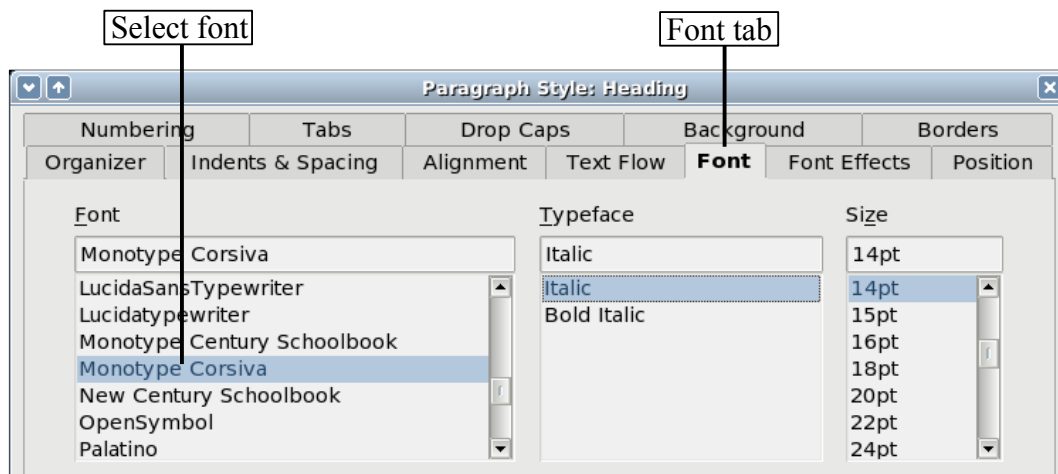


Figure 163. Select font for Heading style.

Now, the fonts of all the heading styles have been changed in a single operation. Your document should now resemble Figure 164.

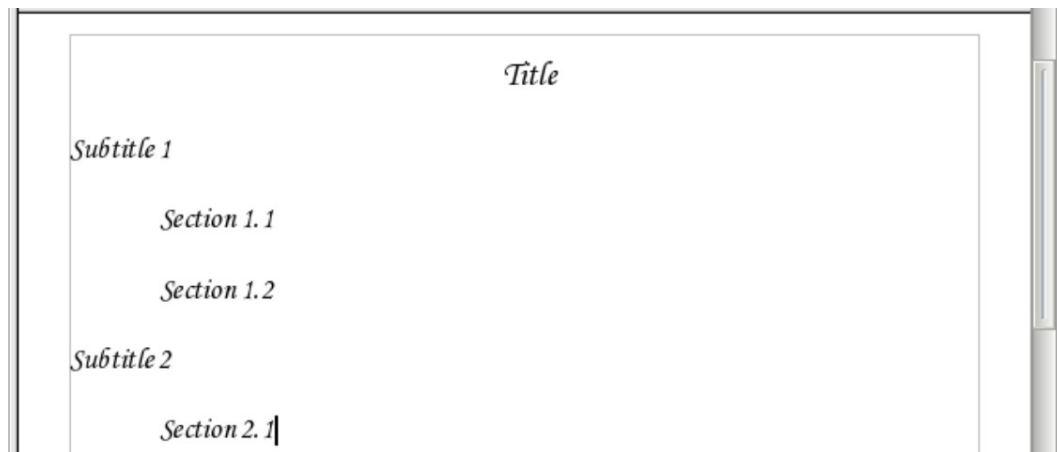


Figure 164. All Heading styles now have the new font.

## Creating custom styles

---

You have seen that the Styles and Formatting window provides several predefined styles, such as *Heading 1* and *Text body*. But what if you need something different, like a poem style, that is not in Styles and Formatting? With OpenOffice.org you can make your own styles to suit your needs.

In this section, we will create a *Poem* paragraph style, and a *Poem Header* paragraph style, with the following properties:

- *Poem*: Centered, with font-size 10.
- *PoemHeading*: Centered, bold, with font-size 12.

In addition, a *PoemHeading* is to be followed by a *Poem*. In other words, when you press *Enter*, the style changes to *Poem*.


---

**Note** The keen reader may have noticed this behavior already. After you type a heading and press *Enter*, the style switches back to *Text body*.

---

### Creating the *Poem* paragraph style

Our first example is the *Poem* style. We use the *Default* style as a starting point.

- 1) Click the **Styles and Formatting** icon  or press *F11*.
- 2) Click the **Paragraph Styles** icon (first from the left).
- 3) Right-click **Default** and choose **New** (see Figure 165).

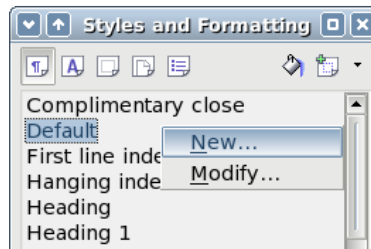


Figure 165. Create a new style.

This opens the Paragraph Style dialog box, with the *Organizer* tab selected. To create a custom style, you have to understand and configure the top three entries.

Style fields	Description
<b>Name</b>	This is the name of the style itself, like <i>Heading 1</i> or <i>Text body</i> . Set (type in the text box) the name to <b>Poem</b> .
<b>Next Style</b>	This is the default style that follows the <i>Poem</i> style. When you press <i>Enter</i> while typing text in the <i>Poem</i> style, this style is used. Set this value to <b>Poem</b> . When you press <i>Enter</i> , the text will remain in the <i>Poem</i> style.
<b>Linked with</b>	If the <i>Poem</i> style is linked with another, say <i>Default</i> , then any change in <i>Default</i> will affect <i>Poem</i> , just as you saw with <i>Heading</i> in the previous section. For our example, this is not the behavior we want. Set this entry to <b>None</b> –. This means that <i>Poem</i> is not linked with any other style.

After making these changes, your screen should look like Figure 166.

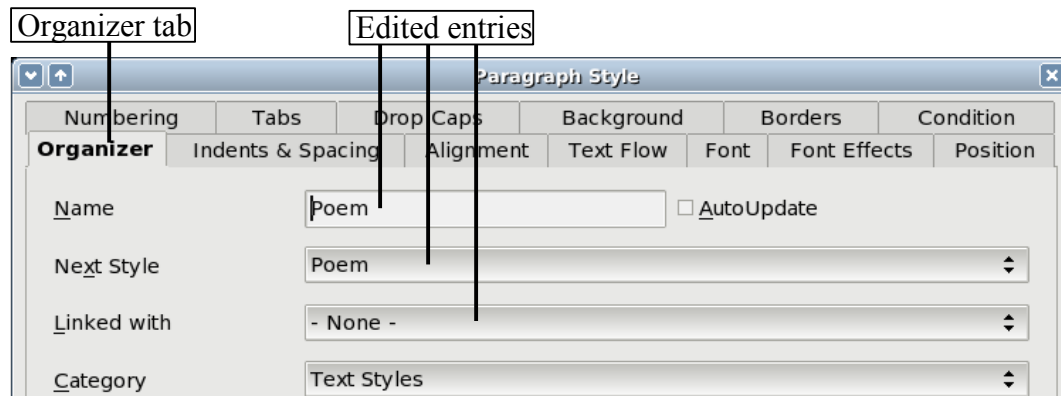


Figure 166. Initial configuration for the *Poem* style. Set the first three entries as shown.

The next step is to configure the alignment and font properties of this style.

- On the *Alignment* page, select the **Center** option.
- On the *Font* page, select **12pt** font-size.

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

Congratulations! You just made your very own style.

## Creating the *PoemHeading* style

Create a new *PoemHeading* style. Use the same procedure as before, with these changes:

- *Next style*: Select **Poem**, not **PoemHeading**.
- *Linked with*: **Heading**.

The window should look like Figure 167.

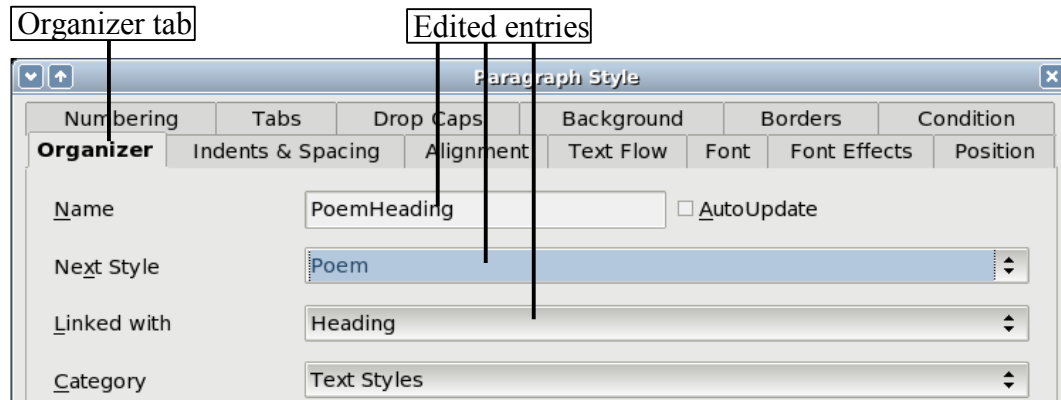


Figure 167. Settings for the *PoemHeading* style

Now set the settings of the new style:

- 1) On the *Alignment* page, select **Center**.
- 2) On the *Font* page, choose **Bold** and size **14pt**.

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

## Sample poem

It is a good idea to test out your new styles and see if you are happy with them. Your poem should look similar to the one in Figure 168.

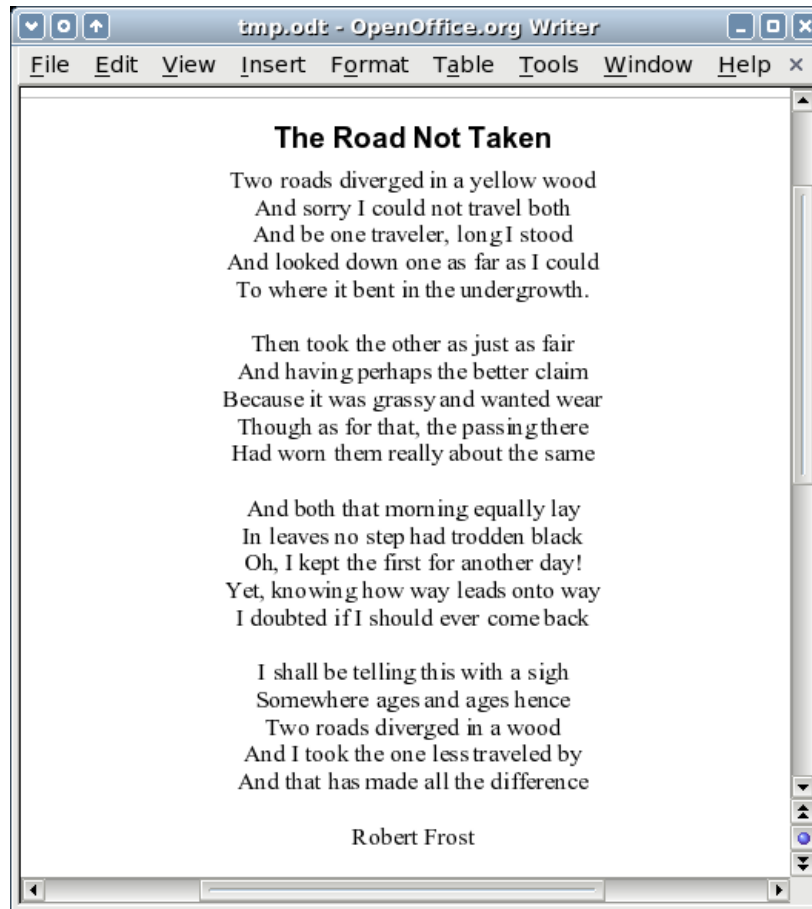


Figure 168. Sample poem



## Changing the formatting of your styles

One of the main advantages of styles is that they allow the document formatting to be changed after the content has been written. For example, suppose you have written a 100-page book of poetry. Then you decide you don't like the way the poems look after all. Or, perhaps, your publisher doesn't like it.

To learn about reconfiguring styles, we will make the following changes:

- The *Poem* style will be indented instead of centered.
- Add a *PoemAuthor* style based on *Poem*, except it is bold and has more indentation.

### Indent *Poem* and *Poem Header*

First, set the *Poem* style to left alignment:

- 1) In the Styles and Formatting window, select **Poem**, right-click and select **Modify**.
- 2) On the *Alignment* page, select **Left**.

Set the indentation:

- 1) Click the **Indents & Spacing** tab.
- 2) Under *Indent*, set the indentation before the text to **5cm** (or about 2in).

Done! Click **OK**, and you should see the text change. Do the same thing for *PoemHeading*.

### Create *Poem Author* style

The purpose of this style is to set apart the name of the author from the rest of the poem. You already know how to create a new style. Follow the same procedure as before (starting from the *Poem* style). Use the following configuration:

- *Name*: **PoemAuthor**
- *Next style*: **Default**
- *Linked with*: **Poem**

Now, configure *PoemAuthor* just like you configured *Poem*, with the following changes:

- *Font*: **Bold**
- On the *Indents & Spacing* page:
  - Under *Indent*, set the *Before text* field to **8.00cm** (3.2 in).
  - Under *Spacing*, set the spacing above the paragraph to **0.50cm** (0.2 in). This creates an extra space between the poem and the name of the author.

Figure 169 shows how the *Indents & Spacing* page should look at this point. Click **OK** to save the style. Now set the author of the poem (in the example, **Robert Frost**) to the newly created *PoemAuthor* style, as described in “First steps” on page 142.

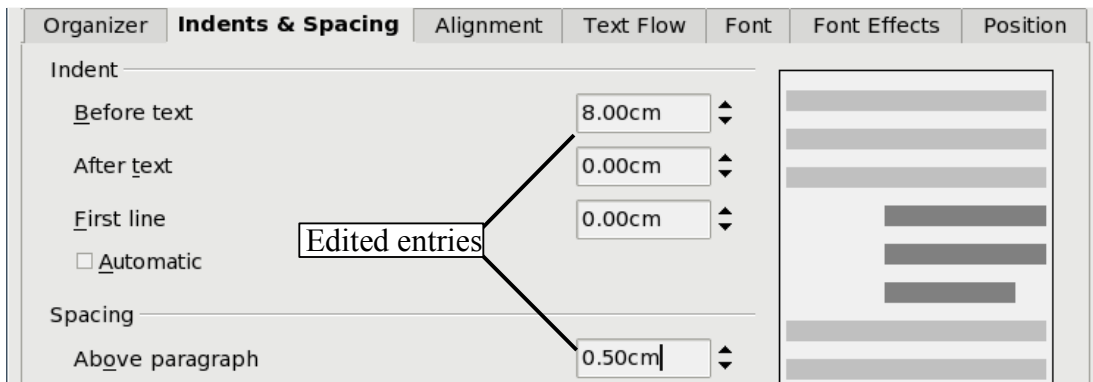


Figure 169. Indentation and spacing for the PoemAuthor style.

## Final result

After all these changes, the poem should look similar to Figure 170.

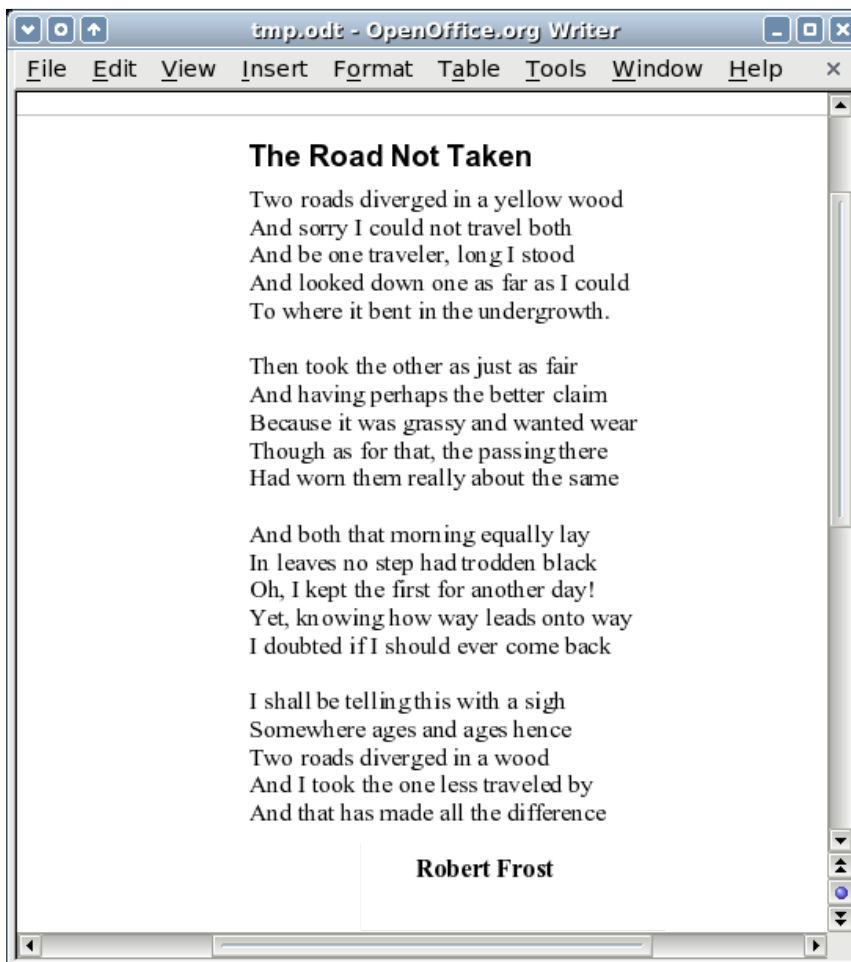


Figure 170. Final result, using three custom styles

## Tips and tricks

You can make the Styles and Formatting window display only custom styles. Click on the menu at the bottom of the Styles and Formatting window and select **Custom Styles**. As shown in Figure 171, Styles and Formatting only displays *Poem*, *PoemAuthor*, and *PoemHeading*.

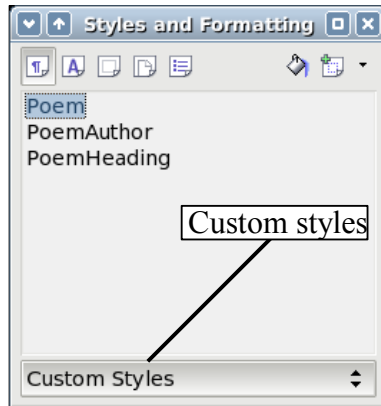


Figure 171. Displaying only custom styles

## Using page styles

Page styles are to pages what paragraph styles are to paragraphs. Just as paragraph styles can define paragraph properties (font size, color, and others), page styles can define page properties (margins, page size, header and footers, and others). However, unlike paragraphs, which can have directly applied properties, pages only have a page style and no directly applied properties.

### Real life situation

Christian is a lawyer from California, USA. For his letters, the first page has his letterhead, and subsequent pages only identify the recipient, the date, and the page number. Christian does this using page styles. He also uses page styles to comply with the spacing requirements (such as margins) for legal briefs in California State courts.


## What page style does a page have?

The page style for the current page is displayed on the status bar (Figure 172).



Figure 172. The current page style is displayed on the status bar.

## Modifying a page style

Open the Styles and Formatting window and click the **Page Styles** button .

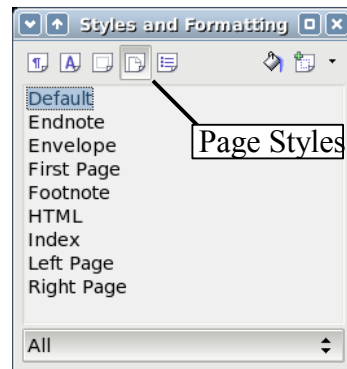


Figure 173. Selecting page styles.

Right-click the currently active page style (Figure 173) and select **Modify**. The resulting window is shown in Figure 174.

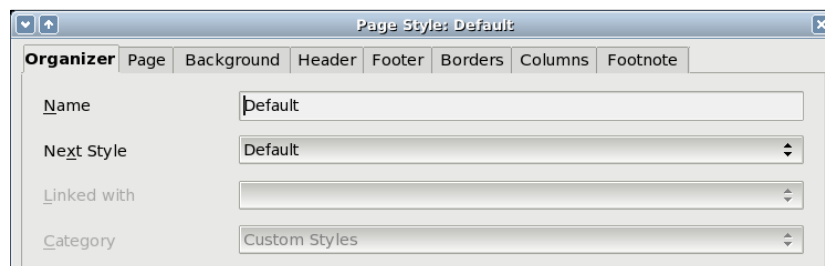


Figure 174. Page properties.

## Mirrored margins for facing pages

You can set up “mirrored” margins for facing pages within one page style. More complex differences between right and left pages may require separate page styles; these are discussed in Chapter 4, “Formatting Pages”.

To set up “mirrored” facing pages, go to the *Page* tab of the Page Style dialog box (Figure 175). Choose **Mirrored** for *Page layout* in the *Layout settings* section and set the inner and outer margins in the *Margins* section.

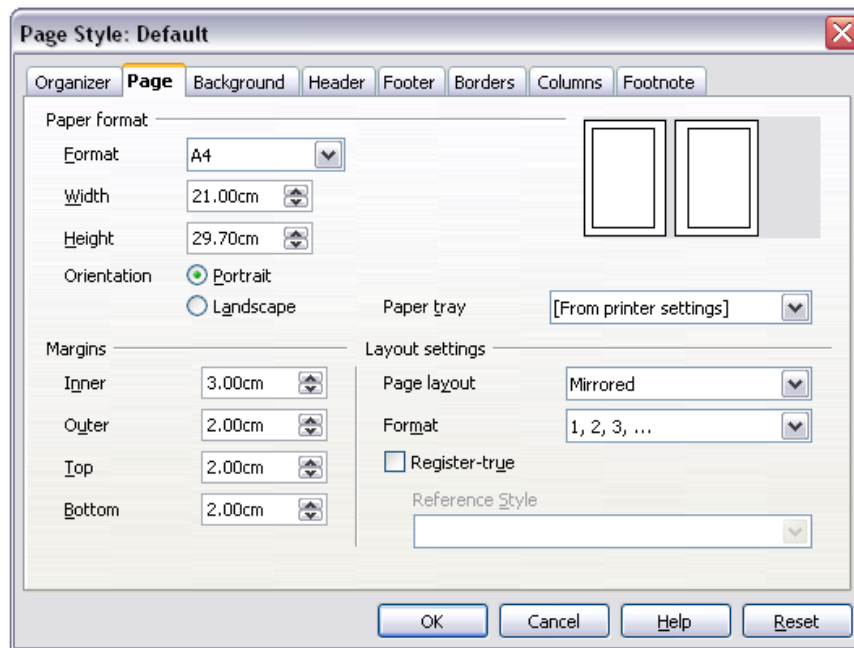


Figure 175. Setting up mirrored pages

## The Next Style property

You have seen the *Next Style* property in the context of paragraph styles. This property is especially powerful in page styles.

### Setting up a title page

Consider a common scenario: you want the document to have a title page that is different from the rest of the document:

- It should not have a header or page number.
- The left and right margins should be the same.

For the title page, we can use the *First Page* page style that comes with OOo, and for the rest of the document, we can use the *Default* page style.

Figure 176 shows the required flow of page styles. On the *Organizer* page of the *Default* page style, leave the *Next Style* property set to **Default**. On the *Organizer* page of the *First Page* style, make sure that the *Next Style* property is set to **Default**.

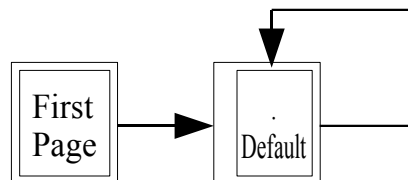


Figure 176. Flow of page styles

See “Inserting a header” on page 158 for instructions on setting up the page header.

## Manual page breaks

The *Next Style* property is enough for projects with straightforward pagination requirements (for example, reports, letterheads, and small books). But more complex projects require more control over page styles. *Manual page breaks* provide this control.

The idea is simple: you break a sequence of page styles and start a new sequence. To insert a page break, choose **Insert > Manual Break** and choose **Page break**. This section illustrates two scenarios where page breaks are useful.

### Example: Chapters

You are writing a book that is divided into chapters. Each chapter starts with a page style called *New Chapter*. The following pages use the *Default* page style. At the end of the chapter, we return to *New Chapter* for the next chapter.

OOo doesn't have a *New Chapter* style, so you must create a custom style (see page 147). Let's suppose that you already have the page styles with the following properties:

<b>Page style</b>	<b>Next Style</b>
New Chapter	Default
Default	Default

This can be seen visually in the flowchart in Figure 176, but where the *New Chapter* style replaces the *First Page* style.

At some point, you will want to start a new chapter. Follow these steps:

- 1) Put the cursor at the end of the chapter, on a blank line of its own.
- 2) Choose **Insert > Manual Break**. The Insert Break dialog box appears.
- 3) Under *Type*, choose **Page break** and under *Style*, select **New Chapter**.

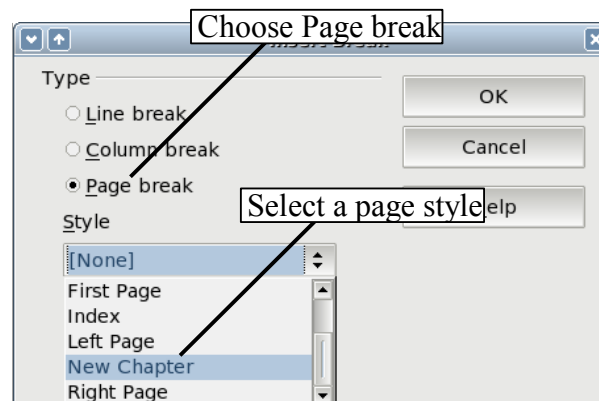


Figure 177. Choose Page break and select the *New Chapter* page style.

Figure 178 illustrates the flow of page styles when using page breaks.

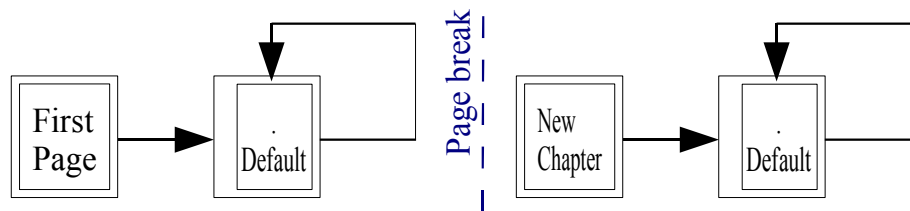


Figure 178. Page style flow using page breaks

### Example: Inserting a page with special formatting

Sometimes you may need to insert a page with special formatting. For example, a landscape page or a page with more columns. This can also be done with page breaks. Suppose that the current page has the *Default* page style.

- 1) Choose **Insert > Manual Break**.
- 2) Select the page style (say, *Special Page*) in the Insert Break dialog box.
- 3) Fill in the contents for this page. Then insert another page break.
- 4) Then select *Default* again. The pagination continues on as normal, except that one page has been replaced by a different page style.

This concept is illustrated in Figure 179.

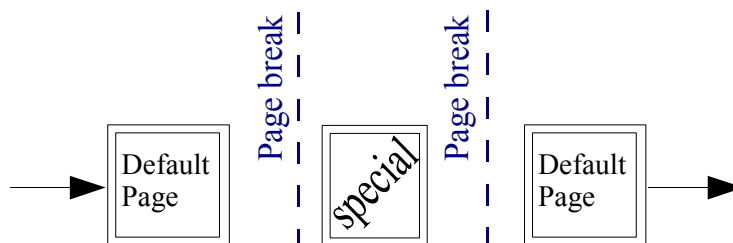


Figure 179. Inserting a page with special formatting

## Page numbering

Many people first encounter page styles when they want to number pages. OpenOffice.org has a powerful system for numbering pages.

### Preliminaries: fields

OpenOffice.org uses a feature called *fields* to manage page numbers. To insert a page number field, position the cursor where you want to insert the number and choose **Insert > Fields > Page Number**. The page number appears with a gray background. The gray background denotes a field.

---

**Note** The gray background is simply there to denote a field. This background is not printed. Choose **View > Field Shadings** (or press *Ctrl+F8*) to turn this feature off.

---

If you have seen lists in OOo, you might have noticed this gray background. OOo lists use fields. The page number field always displays the page number for the current page. If you see the words “Page number” instead of a number, press *Ctrl+F9*. This shortcut key toggles OOo between displaying the field’s *contents* (what the field is for) and the field’s *results* (what the field creates).

---

**Note** For a full introduction to fields, see Chapter 14, “Working with Fields”.

---

## Inserting a header

In OOo, headers are specified by page styles.

- 1) Open the Page Style dialog box for the desired page style (right-click > **Modify**).
- 2) Select the **Header** tab.
- 3) Under *Header*, check **Header on** and click **OK** (see Figure 180).

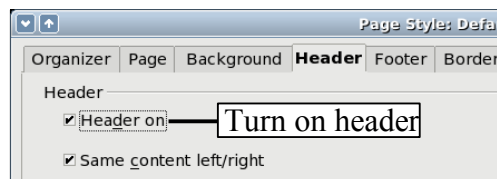


Figure 180. Turn on page header.

At this point you should see the (empty) header on the current page, as in Figure 181.

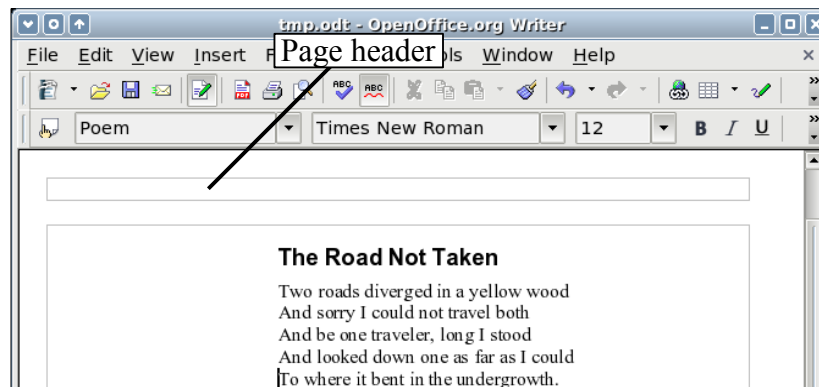


Figure 181. A page with a page header

*What’s so special about headers?* The same text in the header appears on *all* pages with that page style. (You can experience this yourself by entering some text into the header.) This property of headers (or footers), along with fields, forms the basis of OOo page numbering.

---

**TIP** You can also add a header through the Insert menu: **Insert > Header > [page style]**. Likewise, for footers: **Insert > Footer > [page style]**.

---



**Caution**

The Insert Menu can also be used for *deleting* a preexisting header or footer for a page style. If that page style has a check mark in front of it, pointing to it will open an OOO dialog box warning about this and asking whether you want to delete the header or footer for that particular page style.

## Simple page numbering

The simplest case is to have the page number at the top of every page and nothing more. To do this, put the cursor on the header and select **Insert > Fields > Page Number** (Figure 182).

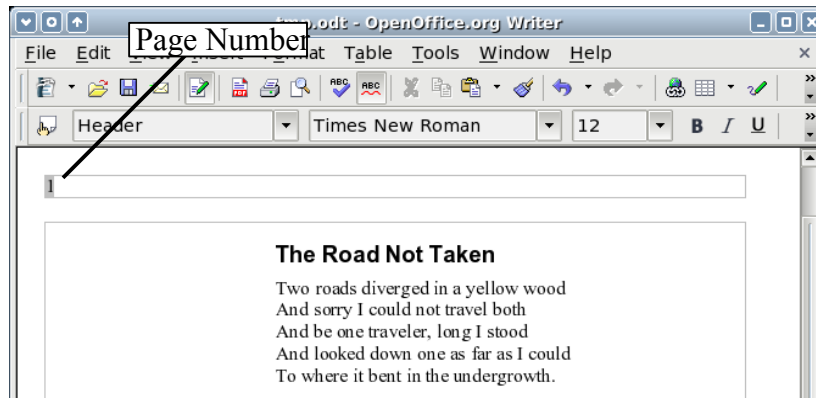


Figure 182. Page number inserted in the header

Presto! Now, the correct page number appears on every page.

## More complex variations

There are a lot of interesting variations that you can apply without further knowledge of page styles. Here are some suggestions:

- Right-align the header to make the page number appear on the top-right:
  - Place the cursor in the header.
  - Click the **Align Right** icon (or right-click anywhere in the header and select **Alignment > Right**).
- Add (type) the word *page* so the header reads **page 1**, **page 2**, and so on. This also requires using the *Page Number* field, discussed earlier (page 157).
- Add the document title so the header reads, for example: **Joe's favourite poems**, left justified, and **page x** with right justification, where x is the value of the *Page Number* field. Consider using a tab to separate the title from the page number.
- OOO also has a *Page Count* field (**Insert > Fields > Page Count**). Using it, you could, for example, have a header that reads **page 2 of 12**.

These variations are all illustrated in Figure 183.

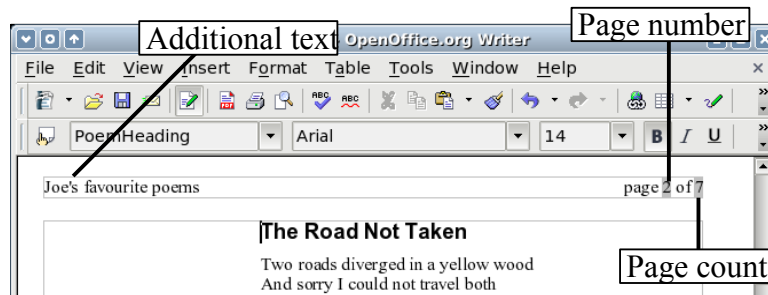


Figure 183. Variations on the simple page numbering method

Many more variations are possible. For example, you can use a footer instead of a header to make the page number appear at the bottom of the page.

### Example: Restart page numbering: a preface

Some times you want to reset the page number back to 1. A typical example is the preface for a book. A standard preface has the following properties:

- Page numbers are displayed in Roman numerals (i, ii, iii, iv, ...).
- After the preface, the document starts on a *Default* page.
- The page number resets to 1, and the number format becomes Arabic (1, 2, 3, 4, ...).

Resetting the page number requires page breaks.

First, let's get the preliminary work done for the *Preface* style:

- 1) Create a new page style and name it *Preface*.
- 2) Set its *Next Style* to **Preface** because a preface could span multiple pages.
- 3) Add a header to *Preface* and insert the *Page Number* field. Make the page numbers display as Roman numerals (i, ii, iii, iv, ...):
  - 1) Open the page style window for *Preface* (if not already open) and click the **Header** tab. Check **Header on** under *Header*.
  - 2) Click the **Page** tab. Under *Layout settings*, in the *Format* drop-down list, set the format to **i, ii, iii, ...**. (See Figure 184.) Click **OK** to close the dialog box.

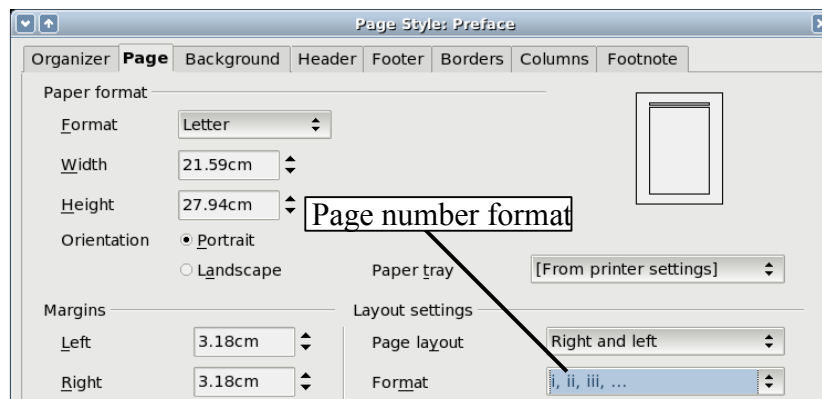


Figure 184. Set page number format to Roman numerals.

After the preface is written, we are ready to restart the page numbering in the main body of the document to Arabic numerals. Follow these steps:

- 1) Make an empty paragraph at the very end of the preface.
- 2) Put the cursor on the blank line.
- 3) Choose **Insert > Manual Break**.
- 4) Select **Page break** and choose the *Default* style.
- 5) Select the **Change page number** check box and set the new value to **1**. Click **OK** to close the dialog box.

These settings are shown in Figure 185.

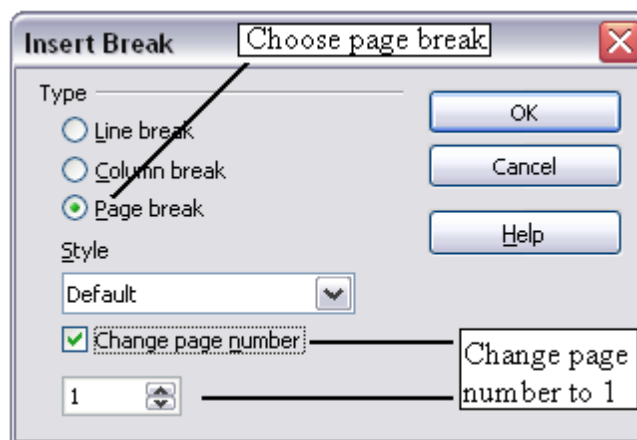


Figure 185. Set the new page number to 1 and the page style to Default.

---

**Note** You cannot assign an odd page number to a left page or an even page number to a right page. OOo strongly adheres to the convention that odd page numbers go on right-hand pages and even page numbers on left-hand pages.

---

This change is also reflected on the status bar. The *Page* section of the status bar now includes both the total page count and the entry of the page number field (Figure 186).

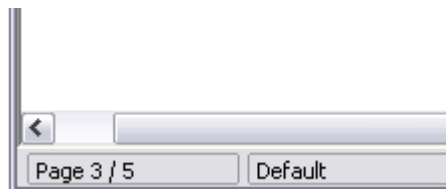


Figure 186. Page number in the status bar

### Example: Different headers on right and left pages

When you insert a header on a page style set up for mirrored pages or right-and-left pages, you can have the contents of the header be the same on all pages or be different on the right and left pages.

To allow different content in headers, clear the **Same content left/right** check box in the *Header* area on the *Header* page of the Page Style dialog box (Figure 187).



Figure 187. Different header content

Now, you can put the page number on the left-hand edge of the left pages and on the right-hand edge of the right pages, put the document title on the right-hand page only, or make other changes. Figure 188 shows an example.

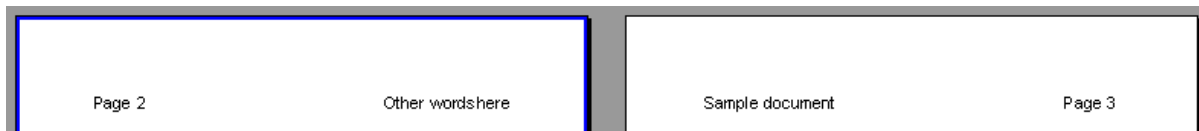


Figure 188. Different content on left and right pages

## Using character styles

Character styles are a complement to paragraph styles. Like paragraph styles, they define text properties (font, weight, size), but they are applied to blocks of text smaller than a paragraph. For example, you can use the *Emphasis* character style to emphasize a word. A couple of character styles used in this document include:

- Key strokes use the custom *OOoKeyStroke* style. For example, “to set OOo to full screen, press *Control+Shift+J*”.
- Menu paths use the custom *OOoMenuPath* style. For example, “to turn field shadings on or off, choose **View > Field Shadings**”.

### Why use character styles?

Beginning OOo users often wonder, “*Why use character styles?*” or “*How is this different from pressing the bold icon to change the font typeface?*”. The following real life event illustrates the difference.

### Real life situation

Jean is a technical writer from Australia. She learned the value of character styles after her publisher told her to unbold menu paths in her 200 page book. Jean had *not* used character styles. She had to edit all 200 pages by hand, with some help from **Find & Replace**.


This was the last time Jean failed to use character styles.

Character styles do not have as many options as paragraph styles or page styles. Their benefits are of a different nature:

- **Formatting changes**  
As Jean's story illustrates, the ability to make formatting changes throughout a document can be important. Character styles provide this.
- **Consistency**  
Character styles help ensure that typesetting guidelines are applied consistently.
- **Focus on content**  
“*Was I supposed to bold keystrokes? How about menus?*”  
A writer shouldn't have to remember the answers to these questions. Typesetting details distract you from the real content of your work. A properly named custom character style (such as *OOoKeyStroke* or *OOoMenuPath*) will remove this burden from you.

Other ways of using character styles are described elsewhere in the *Writer Guide*. These uses include making chapter numbers, page numbers, or list numbers larger than the surrounding text and formatting hyperlinks.

## Applying character styles

Open the Styles and Formatting window (press *F11*) and click the second button in the top bar . The list of available character styles is displayed. To apply a character style, follow these steps:

- 1) Select the block of text where you wish to apply the style.
- 2) Double-click the appropriate character style in the Styles and Formatting window.

Some examples include:

This example uses the OOo-supplied *Strong Emphasis* character style.

**Definition:** A statement describing the meaning of a word or phrase.

---

**Note** One difference between character styles and paragraph styles is the need for selecting text (highlighting). Character styles require you to select the text you want to apply them to; paragraph styles do not.

---

## Unset/undo character styles

Sometimes, you will want to remove the formatting from a block of text. *You must resist the temptation to do this manually.* This will only cause trouble down the road. There are two easy ways to remove character formatting:

- Select the block of text, right-click and choose **Default Formatting**.
- If you have the Styles and Formatting window open, select the block of text and double-click the *Default* character style.

---

**Note**     The first method also works for removing manual formatting.

---

## Migrating to character styles

For people accustomed to formatting text manually, character styles can take some getting used to. Here are some suggestions for making the transition easier:

- *Never* mix character styles and manual formatting. Manual formatting supersedes character styles. If you combine them, you may end up wasting hours in frustration trying to figure out why your character styles don't work.
- Right-clicking and choosing **Default Formatting** removes any text formatting (both manual and character styles).
- Realize that clicking the **Bold** icon in the toolbar *is not easier* than double-clicking on a character style that is preset for bolding the font typeface.
- Leave the Styles and Formatting window open to make character styles easy to access.



*Chapter 7*  
*Working with Styles*

## Introduction

---

A *style* is a set of formats that you can apply to selected pages, text, frames, and other elements in your document to quickly change their appearance. When you apply a style, you apply a whole group of formats at the same time.

OpenOffice.org Writer supports the following types of styles:

- *Page styles* include margins, headers and footers, borders, and backgrounds.
- *Paragraph styles* control all aspects of a paragraph's appearance, such as text alignment, tab stops, line spacing, borders, and character formatting.
- *Character styles* affect properties of the selected text within a paragraph, such as the font and size of text and bold and italic formats.
- *Frame styles* are used to format graphic and text frames, including borders, backgrounds, columns, and how text wraps around the frame.
- *List styles* apply similar alignment, numbering or bullet characters, and fonts to numbered or bulleted lists.

OpenOffice.org (OOo) comes with many predefined styles. You can use the styles as provided, modify them, or create new styles, as described in this chapter.

The importance of styles in OpenOffice.org is covered in Chapter 6, "Introduction to Styles". That chapter also introduces three of the five types of styles in Writer (page, paragraph, and character), and it describes how and why to use them in Writer documents.

This chapter describes the general use of styles in Writer and provides more examples of using all five types of styles.

## Applying styles

---


In order to use a style in OpenOffice.org, you need to *apply* it. OOo provides several ways to apply styles:

- Using the Styles and Formatting window.
- Using Fill Format mode.
- Using the Apply Style list.
- Assigning styles to shortcut keys.
- Using AutoFormat (see Chapter 3, "Working with Text").
- Using conditional styles (see page 185).



## Using the Styles and Formatting window

1) To open the Styles and Formatting window (Figure 189), do *any one* of the following:

- Click on the  icon located at the left-hand end of the object bar.
- Choose **Format > Styles and Formatting**.
- Press *F11*.

---

**TIP** You can move the Styles and Formatting window to a convenient position on the screen or dock it to an edge.

---

- 2) Click on one of the icons at the top left of the Styles and Formatting window to display a list of styles in a particular category, such as paragraph or character.
- 3) To apply a character style to existing text, select the text and then double-click on the name of the style in the *Character Styles* list. To apply any other style, put the cursor in the paragraph, frame, or page you want to modify and double-click on the name of the style. You can select more than one paragraph or frame and apply the same style to all of them at the same time.

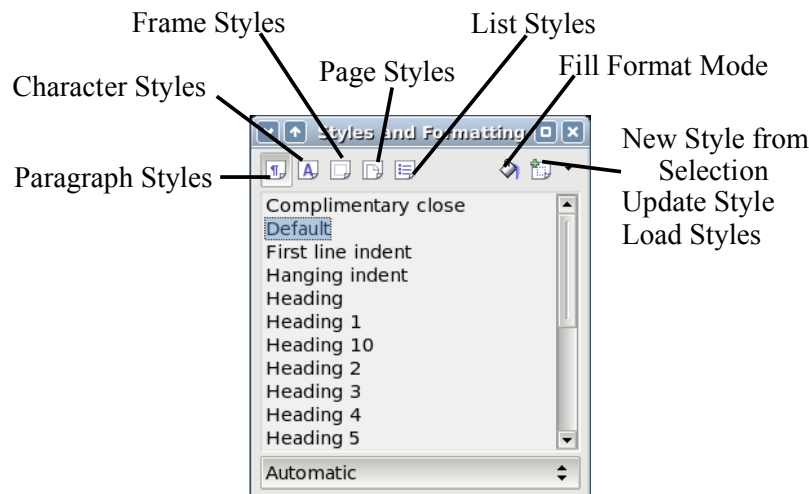


Figure 189: Styles and Formatting window for Writer


---

**TIP** At the bottom of the Styles and Formatting window is a drop-down list. In Figure 189 it shows **Automatic**, meaning the list shows only the styles that are applied automatically by OOo. You can choose to show all styles or other groups, such as custom styles.

---

## Using Fill Format mode

Use Fill Format to apply a style to many different areas quickly without having to go back to the Styles and Formatting window and double-click every time. This method is useful for formatting many scattered paragraphs, words, or other items with the same style, and it may be easier to use than making multiple selections first and then applying a style to all of them.

- 1) Open the Styles and Formatting window (Figure 189) and select a style.
- 2) Click the **Fill Format Mode** icon 
- 3) To apply a paragraph, page, or frame style, hover the mouse over the paragraph, page, or frame and click. To apply a character style, hold down the mouse button while selecting the characters. Clicking on a word applies the character style for that word. Repeat step 3 until you made all the changes for that style.
- 4) To quit the Fill Format mode, click the icon again or press the *Esc* key.

---

**Caution** When this mode is active, a right-click anywhere in the document undoes the last Fill Format action. Be careful not to accidentally right-click and mistakenly undo actions you want to keep.



## Using the Apply Style list

When a style is in use in a document, the style name appears on the *Apply Style* list (Figure 190) at the left end of the object bar, to the right of the *Styles and Formatting* icon.

To apply a style from this list, click on the desired style or use the up or down arrow keys to move through the list, then press *Enter* to apply the highlighted style.

---

**TIP** Select **More...** at the bottom of the list to open the Styles and Formatting window.

---

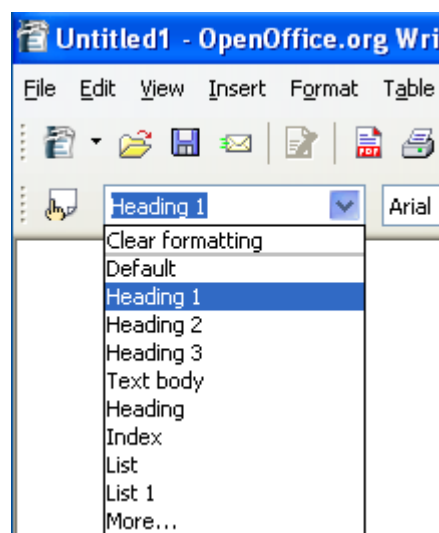


Figure 190: The Apply Style list

## Assigning styles to shortcut keys

New in 2.0

In OOO 2.0 you can configure shortcut keys to assign styles in your document. Some shortcuts are predefined, such as *Ctrl+1* for the *Heading 1* paragraph style and *Ctrl+2* for *Heading 2*.

OOo provides a set of predefined keyboard shortcuts that allow you to quickly apply styles. You can modify these shortcuts and create your own.

- 1) Click **Tools > Customize > Keyboard**.
- 2) On the *Keyboard* page of the Customize dialog box (Figure 191), choose the shortcut keys you want to assign a style to. In this example, we have chosen *Ctrl+9*.

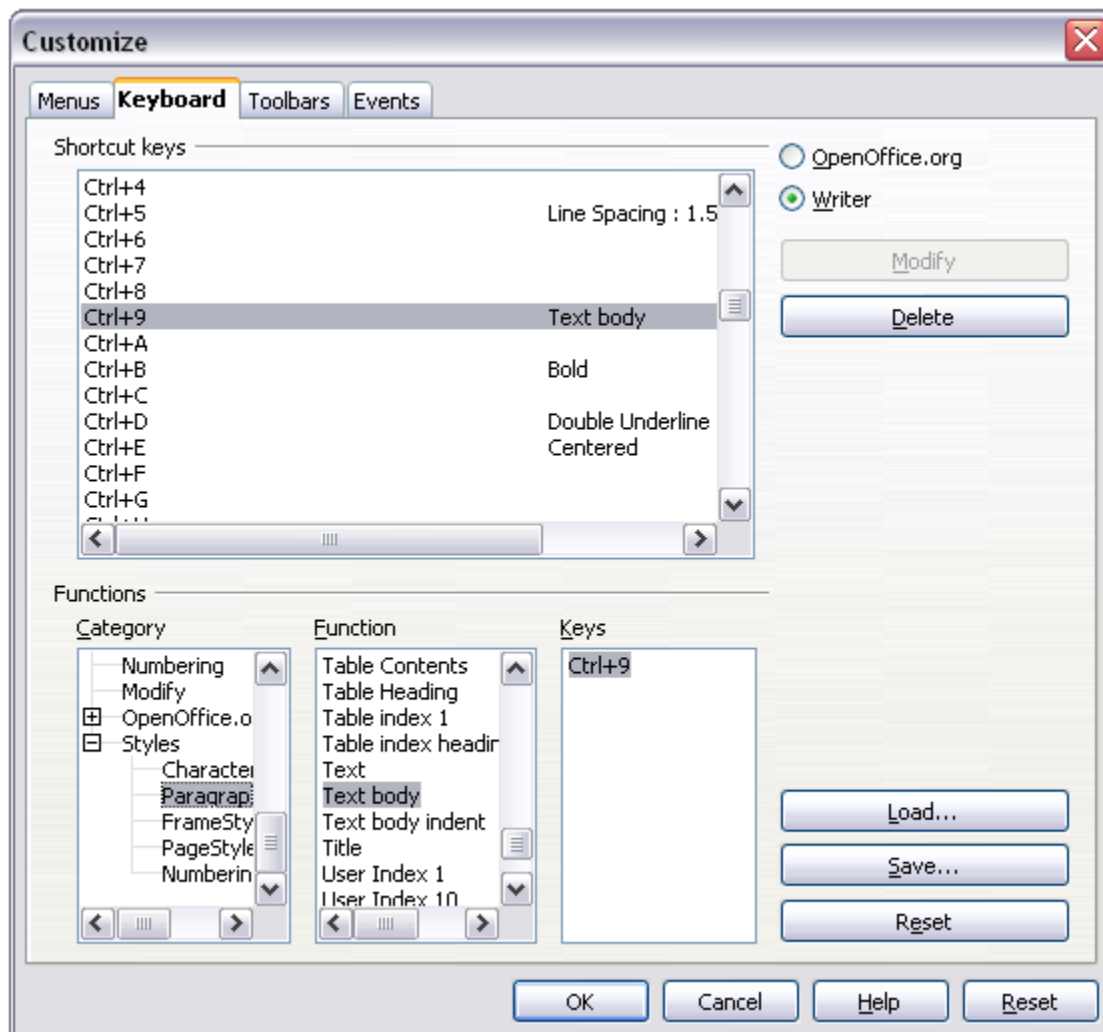


Figure 191. Defining keyboard shortcuts for applying styles

- 3) In the *Functions* section at the bottom of the dialog box, scroll down in the *Category* list to **Styles**. Click the + sign to expand the list of styles.

- 4) Choose the category of the style. The *Function* list will display the names of the available styles for the selected category. The example in Figure 191 shows some of OOO's predefined paragraph styles.
- 5) To assign **Ctrl+9** to the *Text Body* paragraph style, select **Text Body** in the *Function* list, and then click **Modify**. **Ctrl+9** now appears in the *Keys* list.
- 6) When you are done assigning shortcuts, click **OK** to close the dialog box.

Currently, the only way to use *Alt* key or multi-key combinations is through a macro. See [AltKeyHandler.sxw](#) and [KeyHandler.sxw](#), available from <http://homepages.paradise.net.nz/hillview/OOO/>.

## Modifying styles

---

OpenOffice.org provides several ways to modify styles:

- Change a style using the Style dialog box
- Update a style from a selection
- Use AutoUpdate (paragraph and frame styles only)
- Load or copy styles from another document or template

You can change both predefined and custom (user-created) styles.

---

**TIP** Any changes made to a style are effective only in the current document. To change styles in more than one document, change the template (see Chapter 10, “Working with Templates”) or copy the styles into the other documents as described in “Copying and moving styles“ on page 174.

---

### Changing a style using the Style dialog box

To change an existing style using the Style dialog box, right-click on the style in the Styles and Formatting window and select **Modify** from the pop-up menu.

The dialog box displayed depends on the type of style selected. Figure 192 shows an example of the dialog box for a paragraph style. Each style's dialog box has several tabs. Some properties on these dialog boxes are described later in this chapter.

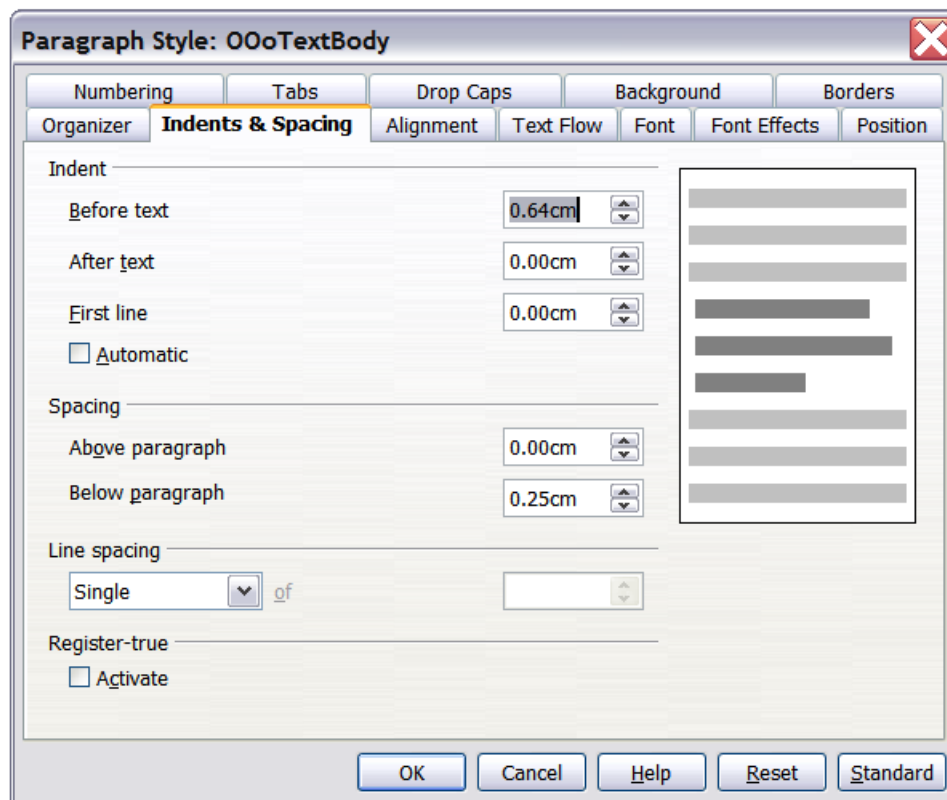


Figure 192: Example of Paragraph Style dialog box

## Updating a style from a selection

Let's use paragraph styles as an example.

- 1) Open the Styles and Formatting window.
- 2) Create a new paragraph (or modify an existing paragraph) and edit all the properties you want to go into the style (such as indentation, font properties, alignment, among others).

---

### Caution



Make sure that there are unique properties in this paragraph. For example, if there are two different font sizes or font styles, that particular property will remain the same as before.

---

- 3) Select the paragraph by clicking anywhere in the paragraph.
- 4) In the Styles and Formatting window, select the style you want to update (single-click, not double-click) and then click on the **New Style from Selection** icon and select **Update Style** (see Figure 193).

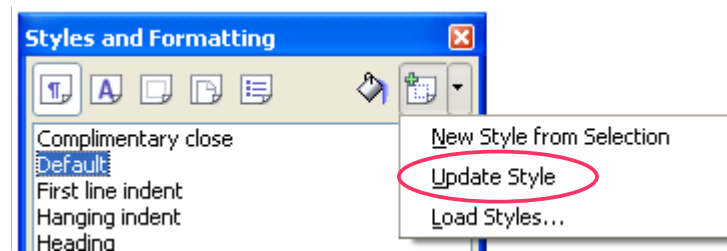


Figure 193. Updating a style from a selection

The procedure to update another type of style (like character, page, or frame styles) is the same. Just select the item in question, select the style you want to update, and choose **Update Style**.

## Using AutoUpdate (paragraph and frame styles only)

If the **AutoUpdate** checkbox is selected on the *Organizer* page of the Paragraph Style or Frame Style dialog box, applying direct formatting to a paragraph or frame using this style in your document automatically updates the style itself.

---

**TIP** If you are in the habit of manually overriding styles in your document, be sure that AutoUpdate is **not** enabled.

---

## Updating styles from another document or template

You can update styles by copying or loading them from a template or another document. See “Copying and moving styles” on page 174.

## Creating new (custom) styles

---

In addition to using the predefined styles provided by OOo, you can add new custom (user-defined) styles. OOo provides three ways to add styles.

- Create a new style using the Style dialog box.
- Create a new style from a selection.
- Drag and drop a selection to create a new style.

### Creating a new style using the Style dialog box

Open the Styles and Formatting window (Figure 189). Right-click on a style and select **New**. The style that you choose will be the basis for this new style. If you do not want too many of the options preset for you, choose the *Default* style.

The dialog box displayed depends on the type of style selected. Figure 194 shows an example of a Style dialog box for a new paragraph style. The dialog boxes and choices for defining new styles are the same as for modifying existing styles.

---

**TIP** An exception to the above rule is conditional styles, which have a different dialog box. See “Working with conditional paragraph styles” on page 185 for more information.

---

## Linking styles

You can *link* a new style to an existing style. For example, suppose that the style *mystyle* specifies a font size of 12. Then you create another style (*mystyle2*) linked to *mystyle* and specifies underlined text. If you modify *mystyle* to font size 20, *mystyle2* inherits the new font size but still underlines the text.

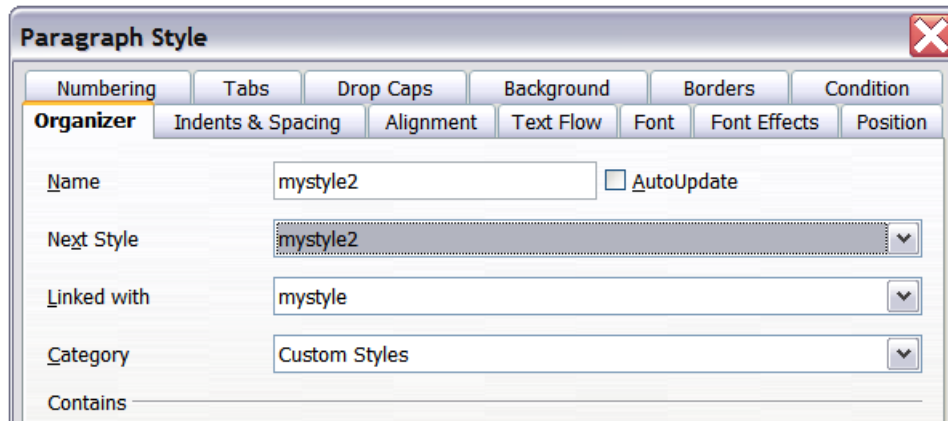


Figure 194: Linking a new paragraph style to an existing style

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**TIP** If styles are linked, changing the base style changes all the linked styles. Sometimes this is exactly what you want; other times it is not. It pays to plan ahead. Many predefined styles are already linked to other styles.

---

## Creating a new style from a selection

You can create a new style from the formatting of an object in the current document. For instance, you can change the formatting of a paragraph or frame until it appears as you like, and then you can turn that object’s formatting into a new style. This procedure can save time, because you do not have to create a new style as described above and remember all of the formatting settings.

- 1) Change the formatting of the object (paragraph, frame, etc) to your liking.
- 2) Open the Styles and Formatting window. From the icons at the top of the window, choose the type of style to create (paragraph, character, and so on).
- 3) In the document, select the item to save as a style.
- 4) In the Styles and Formatting window, click the **New Style from Selection** icon.
- 5) In the Create Style dialog box, type a name for the new style. The list shows the names of existing custom styles of the selected type, if any. Click **OK** to save the new style.

## Dragging and dropping a selection to create a style



In OOo 2.0 it is possible to drag-and-drop a text selection into the Styles and Formatting window to create a new style.

- 1) Open the Styles and Formatting window.
- 2) Select some text and drag it to the Styles and Formatting window.
- 3) In the Create Style dialog box, type a name for the new style. The list shows the names of existing custom styles of the selected type, if any. Click **OK** to save the new style.
- 4) If the Paragraph Styles list is showing in the Styles and Formatting window, a new paragraph style will be added to the list. If Character Styles are active, the character style will be added to the list.

## Copying and moving styles

When you create a style in a document, it is available only within that document. Styles always stay with a document. So, for example, if you e-mail a document to another person, the styles go with it.

Having created a style, you may want to transfer the style to another document. You can copy or move styles from one template or document to another in two ways:

- Using the Template Management dialog box
- Loading styles from a template or document

### Using the Template Management dialog box

To copy or move styles using the Template Management dialog:

- 1) Click **File > Templates > Organize**.
- 2) At the bottom of the Template Management dialog box (Figure 195), choose either **Templates** or **Documents**, as needed. For example, if you are copying styles between two documents, both entries should say Documents.



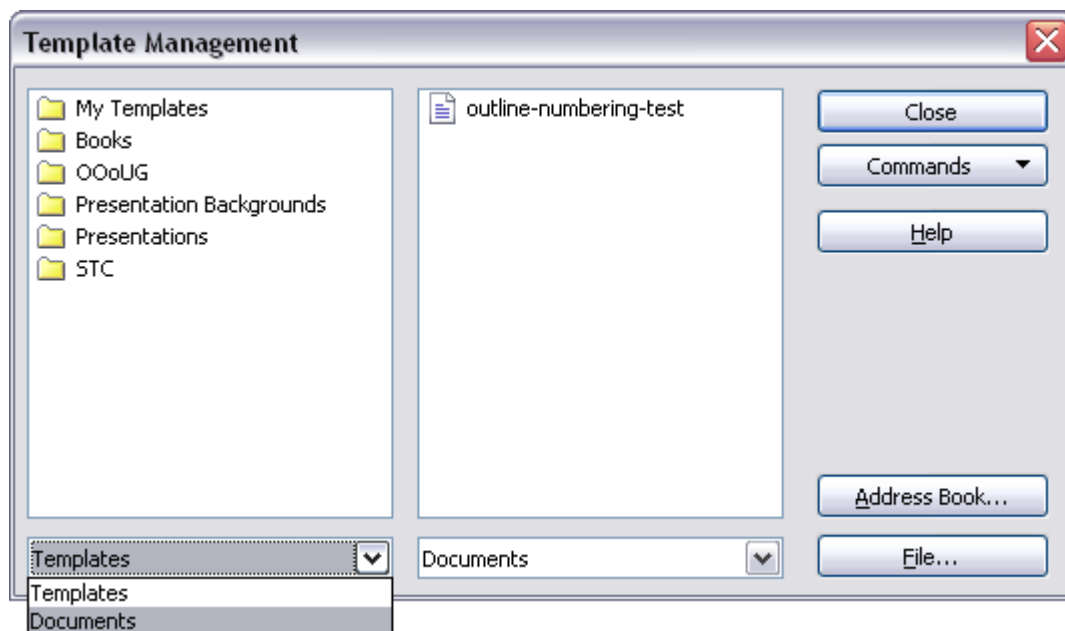


Figure 195: Choosing to copy styles from a document, not a template

- 3) To load styles from a file, click the **File** button. When you return to this window, both lists show the selected file as well as all the currently open documents (Figure 196).

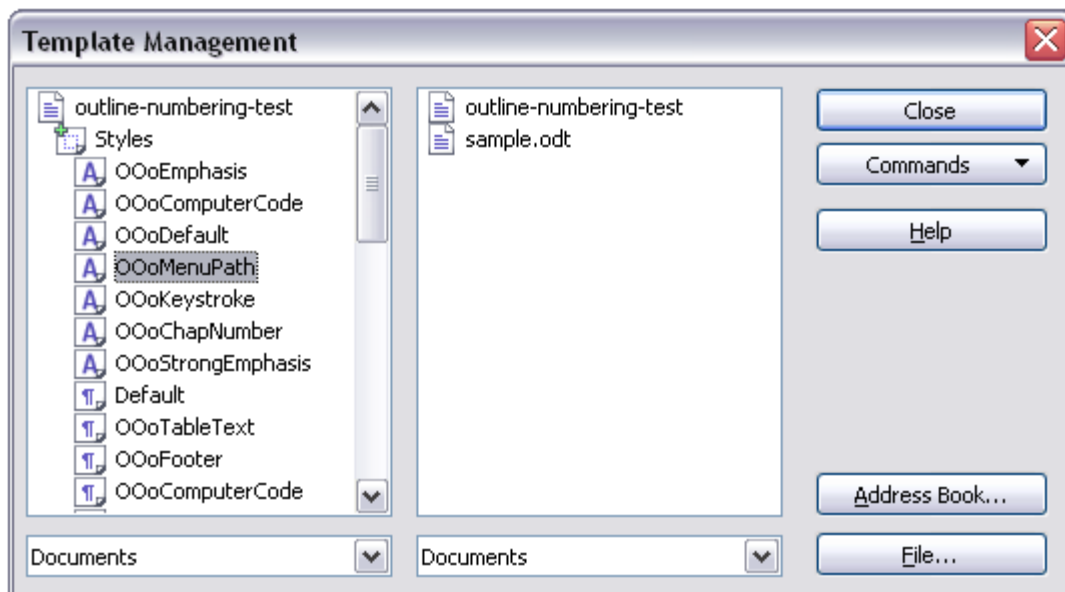


Figure 196: Copying a style from one document to another

- 4) Double-click on the name of the template or document, and then double-click the **Styles** icon to show the list of individual styles.
- 5) To *copy* a style, hold down the *Control* key and drag the name of the style from one list to the other.

To *move* a style, do not use the *Control* key while dragging. The style will be deleted from the list you are dragging it from.

- 6) Repeat for each style you want to copy or move. When you are finished, click **Close**.

## Loading styles from a template or document

You can copy styles by loading them from a template or another document. This method copies all styles, or groups of styles, at one time.

- 1) Open the document to copy styles into.
- 2) In the Styles and Formatting window, click on the **New Style from Selection** icon, and then on **Load Styles** (see Figure 193).
- 3) In the Load Styles dialog box (Figure 197), find and select the template to copy styles from. Or click on **From File** and select a document.
- 4) Select the checkboxes for the types of styles to be copied. If you select **Overwrite**, the styles being copied will replace any styles of the same names in the target document.
- 5) Click **OK** to copy the styles.

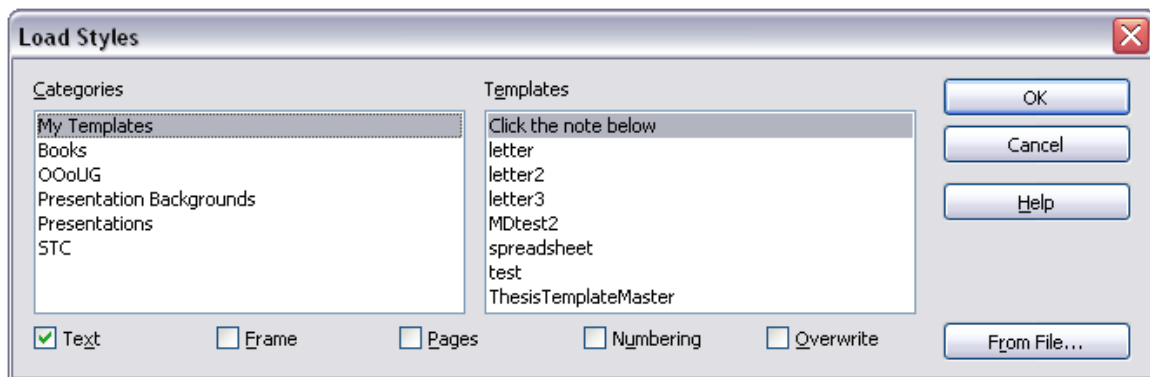


Figure 197: Loading styles from a template

## Deleting styles

It is not possible to delete OOo's predefined styles from a document or template, even if they are not in use. However, custom styles can be deleted.

To delete an unwanted style, right-click on it in the Styles and Formatting window and choose **Delete**. If the style is in use, the message shown in Figure 198 appears.

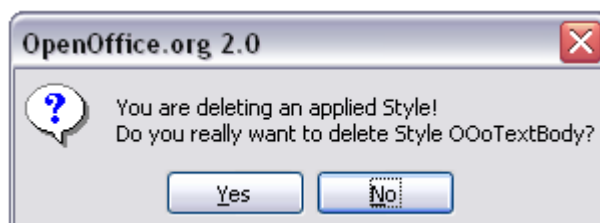


Figure 198. Deleting an applied style

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**Caution**



Make sure the style is not in use before deletion. Otherwise, all objects with that style will return to the default style and retain their formatting as manual formatting. This can be very problematic in a long document

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**TIP**

If an unwanted style is in use, use **Find & Replace** to replace it with a substitute style before deleting it.

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If the style is not in use, the message shown in Figure 199 appears.

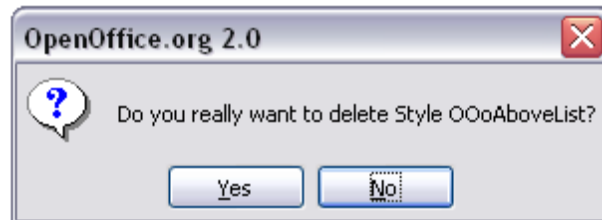


Figure 199. Deleting a style that is not in use

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## Working with paragraph styles

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Chapter 6, “Introduction to Styles”, covers the basics of using paragraph styles. This chapter looks at some advanced properties of paragraph styles and ways that you can use other features in OOO in conjunction with paragraph styles to do specific tasks like:

- Controlling page breaks
- Controlling tab stops
- Specifying a relative font size
- Selecting a language for a paragraph style
- Rotating the text in a paragraph style
- Kerning text (a feature that adjusts the letter spacing to make text more readable)
- Using styles in outlining
- Using conditional paragraph styles

### Controlling page breaks

Writer automatically flows text from one page to the next. If you do not like the default settings, you can change them on the *Text Flow* page of the Paragraph Style dialog box.

### Automatic page or column breaks

The *Options* section of the *Text Flow* page (Figure 200) of the Paragraph Style dialog box provides settings to control what happens when a paragraph does not fit on the bottom of a page:

**Do not split paragraph** means that the paragraph is never split across two pages. If it does not fit on the bottom of one page, the entire paragraph moves to the top of the next.

**Keep with next paragraph** is appropriate for headings or the lead-in sentence to a list, to ensure that it is not the last paragraph on a page.

**Orphan control** and **Widow control**. Widows and orphans are typographic terms. An *orphan* is the first line of a paragraph printed alone at the bottom of a page or column. A *widow* is the last line of a paragraph which appears alone at the top of the next page or column. Use these options to allow paragraphs to split across pages or columns but require at least 2 or more lines to remain together at the bottom or top of a page or column. You can specify how many lines must remain together.



Figure 200: Options for controlling automatic page or column breaks

### Required page or column breaks

You can require a paragraph to start on a new page or column and specify the style of the new page. A typical use is for chapter titles that you always want to start on a new page. This topic is covered in more detail in Chapter 4, “Formatting Pages”.

On the *Text Flow* page of the Paragraph Style dialog box:

- 1) In the *Breaks* section, select **Insert**. Make sure that *Type* is set to **Page** and *Position* to **Before**.
- 2) Select **With Page Style** and choose the page style from the list.
- 3) To continue page numbering from the previous chapter, leave *Page number* set at **0**. To start each chapter’s page numbering at 1, set *Page number* to **1**.
- 4) Click **OK**.

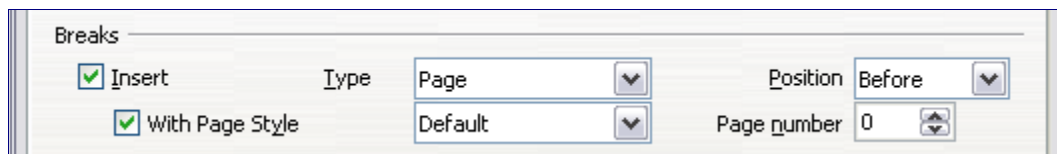


Figure 201: Setting a paragraph style to always start on a new page

## Controlling tab stops

Using tabs to space out material on a page is not recommended (depending on what you are trying to accomplish, a borderless table is usually a better choice), but if you do use tabs, do not use the default tabs set in **Tools > Options > OpenOffice.org Writer > General** (Figure 202); instead, define your own tab settings, as described in this section.

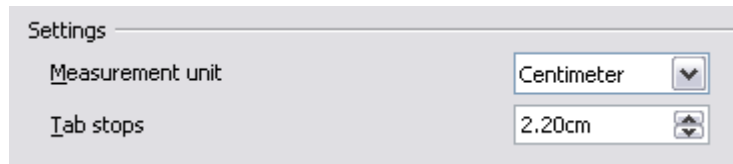


Figure 202: Selecting a default tab stop interval

If you use the default tab interval and then send the document to someone else who has chosen a different default tab interval, tabbed material will change to use the other person's tab settings. This may cause a major formatting problem, as shown in Figure 203.

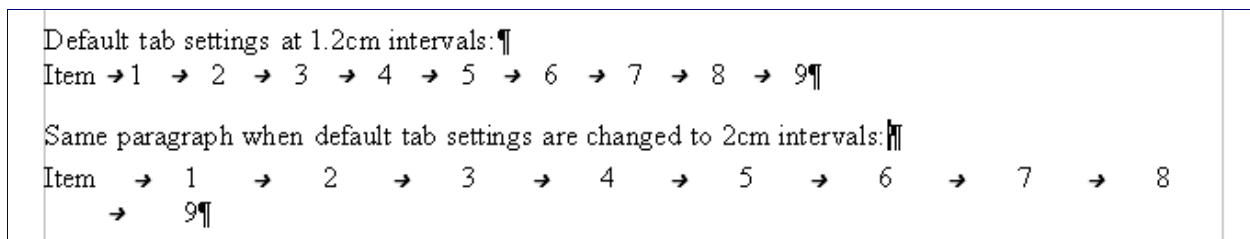


Figure 203: Default tab settings might be different

To avoid this problem, specify all the tab settings for the paragraph, using the *Tabs* page of the Paragraph Style dialog box (Figure 204).

Here you can choose the type of tab: left, right, centered, or decimal; the character to be used as a decimal point; and the fill character—the characters that appear between the end of the text before the tab and the beginning of the text after the tab. A common use of a fill character is the dots between a heading and a page number in a table of contents.

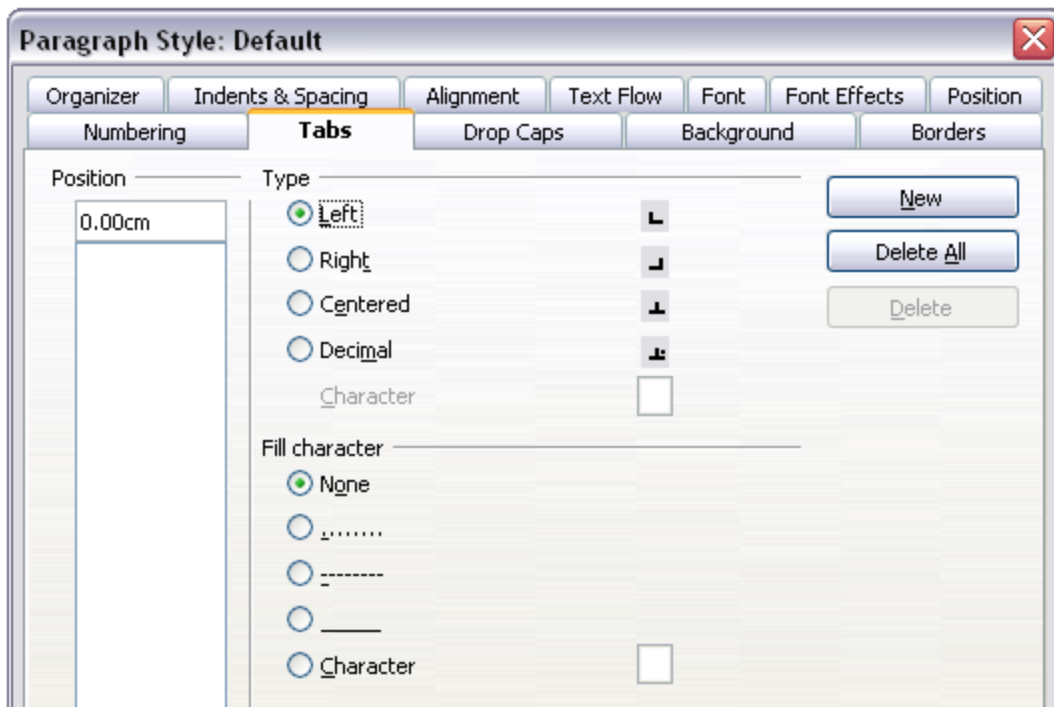


Figure 204: Specifying tab stops for a paragraph style

## Specifying a relative font size

If you are creating a style based on another style, you can specify a font size *relative* to that other style—either as a percentage or as a plus or minus point value (-2pt or +5pt). Relative font sizes are commonly used for Web pages.

For example, the paragraph style *Heading 1* is based on the paragraph style *Heading*. The font size of the paragraph style *Heading* is 14pt, and the font size of paragraph style *Heading 1* is specified as 115%. Thus the resultant font size of text in a paragraph formatted with paragraph style *Heading 1* is  $14\text{pt} \times 115\% = 16.1\text{pt}$ .

To specify a percentage font size, in the Paragraph Style dialog box, go to the *Font* tab. In the *Size* box, enter the percentage amount followed by the symbol % (see Figure 205). Similarly, you can enter a plus or minus sign followed by the number of points to be added or subtracted from the base font size.

To change from a relative font size back to an absolute font size, enter the desired font size in points followed by the letters “pt”.

It is also possible to use a Percentage Font size for character styles. See the note on page 181.

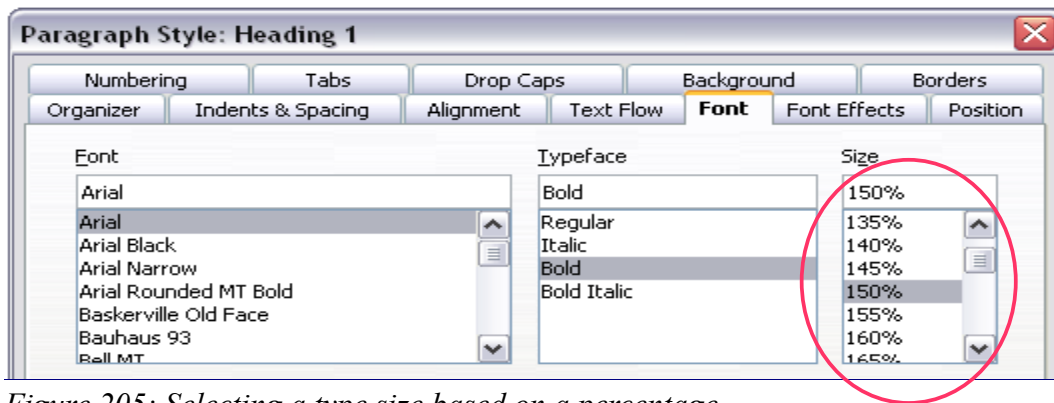


Figure 205: Selecting a type size based on a percentage

## Selecting a language for a paragraph style

The language you select for a document (on **Tools > Options > Language Settings > Languages**) determines the dictionary used for spell checking, thesaurus and hyphenation, the decimal and thousands delimiter used, and the default currency format.

Within the document, you can apply a separate language to any paragraph style. This setting has priority over the language of the whole document. On the *Font* tab of the Paragraph Style dialog box, languages with installed dictionaries are marked in the *Language* list by a small **ABC** icon (Figure 206). When you check spelling, OOo will use the correct dictionary for paragraphs with this style.

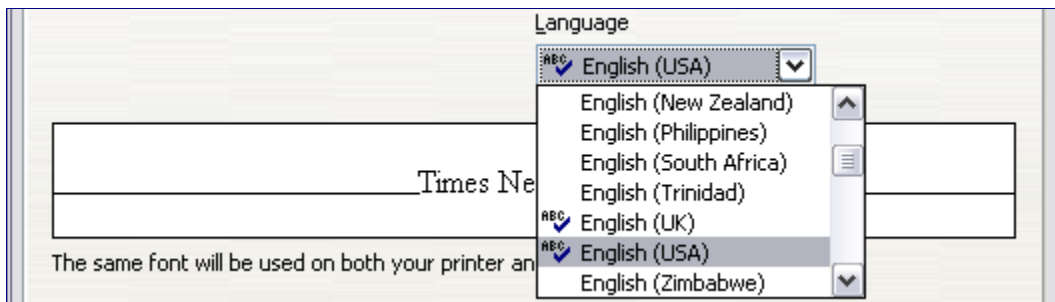


Figure 206: Selecting a language for a paragraph style

---

**Note** You can assign a language to selected pieces of text in a paragraph using character styles, also on the *Font* page. This assignment has priority over the paragraph style and document language.

---

## Rotating the text in a paragraph style

Two common uses for rotated paragraphs are to put portrait headers and footers on a landscape page and to fit headings above narrow table columns (as shown in Figure 207).

<i>This is long</i>	<i>Another long heading</i>	<i>A rotated heading</i>	<i>Another heading</i>	<i>Another heading</i>	<i>Another heading</i>	<i>Another heading</i>

Figure 207: A table with rotated headings

Chapter 4, “Formatting Pages”, describes how to create portrait headers and footers on landscape pages by rotating *characters*. You can achieve the same effect by defining a separate header or footer paragraph style specifically for landscape pages.

As an example, we will apply rotated table headings to a preexisting table.

- 1) Create a new paragraph style. Name it *Table Heading Rotated*.
- 2) On the *Position* page of the Paragraph Style dialog box (Figure 208), in the *Rotation / scaling* section, select **90 degrees**. Click **OK** to save the new style.

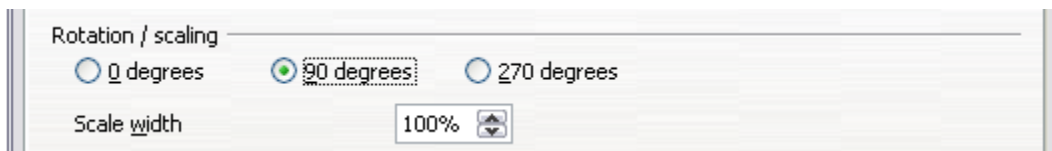


Figure 208: Rotating a paragraph 90 degrees

- 3) Select the heading row of the table and apply the new style. Any text in the cells of the heading row is now rotated.
- 4) If the headings are aligned to the top of the cells, you may want to change the alignment to the bottom of the cells, as shown in Figure 207. To do this, click the **Bottom** button on the Table toolbar (Figure 209).

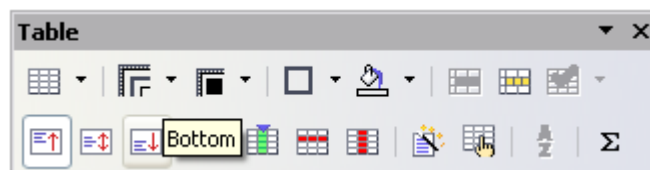


Figure 209: Aligning text to the bottom of cells



## Kerning text

*Kerning* means increasing or decreasing the amount of space between pairs of letters to improve the overall appearance of the text. Kerning automatically adjusts the character spacing for specific letter combinations (see Figure 210). It is only available for certain font types and, for printed documents, only works if your printer supports it.



Figure 210: Kerning disabled (left) vs enabled (right).

To turn kerning on, go to the *Position* page of the Paragraph Style dialog box. In the *Spacing* section, select the **Pair kerning** checkbox (Figure 211).

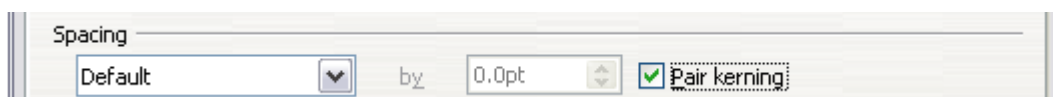


Figure 211: Turning on kerning of letters in a font

## Using styles in outlining

Outline numbering is the feature that automatically numbers sections of a document, for example 1, 1.1, 1.2, 2 and 2.1. When sections are added or deleted, the numbering is automatically corrected.

Paragraph styles are the key to OOO's outline numbering feature. The default paragraph styles assigned to outline levels are the heading styles supplied with OOO: *Heading 1*, *Heading 2*, and so on. However, you can substitute any styles you wish, including custom (user-defined) styles.

OOO's outline numbering feature is used for more than numbering headings. The paragraph styles specified on the Outline Numbering dialog box (Figure 212) determine which headings appear in the table of contents (see Chapter 12, "Tables of Contents, Indexes, and Bibliographies") and some fields commonly used in headers and footers, as described in "Including chapter or section information in page headers" on page 184.

## Choosing paragraph styles for outline levels

If you are using the default heading styles for the headings in your outline, and you are not using heading numbering, you do not need to do anything on the Outline Numbering dialog box. Setting up heading numbering is not covered in this chapter.

To use custom styles in place of the default heading styles:

- 1) Click **Tools > Outline Numbering** to open the Outline Numbering dialog box (Figure 212).

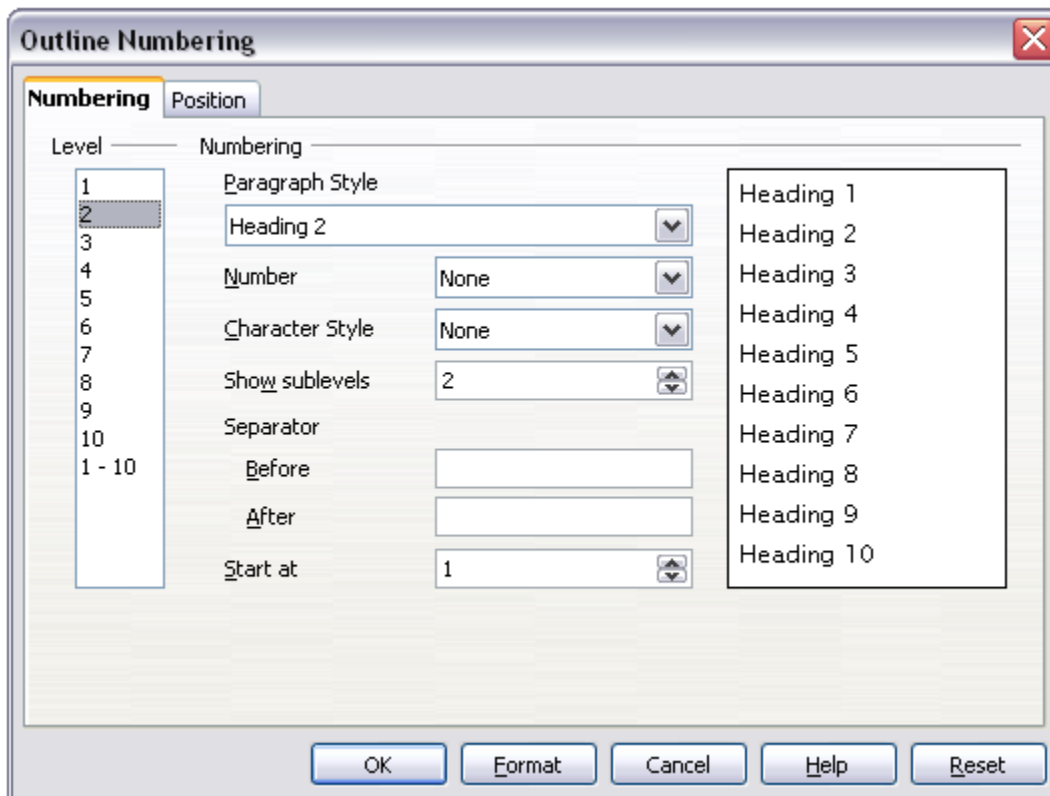


Figure 212: Choosing paragraph styles for outline levels

- 2) Click the number in the *Level* box corresponding to the heading for which you want to change the paragraph style.
- 3) In the *Numbering* section, choose from the drop-down list of paragraph styles the style you want to assign to that heading level. For example, when setting up a chapter in the *Writer Guide*, I would click Level 1 and choose **OOoHeading1** (a custom style defined for the OOoAuthors project) to replace **Heading 1**.
- 4) Repeat for each outline level that you want to change. Click **OK** when done.

## Including chapter or section information in page headers

In addition to page numbers, headers and footers often include the name or number of the chapter or section. Because these names and numbers change from one chapter or section to the next, you need to use a field that displays information relevant to each page.

- 1) Click **Insert > Fields > Other** to open the Fields dialog box (Figure 213).
- 2) On the *Document* page, select **Chapter** in the *Type* list. The *Format* list now shows four choices.

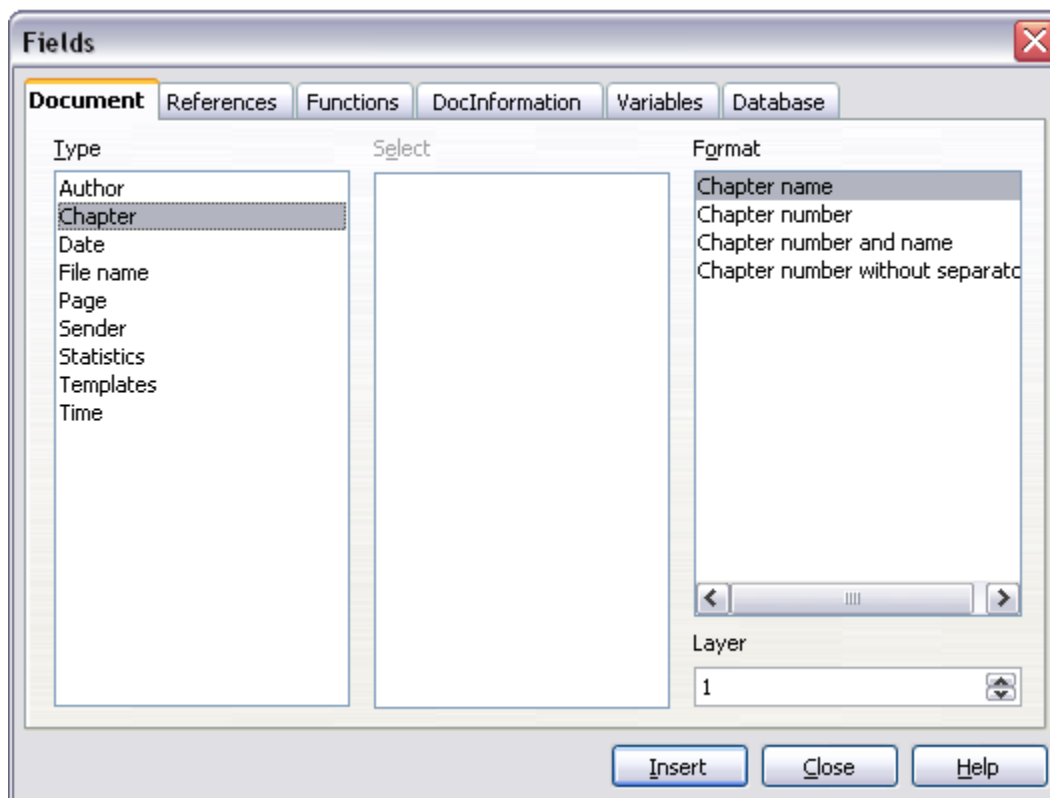


Figure 213: Including the chapter name in page header

The *Layer* box determines which outline level is displayed in the field. For example, **Layer 1** always displays the most recently found heading that has the paragraph style selected for **Level 1** in the Outline Numbering dialog box, **Layer 2** displays the most recent heading with the paragraph style selected for **Level 2** in outline numbering, and so on.

---

**Note** A **Chapter** field in a page header always picks up the **highest** heading level on a page, even if you have specified a lower level in the *Layer* box. For example, if a page has a *Heading 1* and a *Heading 2* on it, then a **Layer 2 Chapter** name field in the header of that page will display the *Heading 1* paragraph, not the first *Heading 2* paragraph, as intended.

In a footer, the layers work as intended.

---

## Working with conditional paragraph styles

A conditional paragraph style is another way of formatting text differently in different parts of your document. In some cases, you may find it saves time to use conditional styles rather than switching between styles as you type.

Making a paragraph style conditional means it changes its formatting depending on where it is used. For example, you may want the style *MyTextBody* to be black by default but turn white when inside a frame with a blue background.

Probably the most common use for conditional formatting is with single style outlining. Single-style outlining is a type of outline numbering designed with a *Numbering* style, rather than with **Tools > Outline Numbering**. Instead of using different styles, it changes the number formatting whenever you press the *Tab* key to create a subordinate heading.

The only trouble with single-style outlining is that all levels look the same. That is where a conditional paragraph style comes in handy. Assign the paragraph style to an outline numbering style in the *Numbering* page and then open the *Condition* page (Figure 214). There, you can assign the levels of the outline numbering style to other paragraph styles. Then, when you press the *Tab* key while using the paragraph style, each level of the outline takes on different formatting, making single-style outlining even more convenient than it is on its own.

---

**Note** Predefined styles (other than *Text Body*) such as *Default*, *Heading 1*, and *Heading 2* cannot be set to be conditional.

---

---

**Caution** If you want to make a style conditional, you have to do it while the style window still is open for the first time. After the window closes, the *Condition* tab no longer appears in the window.



---

## Defining the conditional style

When you create a conditional style, you are saying “in this condition make this style look like that other style”. For example, “When typing into a footer, make this style look like the *my\_footer* paragraph style; when typing into a table, make this style look like the *table\_text* paragraph style”.

In addition to setting the normal (unconditional) properties of the style, you need to define which other style it will look like in different situations. You do this on the *Condition* tab.

To set up a conditional paragraph style:

- 1) Define a new paragraph style.
- 2) Select all the paragraph properties for the style. **Do not click OK!**
- 3) Click the *Condition* tab (Figure 214).

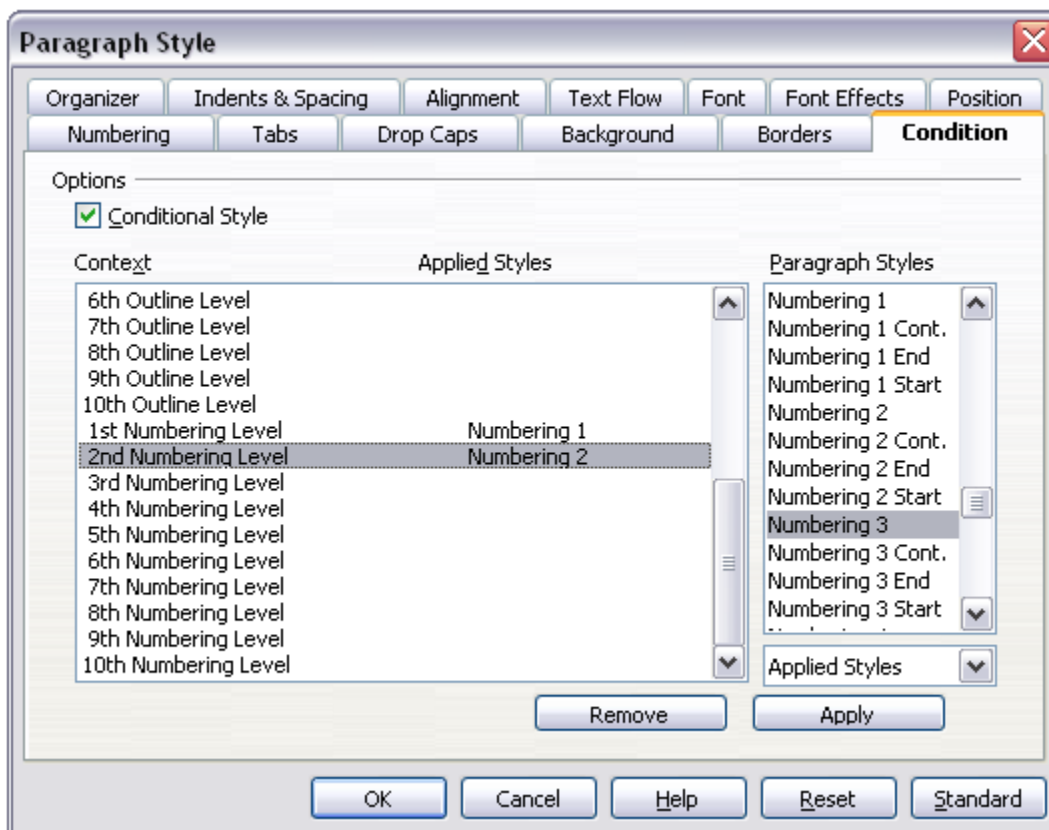


Figure 214: Condition page for paragraph styles

- 4) Select the **Conditional Style** checkbox.
- 5) Select the first condition in the *Context* list (left side of the dialog box) and select the style you want for this condition in the right-hand list.
- 6) Click **Apply**. The name of the paragraph style appears in the middle list.
- 7) Repeat steps 5 and 6 for each condition you want to have linked to a different style.
- 8) Click **OK**.

When the style is selected, you will see that the formatting of your text depends on the context.

## Working with frame styles

---

Frames are often used as containers for text or graphics. To provide consistency in the appearance of frames used for similar purposes, it is a good idea to define styles for frames. For example, you might want photographs to be enclosed in a frame with a drop-shadowed border, line drawings in a frame with a plain border, marginal notes in a frame without a border but with a shaded background, and so on.

Writer provides several predefined frame styles, which you can modify as needed; and you can define other frame styles. The technique for defining and applying frame styles is similar to that for other styles.

---

**TIP** There is considerable overlap between the uses of frames and of sections for some page layout purposes. You may find it useful to take a look at Chapter 4, “Formatting Pages”, for information about the use of frames and sections.

---

### How frame styles work

When an object is added to Writer, it is automatically enclosed in a frame of a predetermined type. The frame sets how the object is placed on the page, as well as how it interacts with other elements in the document. You can edit the frame by modifying the frame style it uses or by using a manual override when a frame is added to the document.

Because frames and objects are used together, it sometimes is easy to forget they are separate elements. In some cases, such as charts, you can edit the frame and object separately, so the distinction is worth remembering.

Unlike other elements that use styles, frames can be defined only partly by their style because their use can vary so much. Several elements of frames, such as the anchor and protected elements, need to be defined manually for individual frames.

You can format a frame manually when you select **Insert > Frame**. The dialog box that opens contains all the settings available when frame styles are set up, as well as some only available when the frame is inserted. As with other styles, the most efficient way to format frames is in the Styles and Formatting window.

### Planning the styles

If you are using a mix of graphics, you may want to define two related styles, one with a border line for graphics with white backgrounds and one without a border for all other backgrounds. You also may want to design one or more frames for text only.

Otherwise, the default frame styles (listed in Table 2) cover most users’ needs. The only significant addition that many users might need is one or more styles for text frames.

Table 2. Various frame styles and their uses

Style	Comments and Use
Formula	The frame style used for formulas. The default includes <b>AutoSize</b> , which adjusts the size of the frame to the formula.
Frame	The default frame style.
Graphics	The default style for graphics. The defaults include autosizing to fit the graphic, no text wrap, and a thin border around the frame. These are reasonable defaults, except for the border. Unless the background of the graphic is white and the document's background also is white, the border usually is unnecessary.
Labels	The default style for use with <b>File &gt; New &gt; Labels</b> . It seems to be used by OpenOffice.org automatically and is not intended for users at all.
Marginalia	A style for placing a frame beside the left margin. As the name suggests, the <i>Marginalia</i> style is intended for comments added in the margin of text. The style also is useful for creating sideheads—headings against the left margin, which often are used in technical documentation. To set up sideheads, create body text styles with two inches or more indentation from the left. Then, place the cursor at the start of a body text paragraph, add the frame, and apply the <i>Marginalia</i> style.
OLE	The default style for OLE objects and floating frames. The default places the frame at the top and center of a body of text.
Watermark	The default style for a watermark, a graphic placed as the background to a body of text. The default is a Through wrap, with text passing over the frame and anything in it. The graphic should be faint enough that text still is readable over top of it.

## Formatting frames

You can access frame settings by selecting **New** or **Modify** in the Styles and Formatting window for a frame style or by selecting **Insert > Frame** from the menu. Once a frame is added to a document, you can double-click the frame to open the Frame dialog box or modify the style in the Styles and Formatting window.

Frame settings are available from the following tabbed pages:

- *Type* page: sets the size and position of the frame. One of the most useful options here is **AutoSize**, which automatically adjusts the frame to the object it contains. If the frame style is one used automatically, then this option should be selected.
- *Options* page: sets whether the contents of the frame are printed and able to be edited in a read-only document. The tab also sets the text direction, which is useful if you are using the frame for contents in a language that uses right-to-left text direction.
- *Wrap* page: sets how text is positioned in relation to the frame and how close text comes to a frame. If you want the frame contents to stand out from the paragraphs around it, set the wrap to **None**. This probably is the single most important tab for frames.

- *Background* page: sets the background color or graphic. This tab is useful mostly for text frames in complex page layouts, in which a text frame has an appearance different from the general background of the page.
- *Border* page: sets the line around the frame, if any. Many beginning designers make the mistake of adding a border to every frame. However, when a colored background distinctly marks the division between the frame's contents and the rest of the page, borders are unnecessary.
- *Columns* page: sets the number of columns used in the frame. This tab can be ignored unless the frame is being used for text.
- *Macro* page: sets a macro to use with the frame. These options are useful only in an on-line Writer or HTML document.

## Applying frame styles

Whenever you insert an object into a document, it will automatically have a frame around it. Some designers like to add frame styles to introduce variation. For example, you could have two different frame styles for graphics: one that is centered for small graphics and another that is left-aligned for graphics that take up the entire width of the main frame. In such a case, you will need to add at least one frame style.

To apply a style to a frame:

- 1) Select the frame.
- 2) Bring up the Styles and Formatting window (for example, by pressing *F11*).
- 3) Click the **Frame Styles** icon (the third one from the left).
- 4) Double-click the frame style you want.

---

**TIP** When a frame is selected, the Apply Style window at the left of the formatting toolbar displays frame styles. You can use this to change the style of a frame.

---

Most of a frame's design can be set in the style. However, the following options must be set manually:

- **Anchoring**: how the frame is positioned in relation to the rest of the page's contents (**Format > Anchor**).
- **Arrangement**: the frame's position in a stack of objects (**Format > Arrange**).
- **Adding a hyperlink**: so that a click on the frame opens a Web page or another document in an HTML file (**Insert > Hyperlink**).

The right-click menu also has items for anchoring and arrangement, as well as for wrap and alignment (Figure 215).



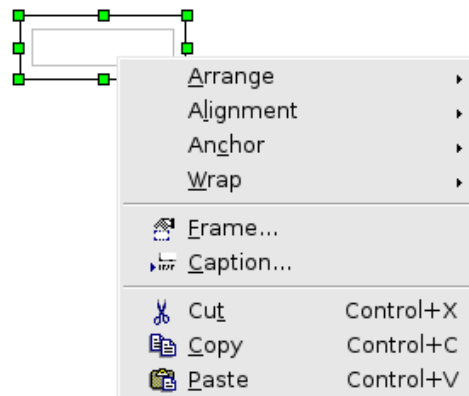


Figure 215: A frame's right-click menu has positioning options

## Working with list (numbering) styles

You can define the appearance of lists by using list (numbering) styles, which include styles for bullet lists as well as numbered lists.

### New in 2.0

OOo 2.0 uses the terms “numbering style” and “list style” inconsistently, but they are the same thing. For example, the tooltip in the Styles and Formatting window says “List Styles”, but its style dialog box says “Numbering Style”.

After setting up a list style, you can associate it with one or more paragraph styles. To create a hierarchy of numbered paragraphs, use a series of list styles and define other (unnumbered) paragraphs to fit the indentation or spacing patterns of the numbered paragraphs.

### Example of list style usage

This example shows how to have Arabic numbers (1, 2, 3) with no following punctuation, lined up as shown in the illustration below:

- 8 Example.
- 9 Example.
- 10 Example.

- 1) In the Styles and Formatting window, select **List Styles** (top), and either **All** or **Hierarchical** in the box at the bottom.

If you want to create a new style, right-click on the window and select **New**; then define the style. However, the following example uses one of the OOo-supplied style names: *List 1*.

- 2) Select *List 1*, right-click and select **Modify**. On the Numbering Style dialog box, either choose a predefined style on the *Numbering Style* tab or design a new style on the *Options* tab. We will use the *Options* tab (Figure 216).

- 3) Choose **1, 2, 3** in the *Numbering* box and delete anything in the *Before* and *After* boxes. In the *Level* box, leave **1–10** (the default) highlighted.

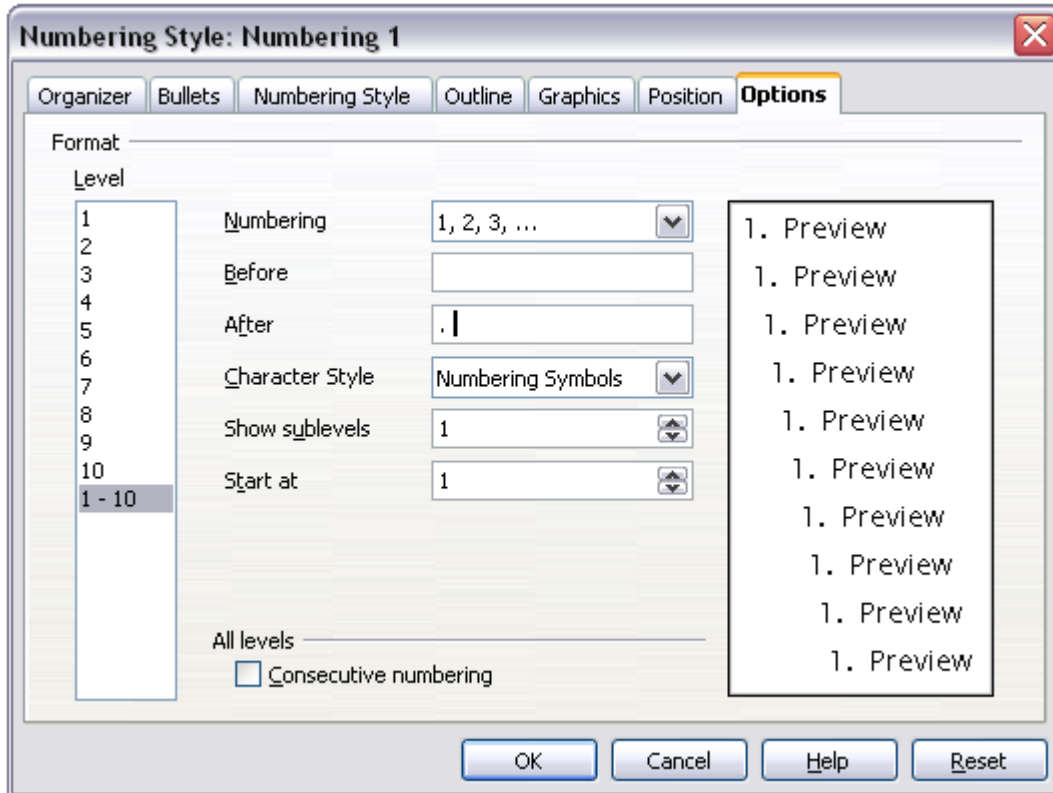


Figure 216: Designing a list-numbering style

- 4) On the *Position* page (Figure 217), increase *Spacing to text* from the default to, say, 0.65cm and change *Numbering alignment* to **Right**. Increase the *Minimum space numbering <--> text* value, if necessary. The values depend on the typeface, type size, and personal preference. Try a few combinations to see what looks best.
- 5) Click **OK** to set the changes. Now the modified style can be used. If the style has already been used in the document, those paragraphs in this style will now reflect the changes.

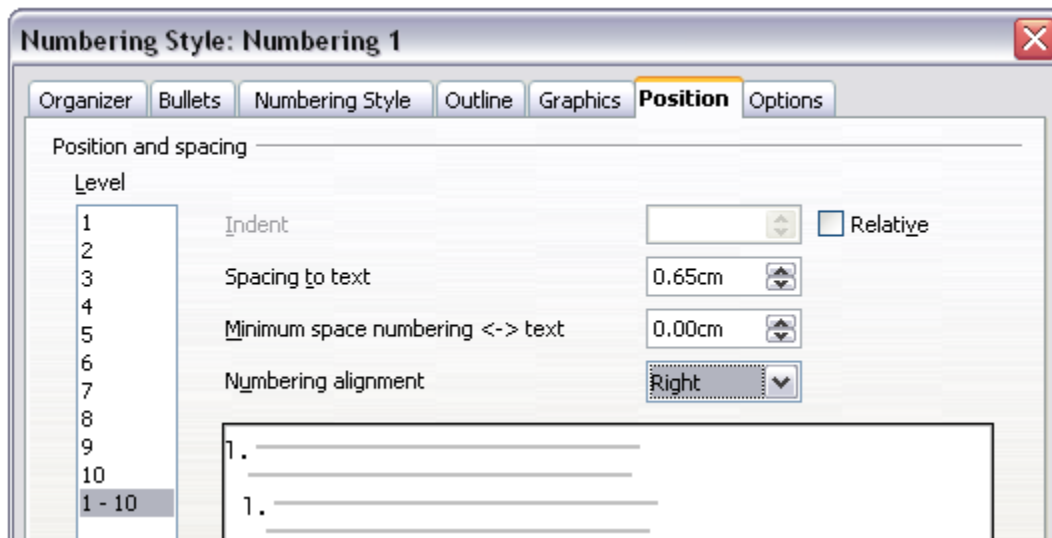


Figure 217: Setting spacing and alignment in a list-numbering style

You can apply this numbering style directly to any paragraph or assign it to a paragraph style.

To assign a numbering style to a paragraph style, open the Paragraph Style dialog box (see page 170), go to the *Numbering* page (Figure 218) and choose the numbering style defined. (The name of the paragraph style does not have to match the name of the numbering style.)

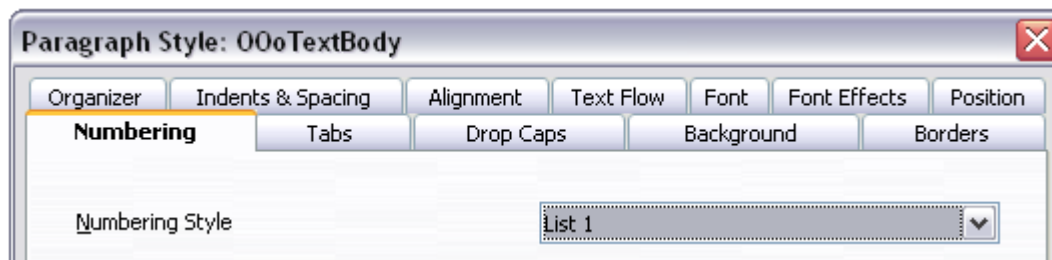


Figure 218: Choosing a numbering style for a paragraph style

## Using outline-numbering styles

Outline numbering (sometimes called multi-level numbering) is a numbered list with indented numbered sections. Rather than just a list of numbered items (1,2,3...), an outline-numbered list may have item 1, then indented items numbered 1,2,3; or i,ii,iii; or some other numbering method before the main number 2.

With outline-numbering styles you can achieve any combination of numbering formats you want. To set up outline numbering styles assigned to paragraph styles, follow the procedure for ordinary numbered lists but use the *Outline* tab.

---

**TIP** The selections under **Tools > Outline Numbering** may be sufficient; you may not need to use outline-numbering styles.

---

You can modify the predefined style, or define a new style. This example uses one of the supplied styles, *Numbering 1*.

As an example, we will use outline-numbering to produce the following effect:

- I. Level-1 list item
  - A. Level-2 list item
    - i. Level-3 list item
      - a) Level-4 list item

**Instructions:**

- 1) In the Styles and Formatting window, choose *Numbering Styles* and select a style such as *Numbering 1*. Right-click on the style and select **Modify**.
- 2) On the Numbering Style dialog box, go to the *Outline* page (Figure 219), where you will find that one style matches our requirements. Click once on that style.

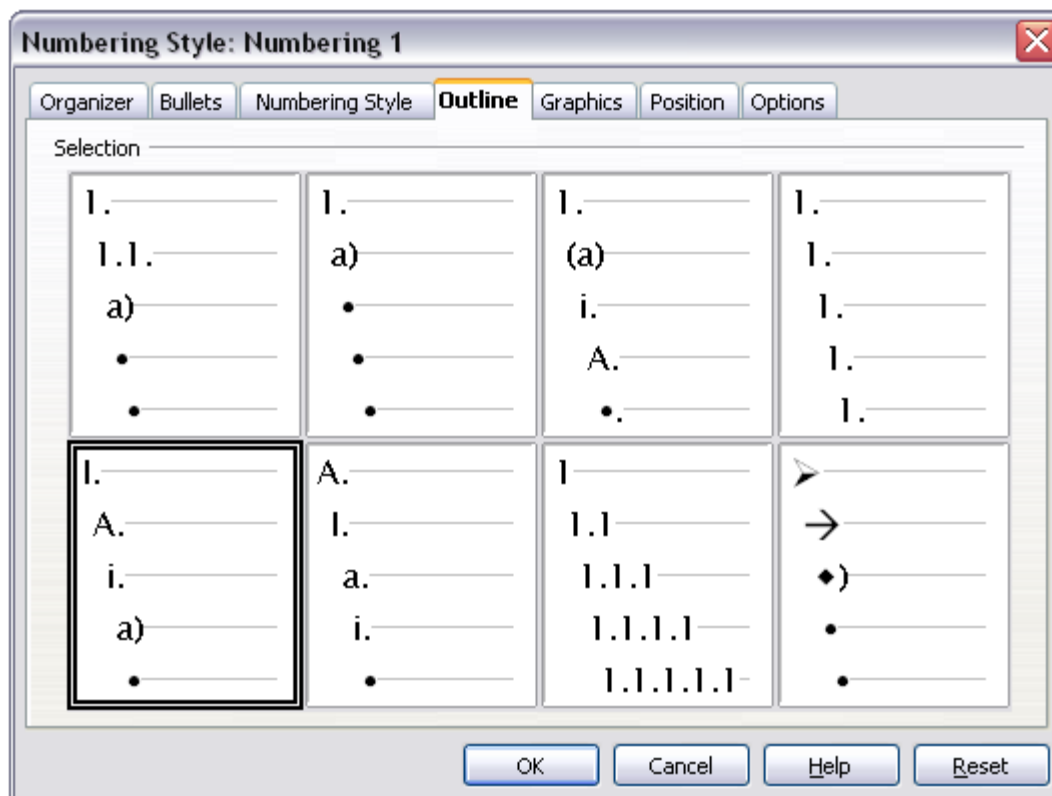


Figure 219: Choosing a predefined outline-numbering style

- 3) To modify the layout of the list, use the *Options* tab (Figures 220 and 221). Notice that the preview on the right shows the outline selected. In the *Level* box on the left, select **1**, then **2**, **3**, and **4** and see how the information in the *Numbering* and *After* boxes changes.

Use the *Options* page to set different punctuation; for example, a period (full stop) after “a” on level 4 instead of a parenthesis.

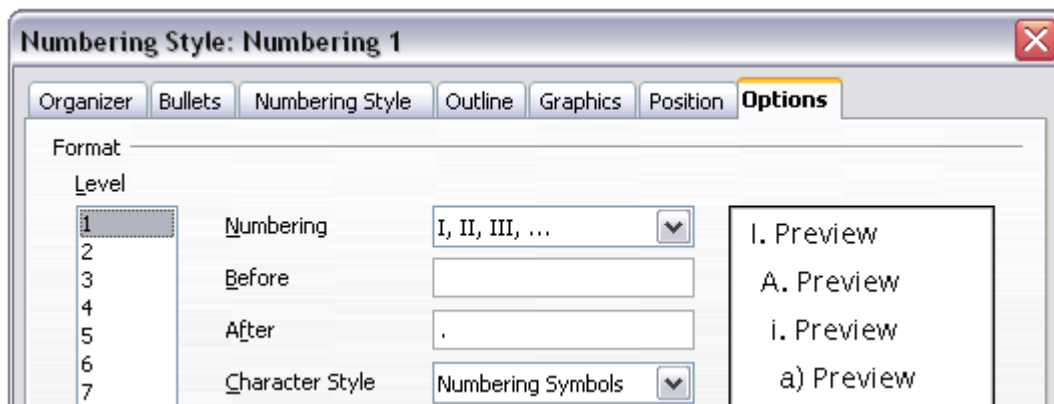


Figure 220: Checking the outline numbering for level-1 list items

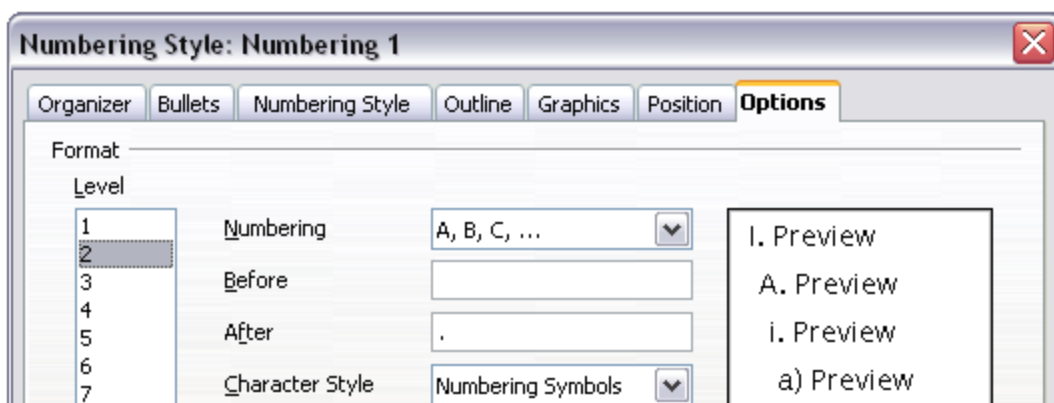


Figure 221: Numbering style for level-2 list items

- 4) To make the indentation at each level greater or less than the default, change it on the *Position* page (Figure 217). Select the heading level, then make any changes in the indentation, spacing, or numbering alignment.
- 5) Repeat for each heading level as required, then click **OK** to save the style.

---

**TIP** With outline numbering you can define different bullet styles for the different levels of a bullet list. Use the *Bullets* tab of the Numbering Style dialog box (not shown) to select the basic style. Return to the *Options* tab to customize the bullet for each indent level. Here you can set bullets to any character. See the *Graphics* tab for more bullets.

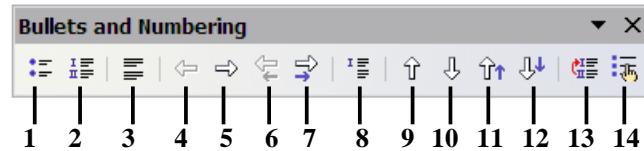
---

## Applying the different levels of a list-numbered paragraph style

To apply the different levels of a list-numbered paragraph style:

- 1) Type the first paragraph and apply the *List 1* style. Notice that the level-1 list number is added automatically.

- 2) Select **View > Toolbars > Bullets and Numbering** to display the Numbering toolbar (Figure 222).
- 3) Press **Enter** to start the next paragraph. To make it a level-2 list item, click the “Down one level” icon on the object bar (Figure 222). The number applied to this paragraph has changed to a level-2 number.
- 4) Continue typing list items, moving each paragraph up or down levels as needed.



- |                           |  |                                      |
|---------------------------|--|--------------------------------------|
| <b>1</b> Bullets On/Off   | <b>6</b> Move Up One Level<br>with Subpoints   | <b>9</b> Move Up                     |
| <b>2</b> Numbering On/Off | <b>7</b> Move Down One Level<br>with Subpoints | <b>10</b> Move Down                  |
| <b>3</b> Numbering Off    | <b>8</b> Insert Unnumbered Entry               | <b>11</b> Move Up with Subpoints     |
| <b>4</b> Up One Level     |  | <b>12</b> Move Down with Subpoints   |
| <b>5</b> Down One Level   |  | <b>13</b> Restart Numbering          |
|                           |  | <b>14</b> Bullets & Numbering dialog |

Figure 222: The Bullets and Numbering toolbar

---

**TIP** One option is to enter all the list paragraphs first and apply the levels afterwards. You can use keyboard shortcuts to move paragraphs up or down the outline levels. Place the cursor at the beginning of the numbered paragraph and press:

*Tab*                    Down a level  
*Shift+Tab*            Up a level

To insert a tab stop at the beginning of a numbered paragraph (that is, after the number but before the text), press *Control+Tab*.

---

## Working with page styles

In Writer, *page styles* define the basic layout of pages, including page size, margins, headers and footers, borders and backgrounds, number of columns, and so on.

Writer comes with several page styles, which you can modify as you wish, and you can define your own. You can have one or many page styles in a single document.

---

**Note** All pages in a Writer document are based on styles. If you do not specify a page style, Writer uses the *Default* page style.

---

To change the layout of individual pages, either define a new page style or use one of the techniques (sections, frames, or tables) described in Chapter 4, “Formatting Pages”.

This section describes one use of page styles. Other uses are discussed in Chapter 6, “Introduction to Styles”, and Chapter 4, “Formatting Pages”.

---

**TIP** Any modifications of page styles, including the *Default* page style, apply only to the document you are working on. If you want the changes to be the default for all documents, you need to put the changes into a template and make that template the default template. See Chapter 10, “Working with Templates”, for details.

---

## Setting up a book chapter sequence of pages

Book chapters typically start on a right-hand page, with the first page of the chapter having a different layout from the rest of the pages. The other pages in the chapter are “mirrored” for double-sided printing. For example, page numbers in the header or footer may be positioned on the outside edge of pages and a wider margin (allowing for binding) may be placed on the inside edge.

Table 3 shows the properties of two page styles (*Right Page* and *Default*) set up for a typical book chapter’s sequence of pages.

Table 3. Properties of customized page styles to be used in a book chapter

<b>Page Style</b>	<b>Desired effect</b>	<b>Property: setting</b>
Right Page	First page always on the right (an odd numbered page)	<b>Page &gt; Page layout &gt; Only right</b>
	No header or footer	<b>Header &gt; Header &gt; Header on: Not selected</b>
	Top margin of page larger than on other pages	<b>Page &gt; Margins &gt; Top: 6.00cm</b>
Default	Mirrored margins	<b>Page &gt; Page layout: Mirrored</b>
	Header with page number on the top outside of the page and chapter title in the top middle center of the page	<b>Header &gt; Header on: Selected</b> <b>Header &gt; Header &gt; Same content left/right: Not selected</b>

Figure 223 illustrates the transitions from *Right Page* to *Default*, with the change of header between left and right pages shown by the # symbol.

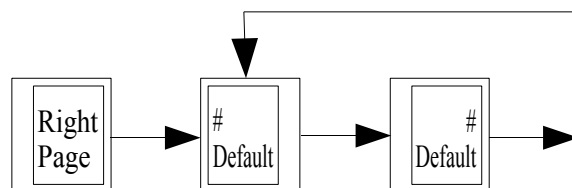



Figure 223. *Right Page* and then *Default* page style with different headers for alternate pages.

To apply this page scenario:

- 1) Set up the page styles.
  - a) On the Styles and Formatting window, click the **Page Styles** icon  (fourth from left) to display a list of page styles.
  - b) Right-click on *Right Page* and select **Modify** from the pop-up menu.
  - c) On the *Organizer* page of the Page Style: *Right Page* dialog box (Figure 224), change *Next Style* to **Default**.

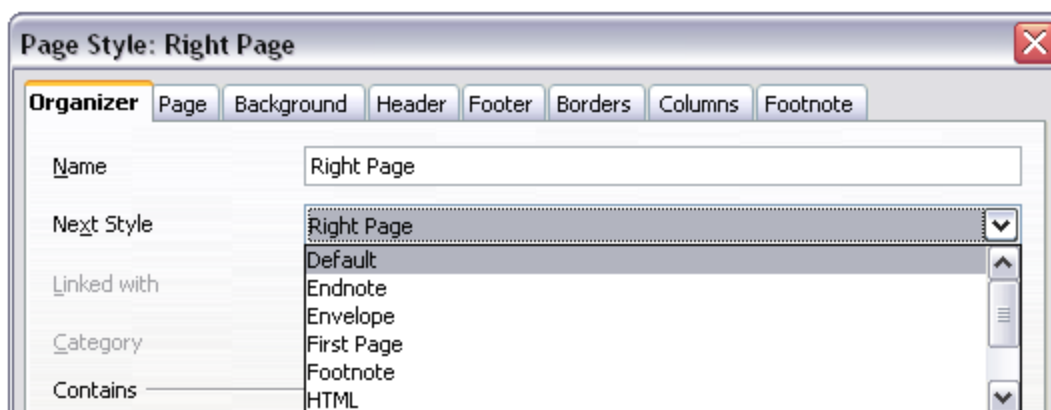


Figure 224. Specifying the next style after the first page of a chapter

- d) On the *Page* page (Figure 225), specify a larger left margin for binding, and a larger top margin to move the chapter title down the page.
- e) On the *Header* and *Footer* pages, be sure the **Header on** and **Footer on** checkboxes are not selected. Click **OK** to save your changes.
- f) On the Styles and Formatting window, in the list of page styles, right-click on *Default* and select **Modify** from the pop-up menu.
- g) On the *Organizer* page of the Page Style: *Default* dialog box, be sure *Next Style* is **Default**.



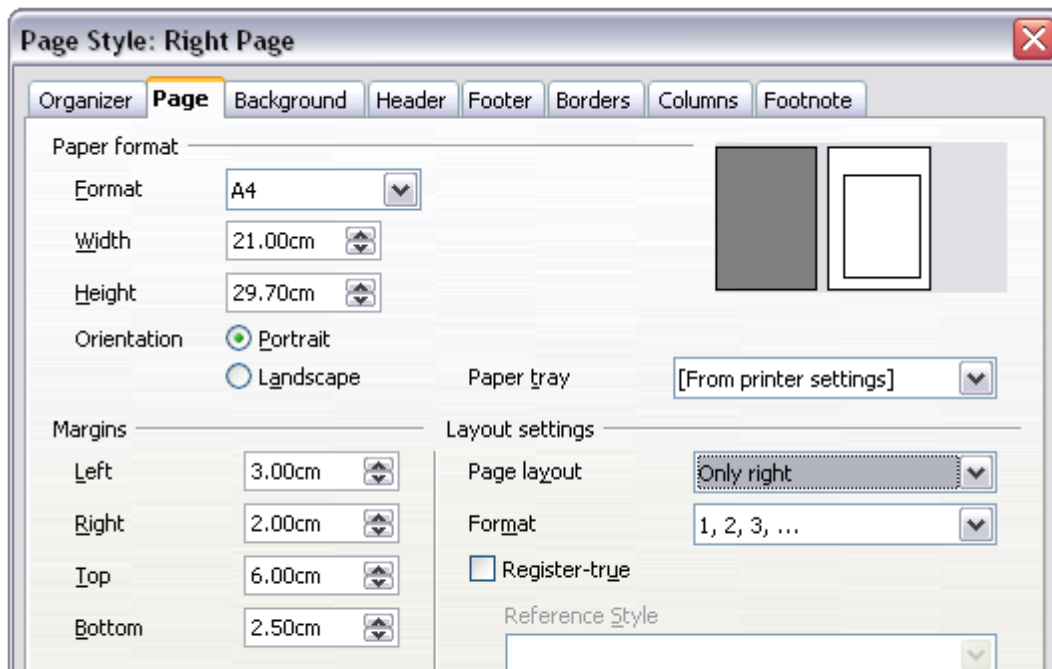


Figure 225. Setting page margins and layout for the Right Page style

- h) On the *Page* page of the Page Style: Default dialog box (Figure 226), select **Mirrored** for *Page layout* and set the *Inner* and *Outer* margins to the same width as the *Left* and *Right* margins, respectively, on the *Right Page* style.

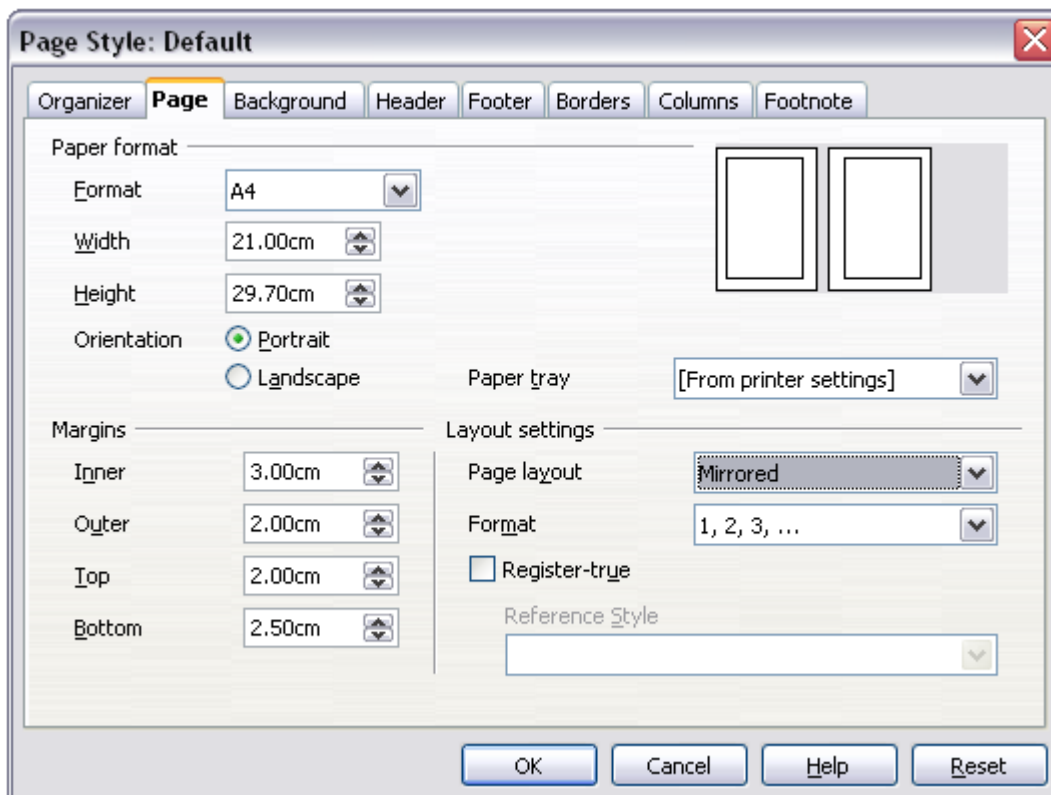


Figure 226. Setting page margins and layout for the Default page style

- i) On the *Header* page of the Page Style: Default dialog box (Figure 227), select the **Header on** checkbox and deselect the **Same content left/right** checkbox. Click **OK** to save your changes.

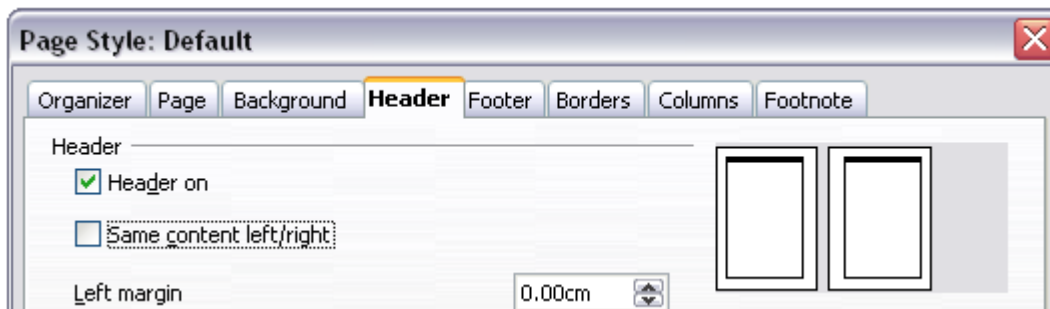


Figure 227. Setting up the header properties for the Default page style

- 2) Set up the *Heading 1* paragraph style to start on a new right-hand page.
  - a) In the Styles and Formatting window, right-click on **Heading 1** and select **Modify**.
  - b) On the *Text Flow* page of the Paragraph Style dialog box (Figure 228), in the **Breaks** section, select **Insert**, **With Page Style**, and **Right Page**. Click **OK** to save your changes.

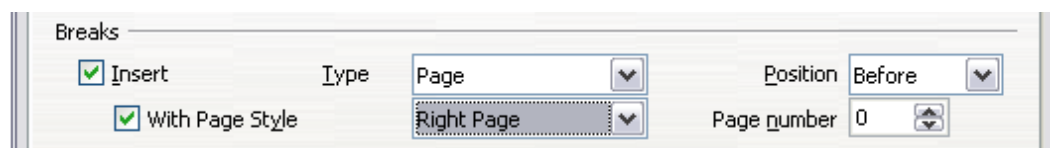


Figure 228. Setting a paragraph style to start on a page of a selected style

- 3) To start a new chapter, apply the paragraph style *Heading 1* to the first paragraph, which will be the title of the chapter.

---

**Note** By default, paragraph style *Heading 1* is assigned to *Outline Level 1*. The assignment of paragraph styles to outline levels is done through **Tools > Outline Numbering**.

---

- 4) To set up the headers:
  - a) On a left page, put the cursor in the header and insert a page number field on the left (**Insert > Fields > Page Number**).
  - b) Press *Tab* to put the cursor in the middle and insert a Chapter reference:  
Press *Control+F2* to display the Fields dialog box (Figure 229).  
On the *Document* page, for *Type* select **Chapter** and for *Format* select **Chapter name**. Make sure that *Layer* is set to **1**, and then click **Insert**.

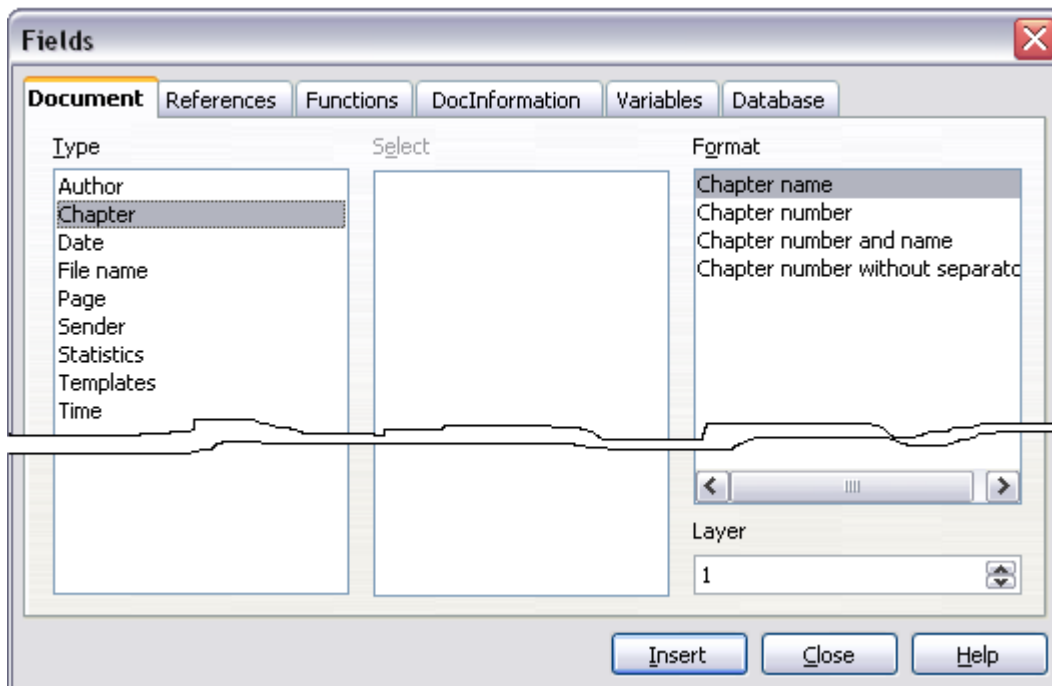


Figure 229. Inserting a chapter title into the header of a page

- c) On a right page, put the cursor in the header, press *Tab*, insert a **Chapter** reference, press *Tab* again, and insert a page number field.
- 2) If you need to adjust the tab stops for the header, modify the *Header* paragraph style. Do not manually adjust the tab stops.



*Chapter 8*  
*Working with Graphics*

## Graphics in Writer documents

---

When you create a text document using OpenOffice.org Writer, you may need to include some graphic illustrations.

Graphics in Writer are of three basic types:

- Graphic and image files, including photos, drawings, scanned images, and others
- Diagrams created using Writer's drawing tools
- Charts created using OOO's Chart facility

This chapter covers the first two types of graphic illustrations. Most parts of this chapter also apply to the other components of OOO.

## How to add a graphic from a file

---

OpenOffice.org can import various vector (line drawing) and raster (bitmap) file formats. The most common are GIF, JPEG or JPG, PNG, and BMP. See "Graphic file types supported" on page 221 for a full list of supported graphic file types.

Graphics may be downloaded from the Internet, scanned, created with a graphics program, or they may be photos taken with a digital camera. Some questions come to mind:

- How is a graphic inserted?
- Should the graphic be included in the document, or should it be linked to the file?
- How can the size of the graphic be adjusted?
- How can the relative position between the graphic and the text be changed?

These questions will be discussed in order.

## Inserting a graphic from a file

To insert a graphic image from a file, the file must be already stored in a directory (folder) on the computer.

Proceed as follows:

- 1) Determine the destination for the image. For example, place the cursor at the appropriate location in the document.
- 2) On the main menu, select **Insert > Picture > From File**. This displays the dialog box shown in Figure 230.
- 3) Navigate to the file to be inserted.
- 4) Select the file to insert and click **Open**.

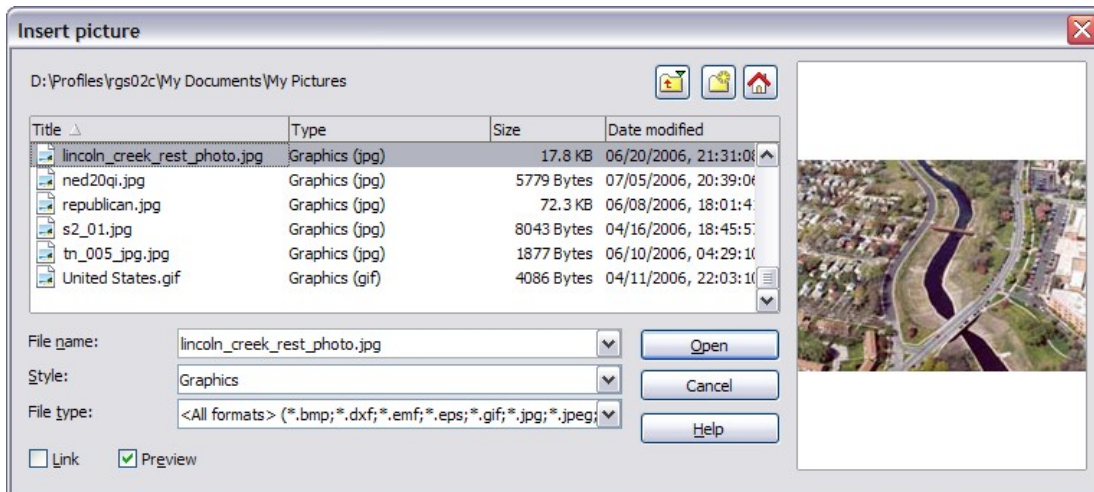


Figure 230. Insert picture dialog box

---

**Note** At the bottom of the Insert picture dialog box (Figure 230) are two check boxes. If the **Preview** checkbox is checked, the selected graphic file is previewed in a pane, as shown in Figure 230, so you can verify that you have the correct file. The **Link** checkbox is discussed below.

---

### Linking a graphic file

If the **Link** checkbox in the Insert picture dialog box is checked, OOO will create a link to the file containing the graphic, instead of saving a copy of the graphic in the document. The result is that the figure will be displayed in the document, but when the document is saved, it will contain only a reference to the graphic file but not the graphic itself. The document and the image remain as two separate files, and they are merged together only when you open the document again.

Linking an image has two advantages and one disadvantage:

- Advantage – Linking can reduce the size of the document when it is saved because the image file itself is not included.
- Advantage – You can modify the image file separately without changing the document because the link to the file remains valid, and the modified image will appear when you next open the document.
- Disadvantage – If you send the document to someone else, you must also send the image file, or the receiver will not be able to see the linked image.

### Resizing a graphic

It is possible, and quite likely, that the inserted image will not fit perfectly into the document because it is too big or too small. Therefore, you will probably need to resize the image.

The position of the image is not relevant for now. Changing the position of an image relative to the text is discussed in “Positioning graphics within the text” on page 211.

You can modify the size of a graphic in two ways:

- Unscaled resize
- Scaled resize

Figure 231 shows three examples of an image inserted into a document and resized.

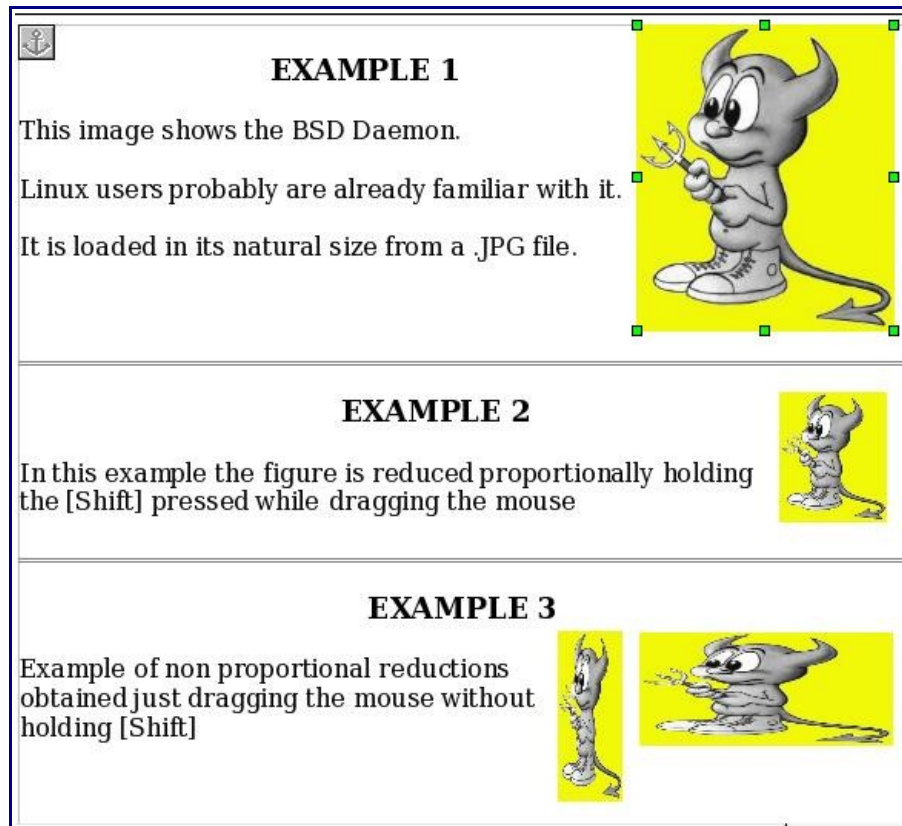


Figure 231. Three examples of resized images, plus the original image

### Unscaled resize

In Example 1, the image is in its natural size. When you add a new graphic (and also when you select an existing one by clicking on it), it displays some square points along its perimeter; these are called *handles*. To resize the graphic:

- 1) Move the cursor onto a point.
- 2) Click the left mouse button.
- 3) Drag the mouse to modify the size of the figure.

This basic resizing process is useful if you need to specify the size and the height independently of each other. The problem with this method, as demonstrated in Example 3, is that when the graphic is not changed to scale, it will be distorted.

You need to either carefully measure and calculate how much the image needs to be adjusted in both the horizontal and vertical directions in order to maintain the correct proportions or use the “*scaled resize*” method described below.

## Scaled resize

A scaled resize is usually the best option, because it automatically maintains the proportions of the graphic. To perform a scaled resize:

- 1) Press and hold the *Shift* key.
- 2) Click and drag a handle of the graphic. It will resize proportionally, as shown in EXAMPLE 2.
- 3) Release the mouse button to complete the resize.

## Inserting images from other sources

You can insert images from sources other than a file. The possible sources for images are:

- Graphics program
- Scanner
- OOo Gallery

### From a graphics program

You can use many different graphics programs to edit a graphic file. In these programs, you can select, copy, and paste an image or part of a graphic into an OpenOffice.org document. Figure 232 shows an example of this procedure, which can be recreated with these steps:

- 1) In the imaging program window, select an area of the image to be copied. (The program used in the example is *Paint Shop*.)
- 2) Move the cursor over the selected area and press *Control+C* to copy.

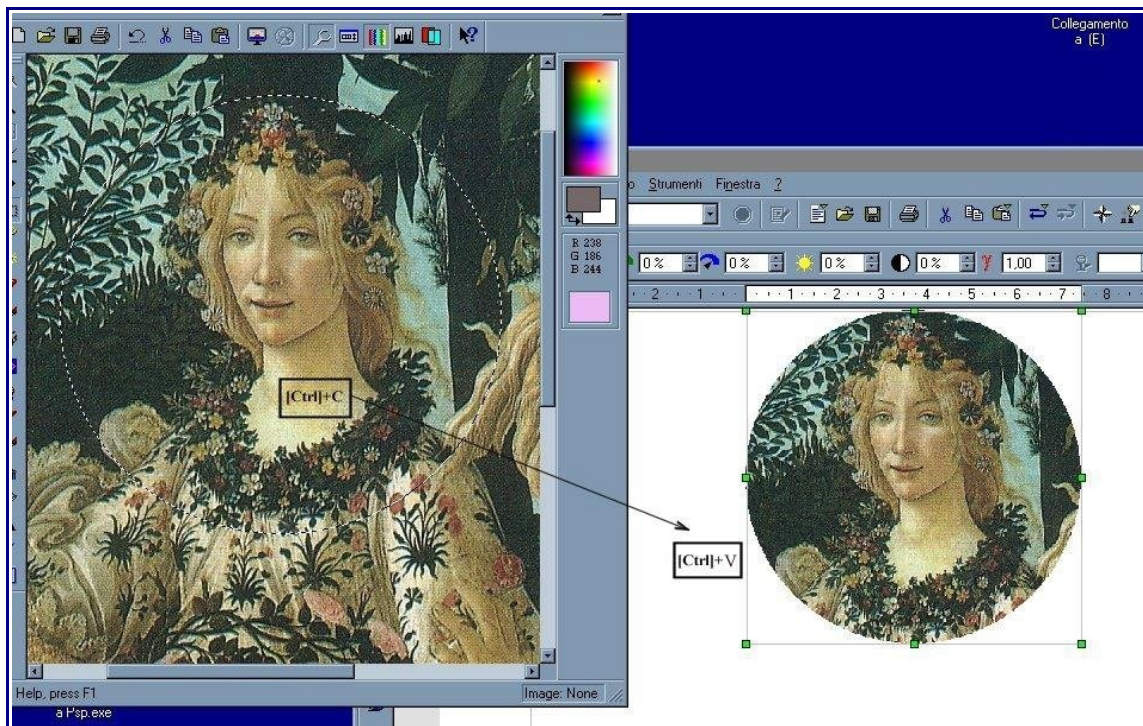


Figure 232. Using a graphics program



- 3) Switch to the OpenOffice.org Writer window.
- 4) Click to insert the cursor where the graphic is to be inserted.
- 5) Press *Control+V* to paste.

## Scanner

If a scanner is connected to your computer, OpenOffice.org can call the scanning application. The scanned item will then be added into the OOo document page as an image. To start this procedure, on the main menu select **Insert > Picture > Scan > Select Source**.

## OpenOffice.org Gallery

The Gallery is available in all components of OpenOffice.org. For an introduction to the Gallery, see Chapter 14, “Working with the Gallery” in the *Getting Started* guide.

You can select a graphic from the Gallery and drag it into the document. The Gallery icon is located in the right side of the Function Bar. Proceed as follows:


- 1) Click on the **Gallery** icon .
- 2) Select the theme containing the image you want to insert.
- 3) Click on the image with the left mouse button and, holding the button pressed, drag the image into the document.
- 4) Release the mouse button.

Figure 233 shows an example of an image dragged from the Gallery.

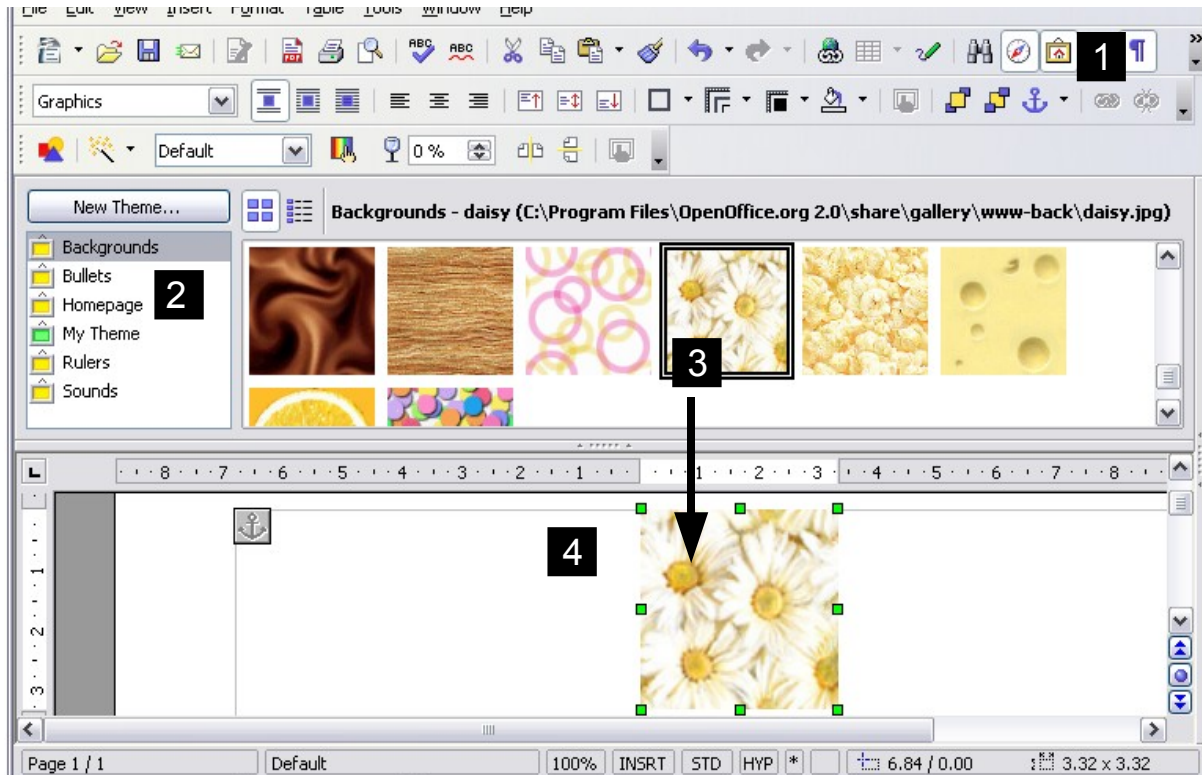


Figure 233. Inserting an image from the Gallery

## Adding an image to the Gallery

You may wish to add to the Gallery any images that you use frequently, for example, a company logo. You can then very easily insert these graphics into a document later.

To add images to the Gallery, proceed as follows:

- 1) Open the Gallery.
- 2) Select the theme where you want to add images, or you can create a new theme. To create a new theme:
  - Click the **New Theme** button above the list box of Themes. The Properties of New Theme dialog box opens, which is similar to the one shown in Figure 234.
  - Select the **General** tab and enter an appropriate name for the new theme in the text box.
  - Select the **Files** tab, skip step 3, and continue with step 4.
- 3) Right-click on the desired theme and select **Properties** in the pop-up menu. This will display a window from which to select the files to be added (see Figure 234).

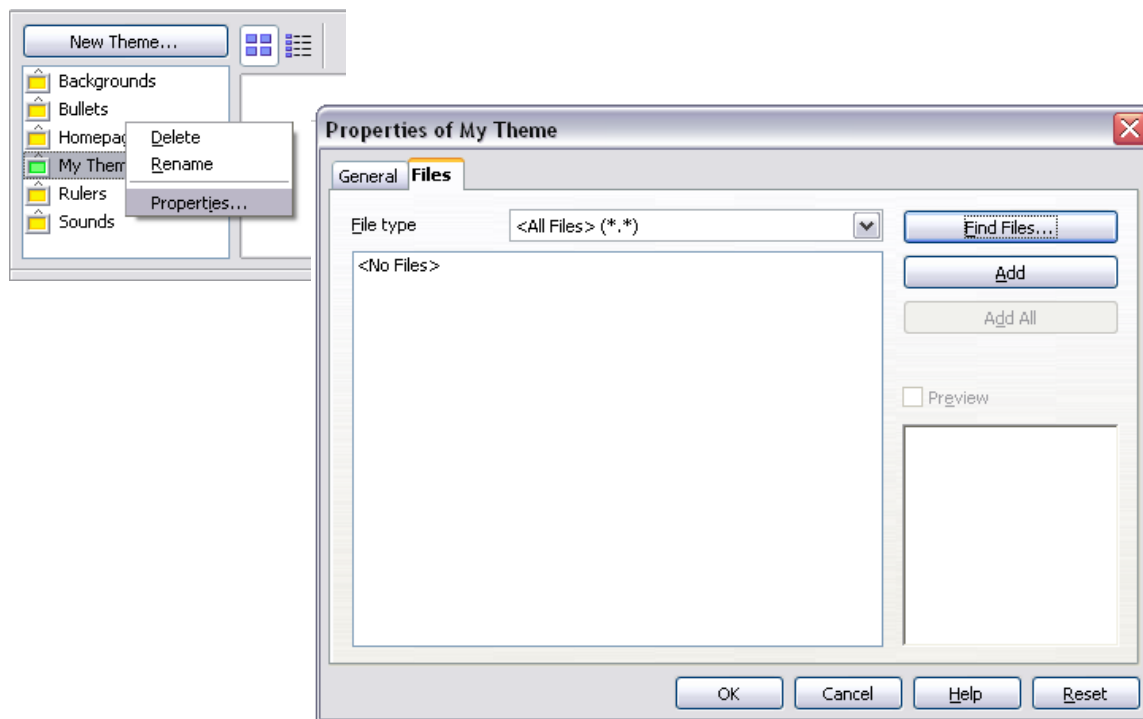



Figure 234. Gallery properties dialog box

- 4) On the *Files* page, click the **Find Files** button. The Select path dialog box opens.
- 5) You can enter the path for the file's directory in the *Path* text box, or you can navigate to locate the file's directory.
- 6) Use the *File type* drop-down list to help limit the search.

- 7) Press the **Select** button to start the search.
- 8) A list of graphic files will be displayed in the window. You can use the *File type* filter again to further limit the search.
- 9) Select the files to add. To select more than one file, hold the *Control* key down while you click on each file.
- 10) Finally, click **Add**.
- 11) When you have finished working with the Gallery, you can click on its icon  to close it.

---

**Note** This procedure assumes that the graphic files for the themes already exist. You may need to import some graphics or to create your own onto your computer if the existing files are insufficient.

---

---

**Note** Similar to the file search function on various operating systems, **Find Files** searches for graphic files in any subfolders of the directory selected in step 5.

---

## Modifying an image

---

When you insert a new image or select one already present in the document, the Picture toolbar appears. This toolbar can be either floating or docked. Figure 235 shows what the Picture toolbar looks like when it is floating. Two other toolbars can be opened from this one: the Graphic Filter toolbar, which can be torn off and placed elsewhere on the window and the Color toolbar, which opens as a separate floating toolbar.

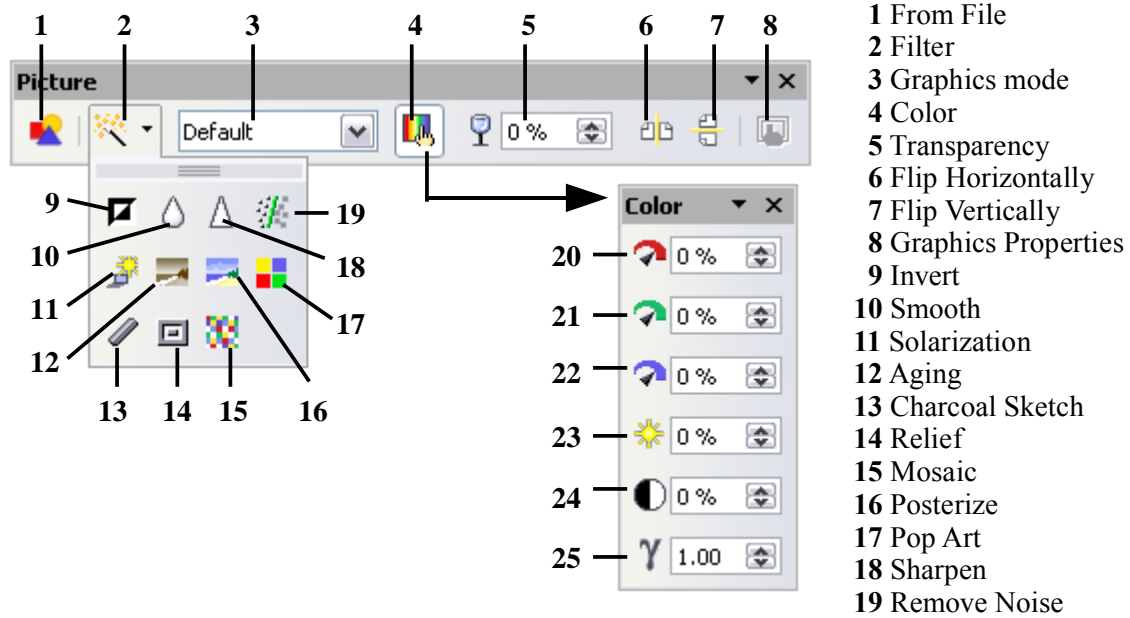
From these toolbars, you can apply small corrections to the graphic or obtain special effects.

---

**Note** For more sophisticated adjustments, it is better to use an image manipulation program, such as GIMP. GIMP is an open-source graphics program which can be downloaded from <http://www.gimp.org/downloads/>.

---

You can find out more information about the graphic filter and what its elements do by selecting the **Find** tab in Help (**Help > OpenOffice.org Help**), pressing the *FI* key, or by clicking on an element that has a dialog box and selecting **Help**. Then, type *Graphic Filter Bar* into the *Search term* text box and press **Find**.



**Note:** Graphics mode (3) can be Default, Grayscale, Black/White, or Watermark.

Figure 235. Picture toolbar plus tear-off Graphic Filter toolbar and floating Color toolbar

Figure 236 provides examples of some of the changes available on the Picture toolbar.

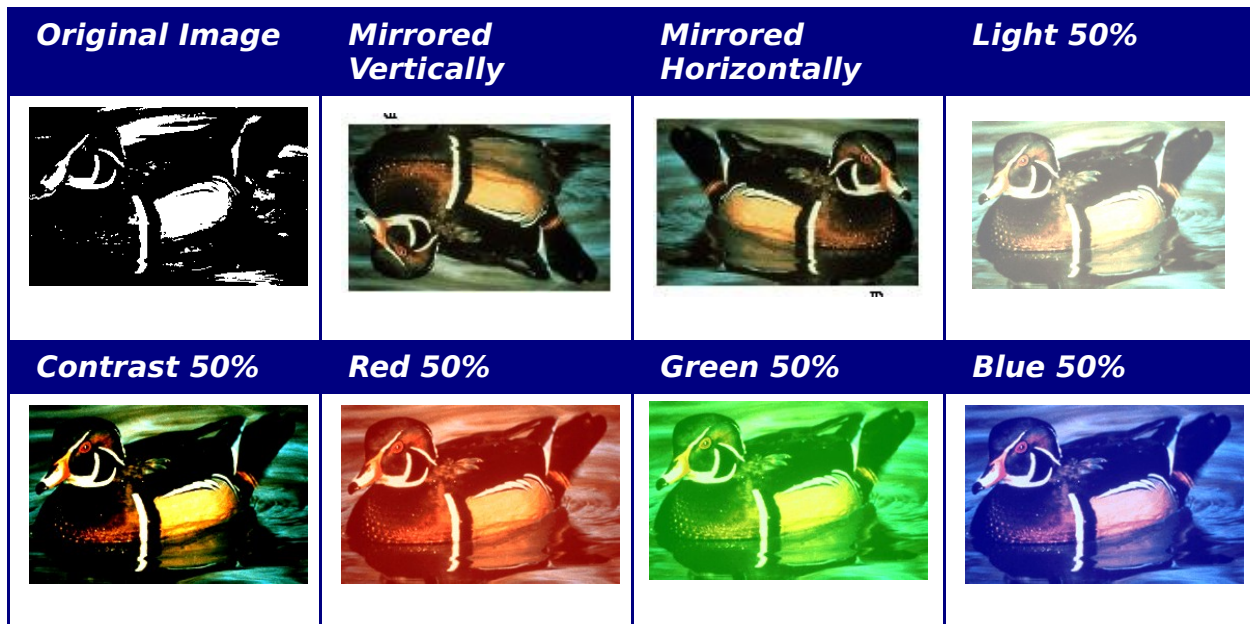


Figure 236. Some graphic effects that can be changed from the Picture toolbar

## Positioning graphics within the text

When you add a graphic to a text document, you need to choose how to position the graphic with respect to the text and other graphics.

Graphic *arrangement* refers to the placement of a graphic behind or in front of other graphics or text. *Alignment* refers to the vertical or horizontal placement of a graphic in relation to the page, frame, paragraph, or character to which it is anchored. *Text wrapping* refers to the relation of graphics to surrounding text, which may wrap around the graphic on one or both sides, be overprinted behind or in front of the graphic, or treat the graphic as a separate paragraph or character.

### Arranging and aligning graphics

You can arrange and align graphics using commands from:

- The main menu: **Format > Alignment** (or **Arrange, Wrap, Anchor, Flip, ...**)
- By right-clicking on the picture, then **Format > Alignment** (or **Arrange, Wrap, or Anchor**)
- Frame (with the *Graphics* frame style applied) toolbar
- Picture dialog box

#### Frame toolbar

When you select a graphic, the Frame toolbar (shown in Figure 237) may be displayed.

Here you can click icons to apply many arrangement, alignment, wrapping, anchoring, formatting, and other choices.

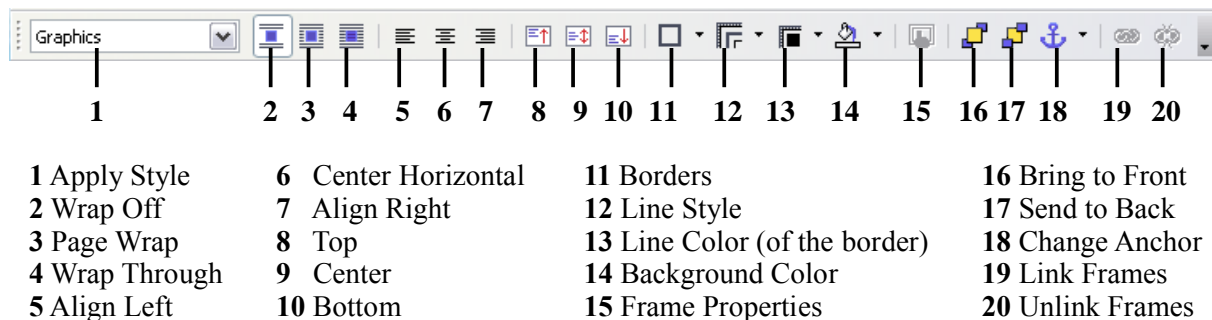


Figure 237. Frame toolbar (*Graphics object*)

#### Picture dialog box

Click on the graphic to select it and then click **Format > Picture**, or right-click on the graphic and then click **Picture** on the pop-up menu, to display the Picture dialog box (Figure 240). Here you can specify the characteristics of the graphic and its placement in detail.

## Wrapping text around graphics

On the main menu, click **Format > Wrap**. The Wrap menu options provide several possibilities:

- Alternate paragraphs and graphics, maintaining a separation between them (*Wrap Off*).
- Wrap text around the graphics (*Page Wrap* or *Optimal Page Wrap*).
- Put a semi-transparent graphic over the text (*Wrap Through*).
- Add a graphic in the background (*In Background*).

Often you need to insert graphics with no text around them, as in this chapter. To set the position of an image to the Wrap Off format, follow the following steps:

- 1) Select a graphic by clicking on it.
- 2) Right-click to display the context menu and move the mouse pointer to **Wrap** to display the various wrap modes.
- 3) Select **No Wrap**.

Figure 238 shows an example of this operation.



Figure 238. Changing the wrap of a graphic

When formatting some documents, such as newsletters, you may want to put photos mixed with text or just want to add some decorative images. The Page Wrap option may satisfy this need. Figure 239 shows an example of a graphic insertion with the Page Wrap option.

When an image is inserted with the Page Wrap option, you can move it anywhere on the page. The text will be automatically adjusted around the image, like water around a sailing boat.

The Optimal Page Wrap option is similar to Page Wrap, but it maintains the text positioned beside the image. The position is decided automatically in order to optimize the relative position between text and image.

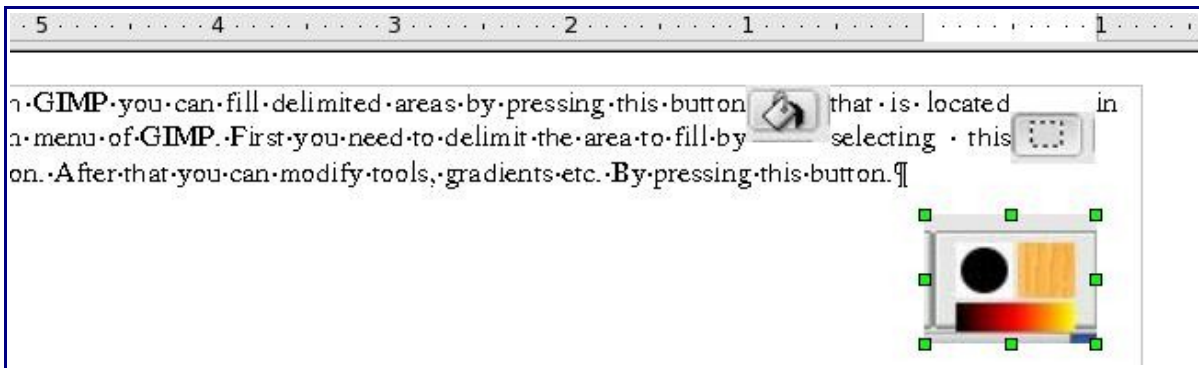


Figure 239. Inserting a graphic using the Page Wrap option

Double-clicking on an image pops up the Picture dialog box where you can set all the parameters affecting the image (see Figure 240). On the *Wrap* page, you can change the setting for the optimal page wrap.

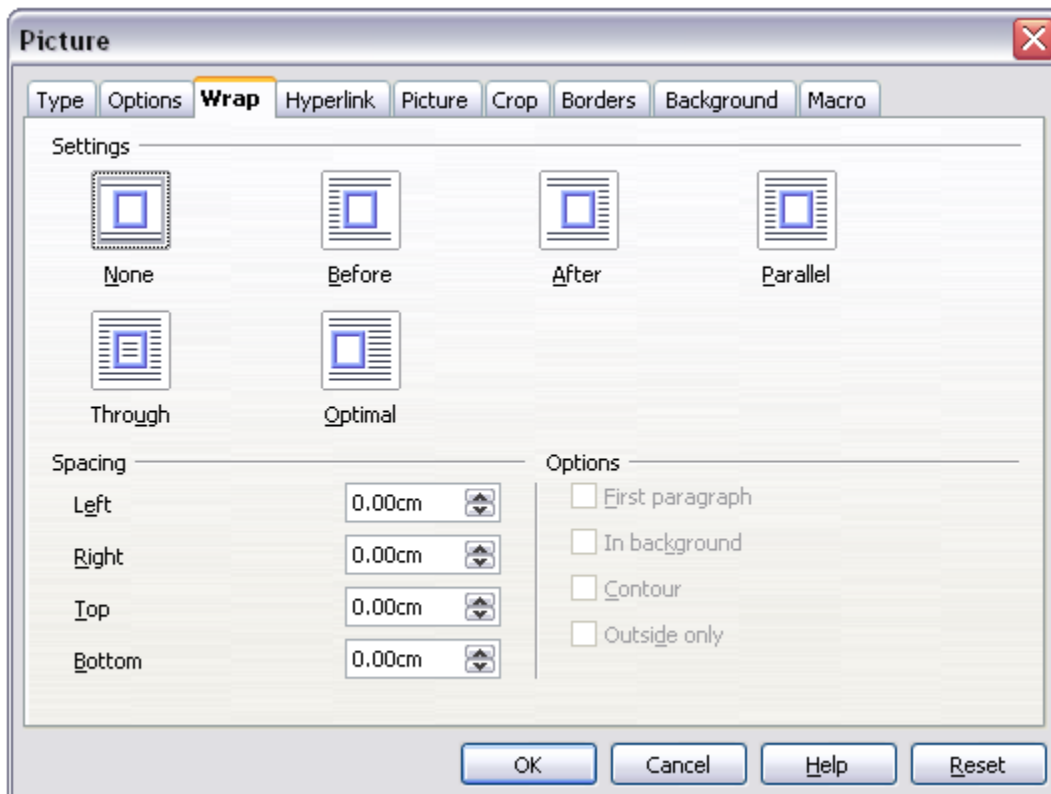


Figure 240. The Wrap page of the Picture dialog box

The Wrap Through option lets you also insert an image overlapping the text. In this case, some part of the text will be hidden, unless you change the transparency of the image.

After changing the transparency, the final result looks like a decal applied over the text, as in Figure 241, where the transparency has been set to **48%** in the *Transparency* spinbox in the Picture toolbar. The words under the image are visible but appear lighter than the rest of the text.

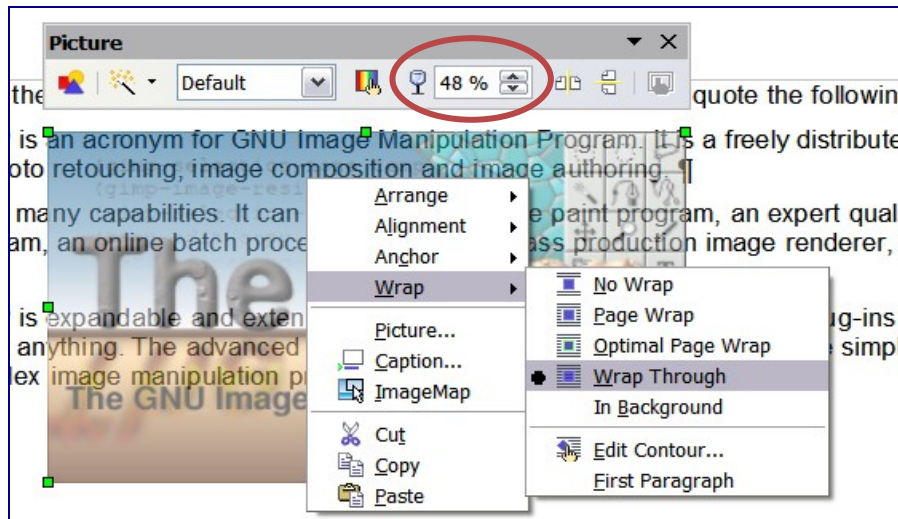


Figure 241. Transparent image added over the text

You can obtain a similar result if you set a graphic's wrap to the *In Background* format. In this case all the text will be clearly readable, with characters that have the same intensity. However, the background graphic should not be dark; otherwise, the text could be difficult to read. You can also use the *Transparency* spinbox to control the "transparency".

## Anchoring graphics and drawing objects

You can anchor graphics as a character or to a page, paragraph, or character. You can also place graphics in a frame and anchor the frame to a page, paragraph, or character. Which method you choose depends on what you are trying to achieve.

Here are the ways you can anchor graphics or drawing objects:

### To Page

The graphic keeps the same position in relation to the page margins. It does not move as you add or delete text or other graphics. This method is useful when the graphic does not need to be visually associated with a particular piece of text. It is often used when producing newsletters or other documents that are very layout intensive.

### To Paragraph

The graphic is associated with a paragraph and moves with the paragraph. It may be placed in the margin or another location. This method is useful as an alternative to a table for placing icons beside paragraphs.

### To Character

The graphic is associated with a character but is not in the text sequence. It moves with the paragraph but may be placed in the margin or another location. This method is similar to anchoring to a paragraph but cannot be used with drawing objects.



### As Character

The graphic is placed in the document like any other character and, therefore, affects the height of the text line and the line break. The graphic moves with the paragraph as you add or delete text before the paragraph. This method is useful for keeping screenshots in sequence in a procedure or for adding a small icon in sequence in a sentence.

### To Frame

If the graphic has been placed in a frame, you can anchor the graphic in a fixed position inside the frame. The frame can then be anchored to the page, a paragraph, or a character, as required.

## Adding captions to graphics

---

You can add captions to graphics in three ways: automatically, by using the Caption dialog box, or manually.

### Adding captions automatically

You can set up OOO to add captions automatically whenever you insert a graphic, a table, or other objects into a document. You can choose which objects are captioned automatically, what the sequence name is for each caption (for example, “Table” or “Illustration”), and the position of the caption.

To set up automatic captions:

- 1) Click **Tools > Options > OpenOffice.org Writer**. Click on the + sign to open the different options. The Options – OpenOffice.org Writer – AutoCaption dialog box opens.
- 2) Select **AutoCaption**. Now you can see several choices at the right of the dialog box for adding captions automatically.
- 3) On the AutoCaption dialog box, choose which objects will be automatically captioned and specify the characteristics of the captions.

For more information, see “General options for text documents” in Chapter 2, “Setting up Writer.”

When you insert a graphic if automatic captioning is enabled, the graphic will be placed in a frame along with a caption containing the default sequence name for graphics—Illustration. Position the cursor in the caption area and type the text for the caption.

---

**Note** You can specify where to place an automatic caption for any object except a picture; picture captions can only be automatically placed below the picture. If you need a caption above the picture (for example, for data plots in scientific publications), you must add the captions manually, as described in “Adding captions manually” on page 217.

---

**TIP** A common sequence name—Figure—is not one of those names provided: <None>, **Drawing**, **Illustration**, **Table**, and **Text**. If you want a custom name for your graphics, do the following:

- Open the Options – OpenOffice.org Writer—AutoCaption dialog box, described above.
- Under the *Add captions automatically when inserting* section, check **OpenOffice.org Writer Picture**.
- With the mouse, highlight the text **Add captions automatically when inserting**, if it is not already highlighted. This activates the *Caption* area in the dialog box for pictures (graphics).
- Under the *Category* drop-down list, enter the name that you want added, say, **Figure**, in the place by overwriting any sequence name in the list. (Overwriting the term will not delete it from the drop-down list.) You can also set some options for the number style and for a separator between the name and the number, if desired. Press **OK** to save the changes.

## Using the Caption dialog box

To add captions using the Caption dialog box:

- 1) Insert the graphic, then select it and click **Insert > Caption**. The Caption dialog box opens.
- 2) Under *Properties* on the Caption dialog box (Figure 242), make your selections for the *Category*, *Numbering*, and *Separator* fields (**Illustration**, **Arabic (1 2 3)**, and a colon (:), respectively, for the example in Figure 242) and type your caption text in the *Caption* text box at the top. Whatever text you enter for the caption appears in the box at the bottom, after the sequence name, number, and separator.
- 3) Click **OK**. The graphic and its caption are placed in a frame, as shown in Figure 243.

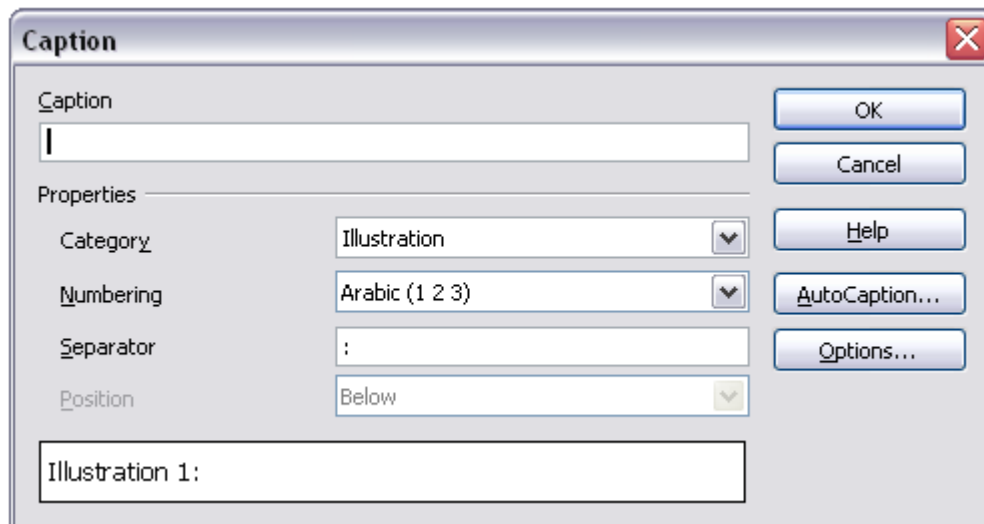


Figure 242. Defining the caption for an illustration

---

**TIP** In the *Category* box, you can type any name you want, for example, *Figure*. OOo will create a numbering sequence using that name.

---

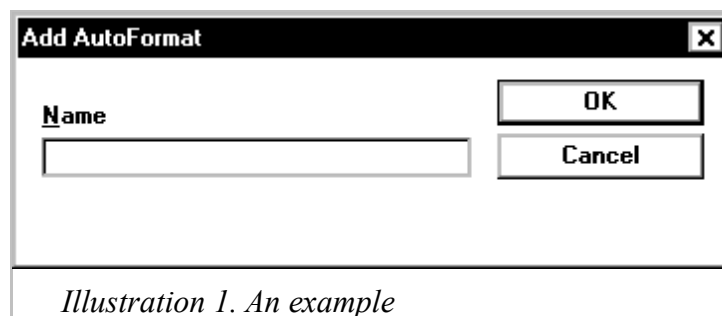


Figure 243. An example of a graphic and its caption contained in a frame. The outer box shows the edge of the frame; this border is normally set to be invisible.

## Adding captions manually

You can add a caption to a graphic manually in two ways.

### Method 1: Override the category and positioning defaults for captions

- 1) Select the picture, right-click on it, and select **Caption**.
- 2) On the Caption dialog box (Figure 242), select **<None>** in the *Category* list and click **OK**.
- 3) Right-click on the picture and select **Caption**. Now you can select a caption type (or type your own sequence category) in the *Category* drop-down list and, optionally, select **Above** in the *Position* list. (If you want the caption to appear at the top, you must add the caption manually.) You can type the actual caption in the box under *Caption* or you can fill it in later—after the (incomplete) caption is inserted.
- 4) Click **OK**.

---

**Note** If you want the caption to appear at the bottom, you can skip skip 2 and the first part of step 3.

---

### Method 2: Place the graphic and its caption in separate paragraphs

- 1) Insert the graphic and anchor it to its paragraph as a character. Press **Enter** to create a new paragraph for the caption.
- 2) In the caption paragraph, enter, for example, *Figure* and add a space.
- 3) To insert the figure number, click **Insert > Fields > Other** and select the **Variables** tab.
- 4) Select **Number range** in the *Type* list. Select **Figure** in the *Selection* list and choose, for example, **Arabic (1 2 3)** in the *Format* drop-down list. Click the **Insert** button.

- 5) A number will appear after the word “Figure” in the caption. Now, type the text of the caption.

**TIPS** If you are manually adding captions to a lot of figures using Method 2, you might want to make an AutoText entry containing, for example, *Figure* and a space, the figure-number field, and an optional separator and a space after it.

You can also place the caption paragraph before (above) the picture paragraph. Using AutoText can be a convenient way to deal with the lack of automatic captioning above pictures.

## Using Writer’s drawing tools

You can use Writer’s drawing tools to create graphics, such as simple diagrams using rectangles, circles, lines, text, and other objects. Group the drawing objects to make sure they stay together the way you intended.

You can use the drawing tools to place drawing objects directly on a page in your document, or you can insert the drawing objects into a frame.

You can also use the drawing tools to annotate photographs, screen captures, or other illustrations produced by other programs, but this is not recommended because:

- You cannot include graphics in a group with drawing objects, so they may get out of alignment in your document.
- If you convert a Writer document to another format, such as HTML, the drawing objects and the graphics will not remain associated; they will be saved separately.

Instead, use OOO Draw or another graphics program to annotate illustrations.

## Creating drawing objects

To begin using the drawing tools, display the Drawing toolbar (Figure 244), by clicking **View > Toolbars > Drawing**.

If you are planning to use the drawing tools repeatedly, you can tear off this toolbar and move it to a convenient place on the window.

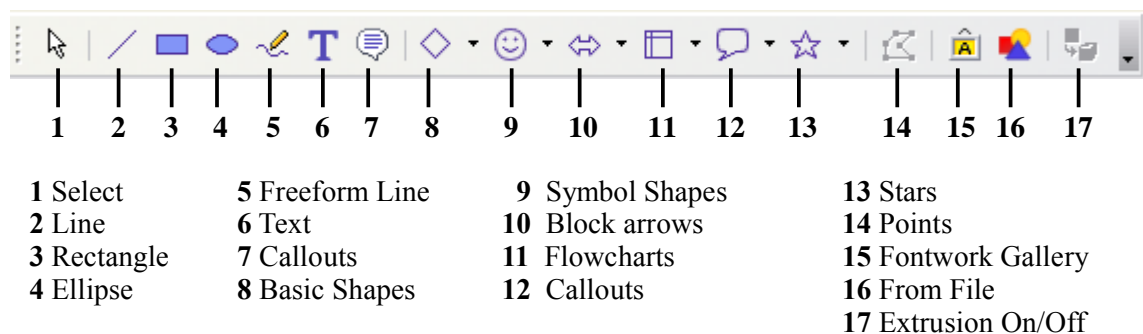



Figure 244. The Drawing toolbar

To use a drawing tool:

- 1) Click in the document where you want the drawing to be anchored. You can change the anchor later, if necessary.
- 2) Select the tool from the Drawing toolbar (Figure 244). The mouse pointer changes to a drawing-function's pointer .
- 3) Move the cross-hair pointer to the place in the document where you want the graphic to appear and then click-and-drag to create the drawing object. Release the mouse button. The selected drawing function remains active, so you can draw another object of the same type.
- 4) To cancel the selected drawing function, press the *Esc* key or click on the **Selection** icon (the arrow) on the Drawing toolbar.
- 5) You can now change the properties (fill color, line type and weight, anchoring, and others) of the drawing object using either the Drawing Object Properties toolbar (Figure 245) or the choices and dialog boxes reached by right-clicking on the drawing object.

## Setting or changing properties for drawing objects

To set the properties for a drawing object before you draw it:

- 1) On the Drawing toolbar (Figure 244), click the **Selection** tool.
- 2) On the Drawing Object Properties toolbar (Figure 245), click on the icon for each property and select the value you want for that property.
- 3) For more control, or to define new attributes, you can click on the **Area** or **Line** icons on the toolbar to display detailed dialog boxes.

The default you set applies to the current document and session. It is not retained when you close the document or close Writer, and it does not apply to any other document you open. The defaults apply to all the drawing objects except text objects.

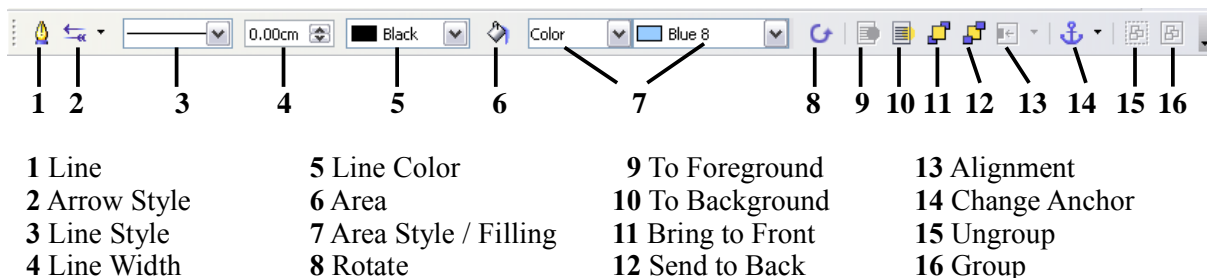


Figure 245. Drawing Object Properties toolbar

To change the properties for an existing drawing object:

- 1) Select the object.
- 2) Continue as described above.

You can also specify the position and size, rotation, and slant and corner radius properties of the drawing object:

- 1) Right-click on the drawing object and then click **Position and Size** from the pop-up menu. The Position and Size dialog box is displayed.
- 2) Choose any properties, as required.

## Grouping drawing objects

- 1) Select one object, then hold down the *Shift* key and select the others you want to include in the group. The bounding box expands to include all the selected objects.
- 2) With the objects selected, hover the mouse pointer over one of the objects and click either **Format > Group > Group** or right-click and then click **Group > Group** on the popup menu.

---

**Note** You cannot include an embedded or linked graphic in a group with drawing objects.

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## Graphic file types supported

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OpenOffice.org Writer can open the file types listed in Table 4. Many of these file types are hyperlinked to Wikipedia for their definitions and other information.

Table 4. Graphic file types supported by OpenOffice.org Writer

<b>File extension</b>	<b>File type</b>
BMP	Windows Bitmap
DXF	AutoCAD Drawing Interchange (Exchange) Format
EMF	Enhanced Metafile
EPS	Encapsulated PostScript
GIF	Graphics Interchange Format
JPG, JPEG, JFIF, JIF	Joint Photographic Experts Group
MET	OS/2 Metafile
PBM	Portable Bitmap
PCD	Kodak Photo CD
PCT	Macintosh QuickDraw PICT
PCX	Zsoft PC Paintbrush
PGM	Portable Graymap
PNG	Portable Network Graphics
PPM	Portable Pixelmap
PSD	Adobe Photoshop Document
RAS	Sun Raster Image
SGF	StarWriter Graphics Format
SGV	StarDraw 2.0
SVM	StarView Metafile
TGA	Truevision Targa
TIF, TIFF	Tagged Image File Format
WMF	Windows Metafile
XBM	X Bitmap
XPM	X PixMap



*Chapter 9*  
*Working with Tables*  
*Using OpenOffice.org Writer*



## Introduction

Tables are a useful way to organize and present large amounts of information, for example:

- Technical, financial, or statistical reports
- Product catalogs showing descriptions, prices, characteristics, and photographs of products
- Bills or invoices
- Lists of names with address, age, profession, and other information

Tables often can be used as an alternative to spreadsheets to organize materials. A well-designed table can help readers understand better what you are saying. While you would normally use tables for text or numbers, you could put other objects such as pictures in cells.

Tables can also be used as a page layout tool to position text in areas of a document instead of using several *Tab* characters. For example, a business may prepare a template of a letter with its logo, the sender, receiver, date, and subject fields correctly positioned in a table with invisible borders. This use of tables is described in Chapter 4, “Formatting Pages”.

Tables are highly customizable in OpenOffice.org 2.0; some features that were lacking in version 1, such as nested tables, are now included.

## The Table menu and toolbar

Table commands are located in the main **Table** menu and on the Table toolbar, shown in Figure 246. Table 5 describes the functions of these commands and icons.

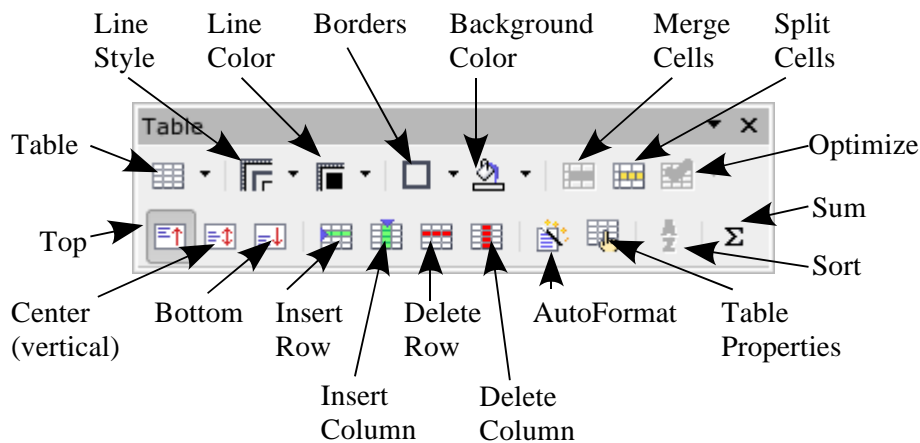


Figure 246: Table toolbar

When you create a table or select an existing table, the Table toolbar may be displayed automatically. You can manually display the Table toolbar by clicking **View > Toolbars > Table**. It can float on top of the main Writer window (as above) or it can be docked along any side of the window.

Table 5: Functions of the icons on the Table toolbar


<b>Icon Name</b>	<b>Description</b>
Table	Opens the Insert Table dialog box where you can set up and insert a table into the document. You can also use the mouse to click the arrow at the right, drag to select the number of rows and columns to include in the table, and then click in the last cell.
Line Style	Opens the Border Style toolbar where you can modify the style of the border line.
Line Color	Opens the Border Color toolbar where you can modify the color of the border.
Borders	Opens the Border toolbar where you can select which sides should have a border.
Background Color	Opens the Background toolbar where you can select the background color.
Merge Cells	Combines the selected cells to a single cell. Refer to “Merging and splitting cells” on page 228 for an example of using this button.
Split Cells	Opens the Split Cell dialog box where you can define how to split a cell. Refer to “Merging and splitting tables” on page 229 for an example of using this button.
Optimize	Open the Optimize toolbar where you can distribute the columns or rows evenly or optimize the row height or column width.
Top	Aligns the contents of the selected cells to the top of the cell.
Center (vertical)	Aligns the contents of the selected cells to the center of the cell.
Bottom	Aligns the contents of the selected cells to the bottom of the cell.
Insert Row	Inserts a row below the selected row.
Insert Column	Inserts a column after the selected column.
Delete Row	Deletes the selected row(s) from the table.
Delete Column	Deletes the selected column(s) from the table.
AutoFormat	Opens the AutoFormat dialog box where you can select among several predefined formatting sets including fonts, shading, and borders.
Table Properties	Opens the Table Format dialog box where you can modify various properties for the table, for example, name, alignment, spacing, column width, borders, and background.
Sort	Opens the Sort dialog box where you can specify the sort criteria for the selected cells.
Sum	Activates the sum function. Refer to “Using spreadsheet functions in a table” on page 242 for an example of using this button.

## Creating a table

Before you insert a table into a document, it is a good plan to have an estimate of the number of rows and columns required. However, if necessary, you can easily make changes later.

### Inserting a new table

To insert a new table, position the cursor where you want the table to go, then use any of the following methods to open the Insert Table dialog box (shown in Figure 247):

- From the main menu, select **Table > Insert > Table**.
- Press *Control+F12*.
- From the Standard toolbar, click the **Table** icon .

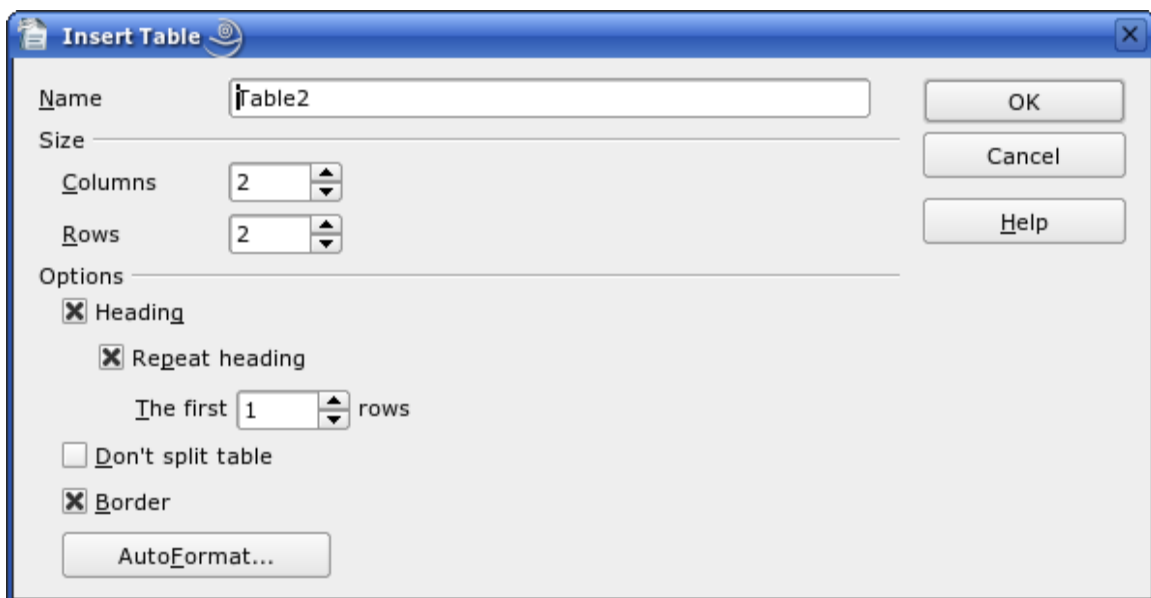


Figure 247: Inserting a new table using the Insert Table dialog box

Here you can specify the properties for the new table.

Under *Size*, specify the initial number of columns and rows for the new table. You can change the size of the table later, if necessary.

Under *Options*, set up the initial table characteristics. When the checkboxes are selected, the following actions occur.

- **Heading** – Defines the first row(s) in the table as headings. The default Table Heading paragraph style is applied to the heading rows and thus makes the text centered, bold, and italic. You can edit the Table Heading in the Styles and Formatting window to change these default settings.

- **Repeat heading** – Repeats the heading row(s) of the table at the top of subsequent pages if the table spans more than one page.

*The first ... rows* – Specifies the number of rows to be repeated. Default is 1.

- **Don't split table** – Prevents the table from spanning more than one page. This can be useful if the table starts near the end of a page and it would look better if the whole table were located on the following page. If the table ends up longer than what fits on one page, you need to either deselect this checkbox or manually split the table.
- **Border** – Surrounds each cell of the table with a border. This border can be modified or deleted later.
- **AutoFormat** – Selects one of the many predefined table layouts. See “AutoFormatting tables” on page 238 for more information.

After making your choices, click **OK**. Writer creates a table as wide as the page margins, with all columns the same width and all rows the same height. You can then adjust the columns and rows to suit your needs.

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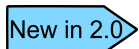
**TIP** To directly insert a table with the default properties, click on the little arrow next to the **Table** icon on the Standard toolbar. A graphic appears where you can choose the table's size (rows and columns) by dragging the mouse. Holding down the mouse button over the **Table** icon will also display the graphic.

---

## Creating nested tables

With OpenOffice.org 2.0, you can now create tables within tables (nested tables). This feature provides much more flexibility by allowing you to insert a secondary table into a primary table's cell. See Figure 248.

To do this, click in a cell of an existing table and use any of the methods mentioned above in “Inserting a new table”.



Nested tables are new in version 2.0 of OpenOffice.org.

<table border="1" style="background-color: yellow;"> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>							

*Figure 248: Example of a nested table. The yellow-shaded table is nested in a cell of the larger table.*

## Using AutoCorrect to create a table

You can also create a table by typing a series of hyphens (-) or tabs separated by plus signs, for example +-----+---+ and then pressing *Enter*. Plus signs indicate column dividers, while hyphens and tabs indicate the width of a column. For example:

+-----+-----+-----+

This character sequence creates a table like this:

--	--	--

---

**Note** This function can be disabled or enabled in **Tools > AutoCorrect**. On the *Options* tab, deselect or select the **Create table** checkbox. This function does not operate when creating nested tables.

---

## Formatting a table

---

### Default parameters

If you create a table using the Insert Table dialog box or the **Table** icon on the Standard toolbar, the following defaults are set:

- The cells in the first row use the *Table Heading* paragraph style. In the default template, the text is centered and set with a bold and italic font.
- The remaining cells use the *Table Contents* paragraph style, which, in the default template, is identical to the *Default* paragraph style.

### Formatting individual cells

You can format each cell independently from other cells. For example, you can:

- Format the characters – change the font, the font style, and the background colors.
- Set different indentation values – when you select a cell, the horizontal ruler shows the indentation points with gray pentagons. Vary the indentation by clicking and dragging these points.
- Change the text alignment – for example, a number can be aligned to the right, while text on another line in the cell is aligned to the left or centered.

To change the format of a cell or range of cells:

- 1) Select the cell or range of cells to be modified. You can select a single cell by clicking in it or select a range with click and drag.
- 2) Right-click the selection, or select **Table > Table Properties** from the menu bar.
- 3) From the pop-up menu or the Table Properties dialog box, select the property to modify.

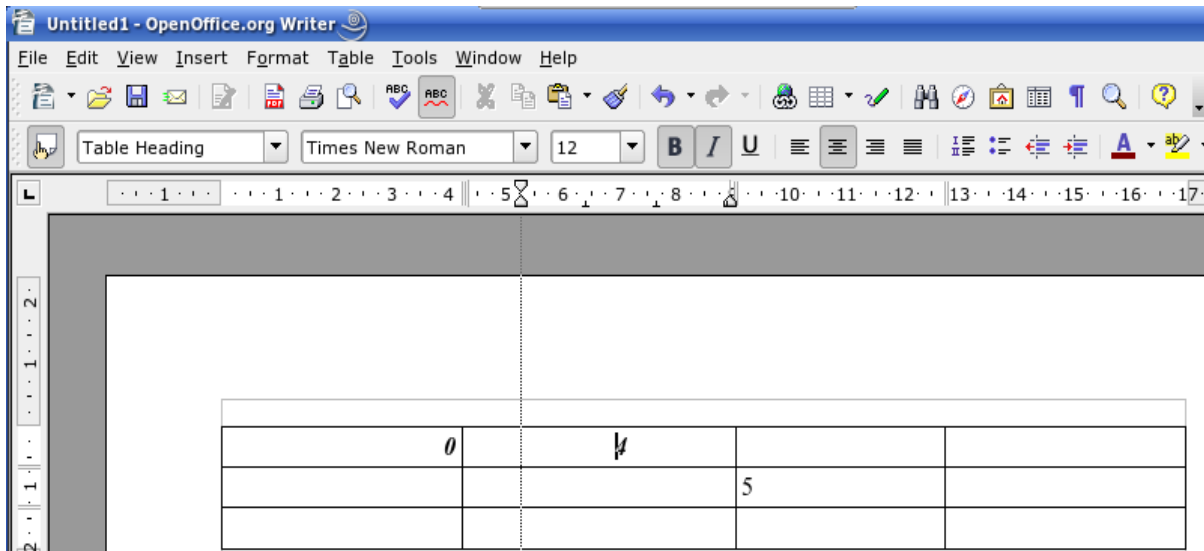


Figure 249: Formatting the contents of individual cells: The 0 is right-justified; the 4 is centered and the indentation in that cell has been increased; the 5 is left-justified.

## Inserting rows and columns

To insert any number of rows or columns:

- 1) Place the cursor in the row or column where you want new rows or columns inserted and right-click. On the pop-up menu, select **Row > Insert** or **Column > Insert**. This will display a dialog box where you can select the number of rows or columns to add after or before the selected one.
- 2) Set *Amount* to the number of rows or columns to insert and *Position* to **Before** or **After**. Click **OK** to close the dialog box.

---

**Notes** Clicking on the **Insert Row** icon on the *Table* toolbar inserts one row *below* the selected one. Clicking on the **Insert Column** icon on the *Table* toolbar inserts a column *after (to the right of)* the selected one.

Regardless of how they are inserted, new rows or columns have the same formatting as the selected row or column.

---

## Merging and splitting cells

To merge a group of cells into one cell:

- 1) Select the cells to merge.
- 2) Right-click and select **Cell > Merge** on the pop-up menu, or select **Table > Merge Cells** from the menu bar.

To split a cell into multiple cells:

- 1) Position the cursor inside the cell.
- 2) Right-click and select **Cell > Split** on the pop-up menu, or select **Table > Split Cells** from the menu bar.
- 3) Select how to split the cell. A cell can be split either horizontally (create more rows) or vertically (create more columns), and you can specify the number of new cells to create.

## Merging and splitting tables

A whole table can be split into two tables, and two tables can be merged into a single table. Tables can be split only horizontally (the top rows are put into one table, and the bottom rows into another).

To split a table:

- 1) Place the cursor in a cell which will be in the top row of the second table after the split (so the table splits immediately above the cursor).
- 2) Right-click and select **Split Table** in the pop-up menu. You can also use **Table > Split Table** from the menu bar.
- 3) A dialog box will pop up regarding the header. You can select *No heading* or an alternative formatting for the header (the top row of the new table).

The table is then split into two tables separated by a blank paragraph.

To merge two tables:

- 1) Delete the blank paragraph between the tables. You must use the *Delete* key (not the *Backspace* key) to do this.
- 2) Select a cell in the second table.
- 3) Right-click and select **Merge Table** in the pop-up menu. You can also use **Table > Merge Table** from the menu bar.

---

**TIP** To see clearly where the paragraphs are and to delete them easily, select **View > Nonprinting Characters** (*Ctrl+F10*) or click the ¶ button in the Standard toolbar.

---

## Choosing table spacing and alignment

You can specify how the table is aligned on the page and what space to leave around the table.

Right-click on the table and select **Table** from the pop-up menu or select **Table > Table Properties** from the menu bar. On the Table Format dialog box, select the *Table* tab (see Figure 250).

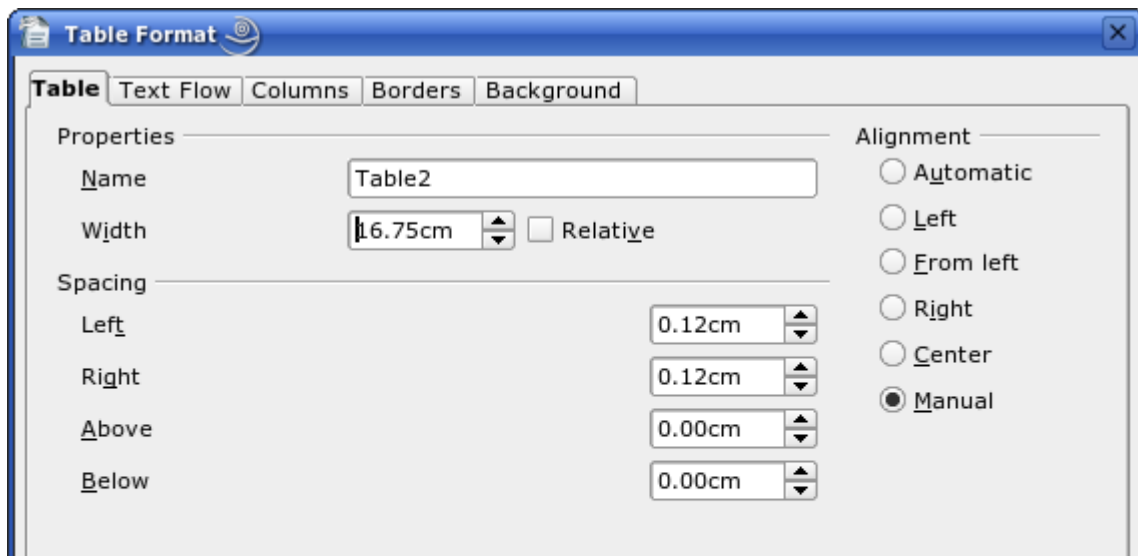


Figure 250: Table Format dialog box: Table tab

On this tab, you can:

- Set a name for the table. This has no effect on the display but makes the table easier to find when using the Navigator. This can be very useful if your document has a number of tables. A table name cannot have any spaces. To make a meaningful name, you could use underscores or hyphens (for example, Table-1\_Doll\_House\_Inventory).
- Set the overall width of the table, either absolute or relative to the page width. This option is available only if the *Alignment* is not set to **Automatic**. (See below.)
- Specify how the table is aligned if it does not fill the width of the page (between the margins). Under *Alignment*:
  - **Left** aligns the table with the left margin.
  - **Right** aligns the table with the right margin.
  - **From Left** lets you specify under *Spacing* exactly how far from the left margin the table is placed.
  - **From Right** lets you specify under *Spacing* exactly how far from the right margin the table is placed.
  - **Manual** lets you specify the distance from both left and right margins under *Spacing*.
- Under *Spacing: Above* and *Below*, specify the distance to leave above and below the table.



## Specifying text flow

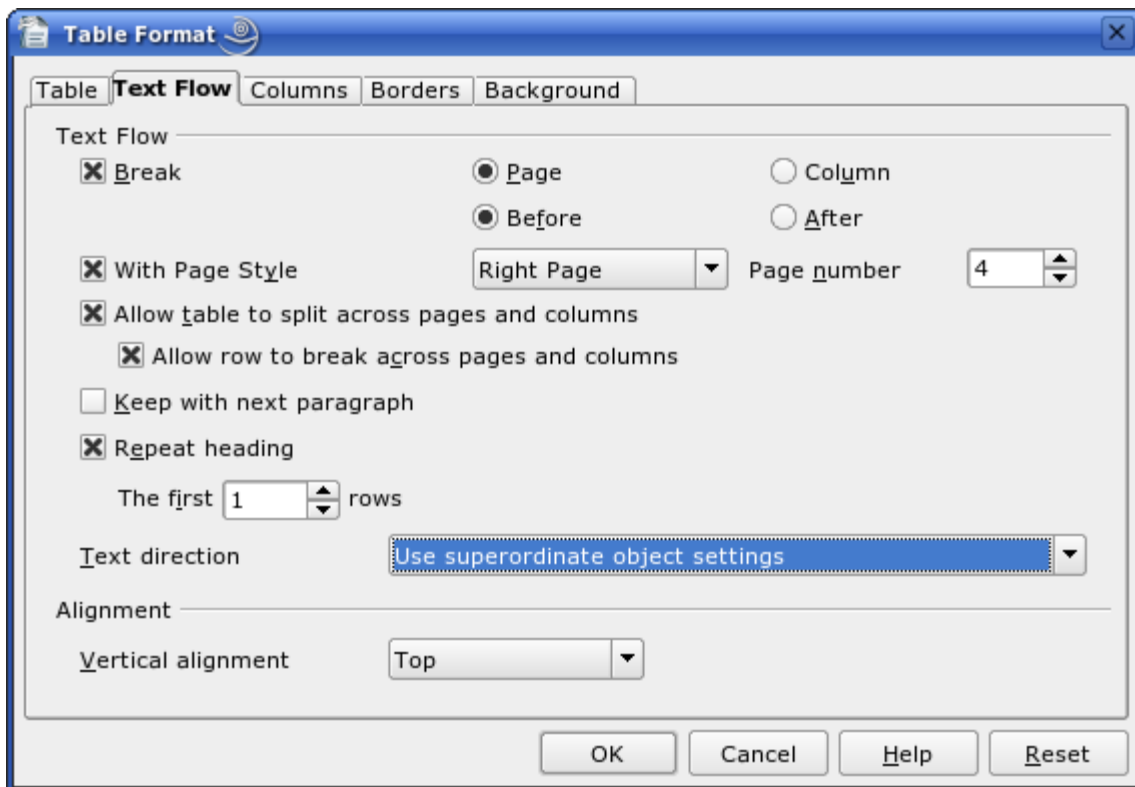


Figure 251: Table Format dialog box: Text Flow tab

On the *Text Flow* tab of the Table Format dialog box (Figure 251), you can:

- Insert a page or column break either before or after the table. Use the *Text Flow: Break* checkbox, combined with the **Page** or **Column** and the **Before** or **After** buttons.
- If you insert a page break before the table (that is, start the table on a new page), you can also change the page style that will go with it by checking the **With Page Style** box and selecting a new page style. As with any page break, you can also reset the page numbers using the *Page number* box.
- Keep a table on one page by deselecting the **Allow table to split across pages and columns** checkbox. If this item is deselected, the next item is not active.
- Keep each row on one page by deselecting the **Allow row to break across pages and columns** checkbox.
- Use the **Repeat heading** checkbox and the numbers box to select the number of table heading rows that will be repeated on each page. A complicated table may need two or three heading rows to be easily read and understood.
- Use the *Text direction* list to select the direction for the text in the cells. The most common setting is “left to right” for Western languages. Note: The phrase “Use superordinate object settings” means “use the formatting settings from the paragraph before the table.”

- Select the vertical alignment of the text in the table or the selected cells; the choices are to align with the top of the cell, the center of the cell, or the bottom of the cell. This alignment is in addition to the Left-Right alignment options available under **Table > Table Properties > Table** or by right-clicking and choosing **Tables > Table**.

---

**Note** A Table Heading row will not span two pages, but any other row will. A one-row table, set up with the default of including a heading, will not break across pages. The cure is to make sure the table is defined without a heading row.

---

## Resizing rows and columns

You can adjust the height of rows and the width of columns in a table in several ways.

You can manually resize rows and columns by dragging them to the desired size. When the cursor is in the table, a pair of thin gray lines (||) appear in the rulers.

The horizontal ruler shows the column dividers, and the vertical ruler shows the row dividers.

To change the width of a column or height of a row, use one of these methods:

- Hold the mouse button down on a cell border, so a double-headed arrow appears, and drag the border to the desired position.
- To change the column width using the ruler, hold the mouse button down on the appropriate column divider (double vertical line), and drag the divider to a new location.
- To change the row height using the ruler, hold the mouse button down on the appropriate row divider (double horizontal line) and drag the divider to a new location.

Selecting **Table > Autofit** from the main menu offers some shortcuts to resizing:

- Optimal column width or row height will make the columns or rows as narrow as possible while still fitting their contents.
- Columns and rows can be distributed evenly to quickly bring them back to all being the same width or height.

For greater control over the width of each column, use the *Columns* tab of the Table format dialog box (Figure 252).

Right-click on the table and select **Table** from the pop-up menu or select **Table > Properties** from the menu bar. On the Table Format dialog box, select the *Columns* tab.

- **Adapt table width:** If a table already stretches to the page margins, it cannot stretch any wider and the *Adapt table width* option is not available. If the table is narrower, increasing the width of a column will increase the width of the whole table.

**Adjust columns proportionally** results in all columns changing width when one is changed, so the proportions between them stay the same.

- *Remaining space* shows how much farther the table can expand before hitting the limit of the margins. This value cannot be edited.

- Under *Column width*, each individual column can be adjusted. If you have more than six columns, use the arrows at the right and left to view them all.

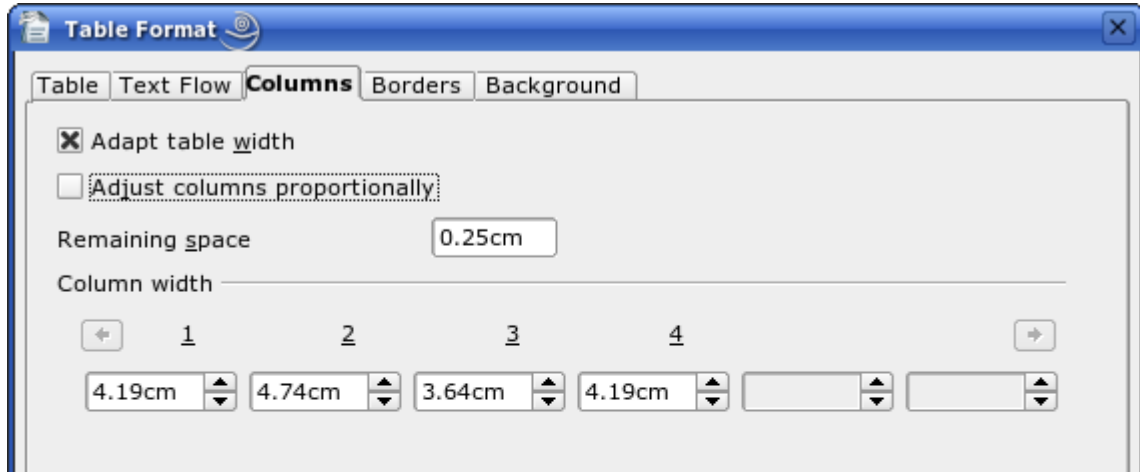


Figure 252: Table Format dialog box: Columns tab

## Specifying table borders

On the Table Format dialog box, select the *Borders* tab (Figure 253).

Here you can set borders for a whole table or groups of cells within a table. In addition, a shadow can be set for the whole table.

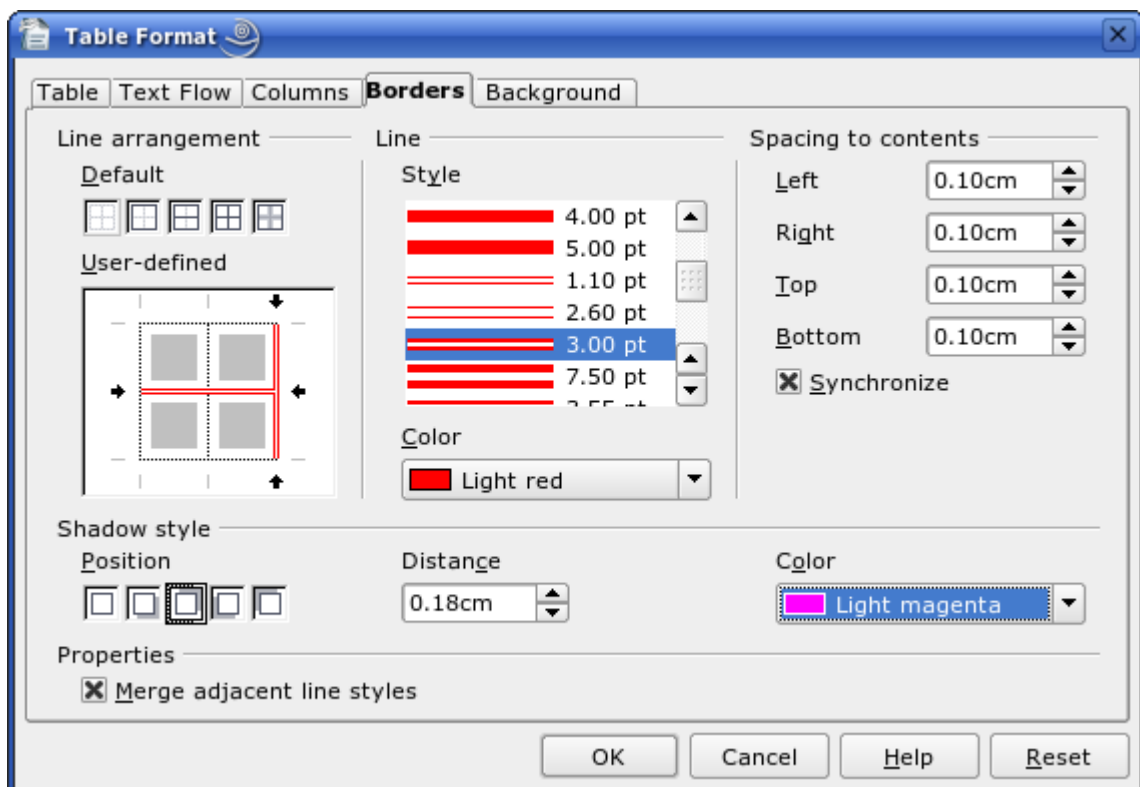


Figure 253: Table Format dialog box: Borders tab

Borders have three components: where they go, what they look like, and how big a space is left around them.

- *Line arrangement* specifies where the borders go. If a group of cells is selected, the border will be applied only to those cells. You can specify no border or any combination of border for the outside edges and the cell divisions, either by selecting a default arrangement or by clicking on the lines in the *User-defined* area to get exactly what you want.
- *Line* specifies what the border looks like: the style and color. There are a number of different styles and colors to choose from.
- *Spacing to contents* specifies how much space to leave between the border and the cell contents. Spaces can be specified to the left, right, above, and below. Check **Synchronize** to have the same spacing all the way round.

Shadows always apply to the whole table. A shadow has three components: where it is, how thick it is, and what color it is. Set each of these under *Shadow style* on the dialog box.

If **Merge adjacent line styles** is checked, two cells sharing a common border will have their borders merged, rather than being side by side.

---

**TIP** To reset everything if you are having problems with borders, right-click in the table and select **Tables > Borders** or select **Tables > Table Properties > Borders** and then select **Set no borders** under *Line arrangement: Default* (the box on the left).

---

## Selecting background colors and graphics

The background of a table, a cell, or a group of cells can be set to a color or a background graphic. If you select an image, you can position it in the cell (or group of cells), stretch it to fill the space, or tile the image across the cells. You can set the background for the whole table in the same way.

To set the background for a cell, row, or table:

- 1) Select the cells you wish to work with. If you are changing the background for a row or table, just place the cursor anywhere inside the row or table to be changed.
- 2) Right-click and select **Table** from the pop-up menu, or select **Table > Table Properties** from the main menu.
- 3) In the Table Format dialog box, select the *Background* tab.
- 4) In the *For* section, choose whether to apply the settings to cell, row, or table. If you choose **Cell**, any changes apply to all the selected cells.
- 5) In the *As* section, choose whether the background is a color or a graphic.
- 6) To apply a color, select the color and click **OK**.
- 7) To apply a graphic, first select the graphic to use. This must be a graphic file accessible from your computer. (Writer supports a large number of graphics formats.)

- You have the option with the *Link* checkbox to link the graphic file. If it is linked, changes to the graphic (for example, if you edit it in a different package) will be reflected in your document. However, you also need to keep the linked graphic file with the document file. If, for example, you email the document without the graphic file, the graphic will no longer be visible.
- Under *Type*, select the type of placement for the graphic. If you choose **Position**, you can select where to position the graphic within the cells, row, or table. If you choose **Area**, the graphic is stretched to fill the whole area. If **Tile**, the graphic is tiled (repeated horizontally and vertically) to fill the area.
- If the **Preview** checkbox is checked, the graphic displays in the pane above the checkbox.
- To apply the graphic, click **OK**.

See Figure 254 for an example of a background for a cell using an unlinked graphic which can be viewed in the Preview pane.

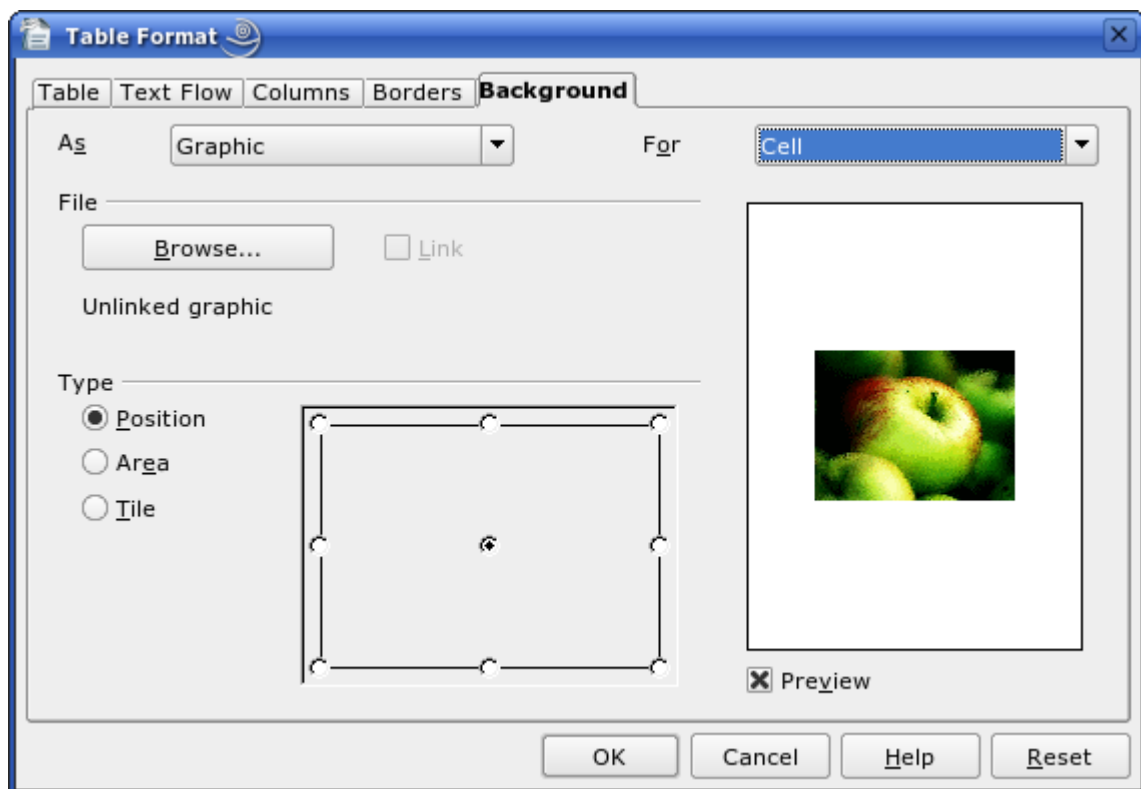


Figure 254: Table Format dialog box: Background tab

## Vertical alignment

The default for text entered into table cells is for it to be aligned horizontally to the left, and numbers are aligned to the right. In addition, if more than one row of text is entered or if a graphic is used, text aligns vertically to the top of the cell and numbers to the bottom.

To vertically center align all of the text and numbers in the table:

- 1) Move the cursor to the upper left-hand cell under the table heading and click and drag to the lower left hand cell.

---

**Note** By selecting all cells, the images will also be aligned.

---

- 2) Right-click in the selected area and select **Cell > Center** in the pop-up menu.

## Number formats

The number format can be set for a whole table or group of cells. For example, cells can be set to display in a particular currency, to four decimal places, or in a particular date format.

**Number recognition** specifies that numbers in a text table are recognized and formatted as numbers. If number recognition is not selected, numbers are saved in text format and are automatically left-aligned. Number recognition can be set on or off under **Tools > Options > OpenOffice.org Writer > Table**.

Select the cells to format, then right-click and select **Number Format** from the pop-up menu. The Number Format dialog box opens for you to set options for various categories of numerical data.

- In the *Category* drop-down list, select the category you want, such as currency, date, or text.
- In the *Format* drop-down list, choose a format for the category you just selected.
- For some categories, such as date, you may wish to change the language using the *Language* list.
- Additional options are available for different categories.

## Adding a caption

You can easily add a caption to any table. Writer will keep track of all your captioned tables, automatically number them, and update any links to them.

To add a caption to a table:

- 1) Place the cursor in the table.
- 2) Right-click and select **Caption** from the pop-up menu.
- 3) Enter the text for your caption, the numbering style, and separator.

To automatically caption all your tables:

- 1) Place the cursor in a table.
- 2) Right-click and select **Caption** from the pop-up menu.
- 3) Select **AutoCaption**.

- 4) Select **OpenOffice.org Writer Table** and select the settings you want. (This dialog box is covered in more detail in Chapter 2, “Setting up Writer”.)

When AutoCaption is enabled for tables, all tables will be captioned; you will need to add the text for each caption onto the table manually.

Writer supplies five different category labels:

<None>  
**Drawing**  
**Table**  
**Illustration**  
**Text**

You can create your own category labels, formatting and separators, either under **Insert > Caption** or under **Tools > Options > OpenOffice.org Writer > AutoCaption > OpenOffice Writer Table**.

In either case, simply highlight a label and type in the new name. In the example below, we used *Fantasia*.

You can also change the separator or the format of the category label. For example, you might want your tables to be labeled as *Fantasia* and formatted in bold type and using a period (‘.’) as a separator, as follows:

**Fantasia 1.** Interesting data  
**Fantasia 2.** More interesting data  
**Fantasia 3.** Yet more interesting data

To do this, you can highlight and replace a separator and then select **Insert > Caption > Options > Character Style** and assign a style, or you can set this up in the AutoCaption dialog box.

The format and separator if used under **Insert > Caption** only works for that specific table. However, it will work for that and all following tables if it is set up under AutoCaption.

When using AutoCaption, you need to remove the ‘.’ under **Numbering captions by chapter > Separator** if you are *not* using Chapter numbering to avoid having an extra punctuation mark added to the category label.

## Cross-referencing a table

You can insert a cross-reference to a captioned table. Clicking on the cross-reference takes the reader directly to the table.

- 1) Position the cursor where you want the cross reference.
- 2) Select **Insert > Cross-reference** from the main menu.
- 3) Set the *Type* to **Table**. A list of captioned tables will be shown in the *Selection* panel; select the one you want to reference.

- 4) In the *Format* pane, choose how the cross reference will appear. For example, **Category and Number** will show up as “**Table 1**” for the first table, while **Numbering** produces only “**1**”, and **Above/Below** inserts one of those words as the reference.
- 5) Click **Insert** to add the cross-reference and click **Close** to exit the dialog box.

## AutoFormatting tables

You can use AutoFormat to make your table formats consistent. You can also create and add your own table autoformats. Here is how:

- 1) Create a table and manually format it as you wish, including borders, spacing of text from the top and bottom borders, fonts to be used in the table heading and data cells, and background colors.

---

**Note** To use background colors in a new format, color the cells rather than the table. That is, select the cell or cells you wish to color, click **Table > Table Properties > Background**, choose a color, and specify *As: Color, For: Cell*.

---

- 2) Position the cursor anywhere in the table and then click **Table > AutoFormat**.
- 3) On the AutoFormat dialog box (Figure 255), click **Add** and give the table format a name.

---

**TIP** This technique does not include table and column widths in the table format. To insert a table with predefined full formatting, save it as AutoText.

---

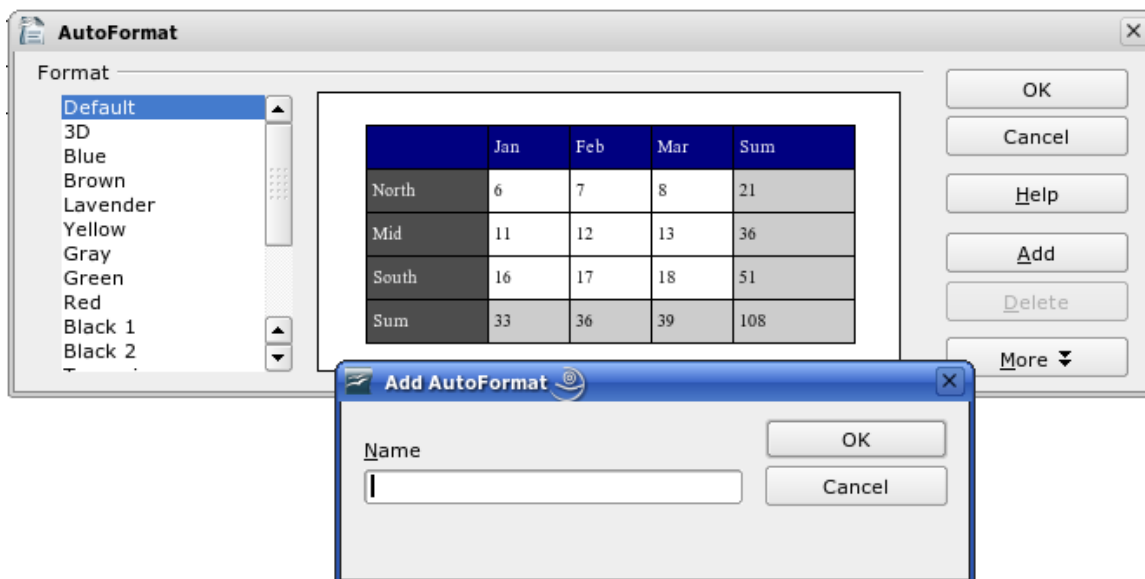


Figure 255: AutoFormat dialog box



## Create a heading row in an existing table

To create a heading row in an existing table that does not have one, you need to apply an autoformat that does have a heading defined. (Here is where having some personalized table formats could come in very handy.) Place the cursor anywhere in the table and then click **Table > AutoFormat**. Choose a format. Click **OK**.

## Rotating text in a table cell

You can rotate text in a table cell 90 or 270 degrees. Text rotation is useful when you have long headings for narrow columns. Select the text to be rotated and then click **Format > Character**. On the *Position* tab, in the *Rotation/scaling* section, choose the rotation angle and click **OK**.

## Displaying or hiding table boundaries

A “table boundary” is a set of pale (usually gray) lines around the cells when viewed on-screen in OOO. These boundaries do not print and do not appear in PDFs; their only function is to help you see where the table cells are.

To display the table the same way on the screen as on the printed page, with no boundary lines, right-click on the table and select **Table Boundaries** from the pop-up menu. Repeat this to have the boundaries appear again.

---

**Note** Turning boundaries off may not have an effect if the table has borders.

---

---

**TIP** You can also turn table boundaries on and off through **Tools > Options > OpenOffice.org > Appearance**. On that page, you can display or hide boundaries around text, pages headers and footers, figures, and other parts of a document.

---

## Data entry in tables

---

### Moving between cells

Within a table, you can use the mouse, the cursor keys, or the *Tab* key to move between cells.

The cursor keys move to the next cell only if there is no text in the way. For example, pressing the right cursor key will move to the right of the text in the current cell, then to the next cell.

The *Tab* key moves directly to the next cell and, if the cursor is in the last cell in the table, creates a new row. Pressing *Shift+Tab* moves the cursor back a cell.

## Number recognition

If number recognition is turned on, when you type a number in a table, Writer aligns it to the right of the cell and strips off any trailing zeros. For example, 4.0 is changed to 4 and aligned to the right.

To turn number recognition on or off, right-click on the table and select **Number Recognition** in the pop-up menu.

## Converting between table and text

Writer makes it easy for you to convert from a table to text (that is, replace a table with its data) or vice versa.

To convert plain text data into a table, select the data and then select **Table > Convert > Text to Table** from the main menu bar. The Convert Text to Table dialog box allows you to create a table. You must select the field delimiter (tab, paragraph marker, comma, or other printing or non-printing character) that Writer should use to divide data into different cells.

To convert from a table to plain text, select the table and then select **Table > Convert > Table to Text**. The data in the table is converted to plain text with the field delimiter of your choice. A space can function as a field delimiter.

## Sorting data in a table

Just as in a spreadsheet, Writer allows data in a table to be sorted. Up to three levels of sorting can be specified (for example, sort first by age, then by name within each age).

To sort data in a table:

- 1) Select the table (or part of the table) to be sorted.
- 2) From the menu bar, select **Table > Sort**.
- 3) In the Sort dialog box:
  - Decide whether you want to sort in the direction of rows or columns. Sorting by rows is the default, which sorts down the page (a list of data in a column will be sorted).
  - Select up to three keys to sort on, in the correct order.
  - For each key, select which column or row to sort on, whether the sort is **Numeric** or **Alphanumeric** and whether it is **Ascending** or **Descending**.
  - Click **OK** to perform the sort.

---

**Note** You have to select all cells that might be affected by the sorting. For example, if you select only the cells of one column, the sort affects that column only, while the others remain unchanged. In such a case, you risk mixing the data of the rows.

---

## Deleting, copying, and moving a table

---

### Deleting a table

To delete a table:

- 1) Click somewhere in the table.
- 2) Select **Table > Delete > Table** from the main menu.

Or:

- 1) Select from the end of the paragraph before the table to the start of the paragraph after the table.
- 2) Press the *Delete* or the *Backspace* key.

---

**Note** The second method also merges the paragraph after the table with the paragraph before the table, which may not be what you want.

---

### Copying a table

To copy a table from one part of the document and paste it into another part:

- 1) Click somewhere in the table.
- 2) From the main menu select **Table > Select > Table**.
- 3) Press *Control+C* or click the **Copy** icon on the Standard toolbar.
- 4) Move the cursor to the target position and click on it to fix the insertion point.
- 5) Press *Control+V* or click the **Paste** icon in the Standard toolbar.

### Moving a table

To move a table from one part of a document to another part:

- 1) Click somewhere in the table.
- 2) From the main menu, select **Table > Select > Table**.
- 3) Press *Control+X* or click the **Cut** icon in the Standard toolbar.
- 4) Move the cursor to the target position and click on it to fix the insertion point.
- 5) Press *Control+V* or click the **Paste** icon in the Standard toolbar.
- 6) Return to the original table, click somewhere in it, and then select **Table > Delete > Table** from the main menu.

## Using tables as a page layout tool

---

Tables may be used as a page layout tool to position text in a document instead of using tabs or spaces. For example, the Tips below are formatting as a table.

For more information and tips about using tables in page layout, see Chapter 4, “Formatting Pages”.

---

**TIPS** When inserting a table used for layout, you may wish to deselect the checkboxes for **Heading** and **Border** (see Figure 247 on page 225).

To remove the borders from an existing table, right-click on the table, select **Table** from the pop-up menu, select the *Borders* tab (see Figure 253 on page 233), and select the icon for no borders.

---

## Using spreadsheet functions in a table

---

In a table in a Writer document, you can use some of the mathematical functions that are normally implemented by OpenOffice.org Calc. For many simpler functions, Writer tables can be used as a basic spreadsheet.

Just as in a spreadsheet, each table cell is identified by a letter (for the column) and a number (for the row). For example, cell C4 is the cell in the third column from the left and fourth row from the top. When the cursor is in a cell, this cell reference is displayed on the status bar (in its default position at the bottom right corner of the screen).

---

**TIP** Basic spreadsheet functions in tables are much the same as in OpenOffice.org Calc. The main difference is that cell references are formatted differently. Cell A2 (first column, second row) is referred to in Calc as A2 (or \$A\$2 for an absolute reference). In Writer tables, it is referred to as <A2>.

---

For example, suppose you had two numbers in cells <B1> and <C2> and wanted to display the sum of the two in cell <A1>, as shown in Figure 256.

Do the following:

- 1) Click in cell <A1> and press the = key. The Formula bar appears automatically, near the top of the screen. In the leftmost side of the bar, you can see the coordinates of the selected cell.
- 2) Click in cell <B1>. The identifiers of this cell are automatically displayed in the Formula bar and inserted into cell <A1>.
- 3) Press the + key.
- 4) Click on cell <C2>. You can see the final formula “= <B1>+<C2>” displayed both in the selected cell and in the Object bar.
- 5) Press the *Enter* key or click the green tick on the Formula Bar.

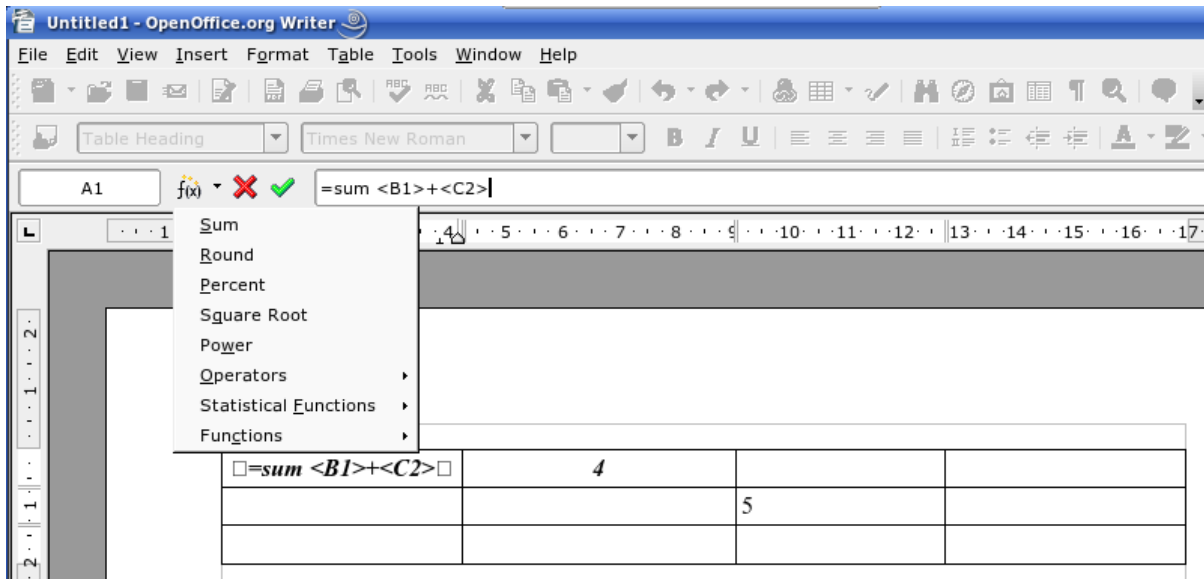


Figure 256: Using spreadsheet functions in a table

**TIP**

To display the list of the mathematical functions that you can use in a table:

- 1) Display the Formula toolbar by pressing *F2* or select a blank cell and press the = key.
- 2) Click and hold the Formula **f(x)** icon.

In our example, this gives the result **9** in the top left cell. For contiguous cells, you can simply select the cells in the row, column, or the rectangle of rows and columns. Thus, for example, to add a column of numbers, do this:

- 1) Type an equals sign '=' in an empty cell.
- 2) Select the cells to be added together, in this case the cells from A2 to A5. The formula should be something like "**=<A2:A5>**".
- 3) Press the *Enter* key or click the green tick on the Formula Bar.
- 4) The answer appears in the cell you have selected.

When using a function, you can enter the cells manually or by selecting them. Thus, to add up the four numbers that we added above (A2, A3, A4, A5), do this:

- 1) Type an equals sign '=' in an empty cell.
- 2) Type 'sum' or select it from the function list **f(x)**.
- 3) Select the cells to be added together. The formula should be something like "**=sum<A2:A5>**".
- 4) Press the *Enter* key or click the green tick on the Formula Bar.
- 5) The answer appears in the cell you have selected.



*Chapter 10*  
*Working with Templates*

## Introduction

---

A template is a model that you use to create other documents. For example, you can create a template for business reports that has your company's logo on the first page. New documents created from this template will all have your company's logo on the first page.

Templates can contain anything that regular documents can contain, such as text, graphics, a set of styles, and user-specific setup information such as measurement units, language, the default printer, and toolbar and menu customization.

All documents in OpenOffice.org (OOo) are based on templates. If you do not specify a template when you start a new Writer document, the document is based on the default template for text documents. If you have not specified a default template, Writer uses the blank template for text documents that is installed with OOo. See "Setting a default template" on page 250 for more information.

This chapter shows you how to:

- Use a template to create a document.
- Create a template.
- Edit a template.
- Set a default template.
- Organize templates.

## Using a template to create a document

---

To use a template to create a document:

- 1) From the main menu, choose **File > New > Templates and Documents**. The Templates and Documents dialog box opens. (See Figure 257.)
- 2) In the box on the left, click the **Templates** icon if it is not already selected. A list of template folders appears in the center box.
- 3) Double-click the folder that contains the template that you want to use. A list of all the templates contained in that folder appears in the center box.
- 4) Click the template that you want to use. You can preview the selected template or view the template's properties:
  - To preview the template, click the **Preview** icon. (For the location of the Preview icon, see Figure 257.) A preview of the template appears in the box on the right.
  - To view the template's properties, click the **Document Properties** icon. (For the location of the Document Properties icon, see Figure 257.) The template's properties appear in the box on the right.

- 5) Click **Open**. The Templates and Documents dialog box closes and a new document based on the selected template opens in Writer. You can then edit and save the new document just as you would any other document.

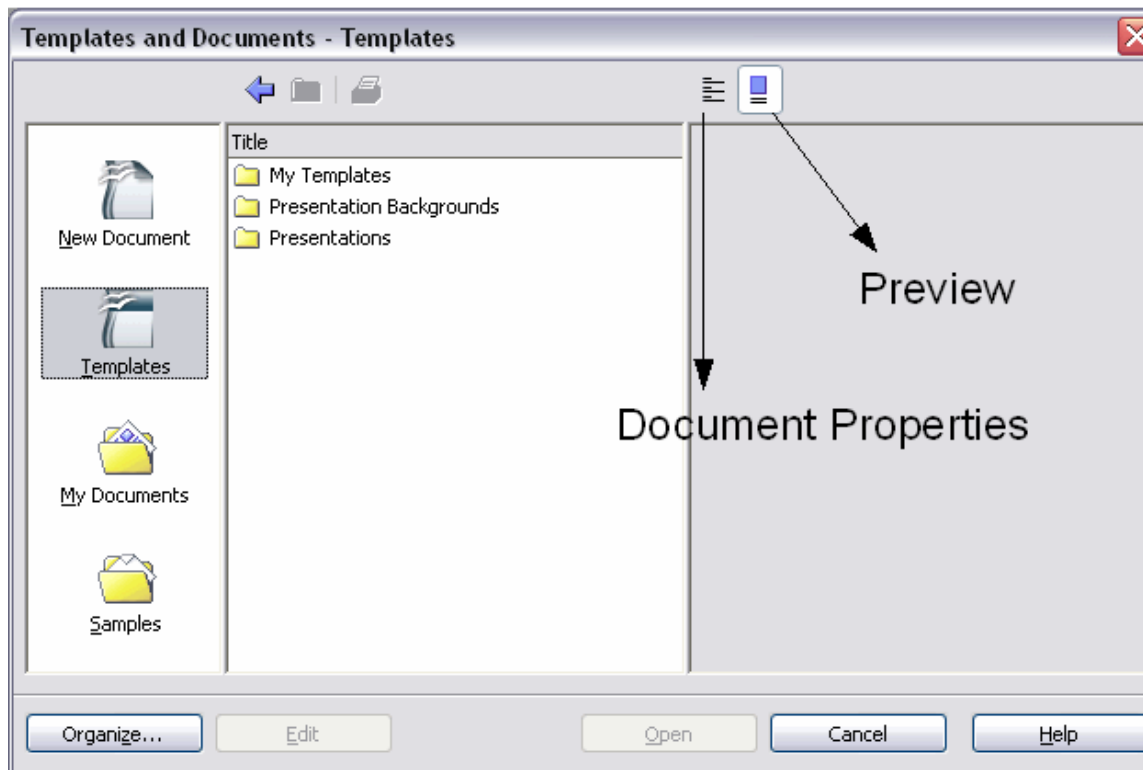


Figure 257. Templates and Documents window

## Creating a template

You can create your own templates in two ways:

- From a document
- Using a wizard

### Creating a template from a document

To create a template from a document:

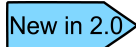
- 1) Open a new or existing document you want to make into a template.
- 2) Add the content and styles that you want.
- 3) From the main menu, choose **File > Templates > Save**. The Templates dialog box opens (see Figure 258).
- 4) In the **New template** field, enter a name for the new template.



- 5) In the **Categories** list box, click the category to which you want to assign the template. (The category is simply the template folder in which you want to save the template. For example, to save the template in the “My Templates” folder, click the **My Templates** category.)

To learn more about template folders, see “Organizing templates” on page 251.

- 6) Click **OK**. Writer saves the new template and the Templates dialog box closes.



OOo 1.X previously used a “Default” folder in place of the new “My Templates” folder.

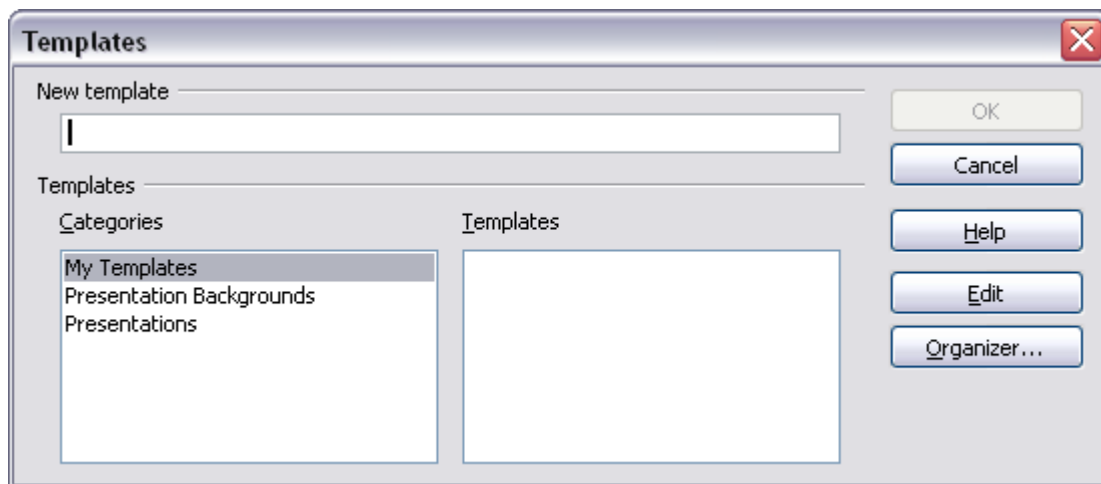


Figure 258. Saving a new template

Any settings that can be added to or modified in a document can be saved in a template. For example, below are some of the settings (although not exhaustive) that can be included in a Writer document and then saved as a template for later use:

- Printer settings: which printer, single-sided or double-sided, paper size, etc.
- Styles to be used, including character, page, frame, numbering, and paragraph styles.
- Format and settings regarding indexes, tables, bibliographies, table of contents.

## Creating a template using a wizard

You can use wizards to create these types of Writer templates:

- Letter
- Fax
- Agenda

For example, the Fax Wizard steps you through the following choices:

- Type of fax (business or personal)
- Document elements like the date, subject line (business fax), salutation, and complimentary close
- Options for sender and recipient information (business fax)
- Text to include in the footer (business fax)

To create a template using a wizard:

- 1) From the main menu, choose **File > Wizards >** type of template required (Figure 259).

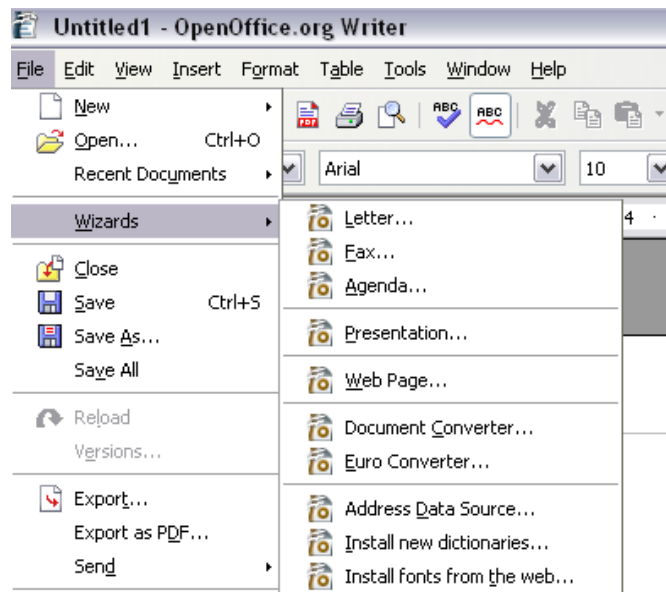


Figure 259: Creating a template using a wizard

- 2) Follow the instructions on the pages of the wizard. This process is slightly different for each type of template, but the format is similar for all of them.
- 3) In the last section of the wizard, you can specify the name and location for saving the template. The default location is your user templates directory, but you can choose a different location if you prefer.
- 4) Finally, you have the option of creating a new document from your template immediately, or manually changing the template. For future documents, you can re-use the template created by the wizard, just as you would use any other template.

## Editing a template

You can edit a template's styles and content, and then, if you wish, you can reapply the template's styles to documents that were created from that template.

---

**Note** You can only reapply styles. You cannot reapply content.

---

To edit a template:

- 1) From the main menu, choose **File > Templates > Organize**. The Template Management window opens (see Figure 260).

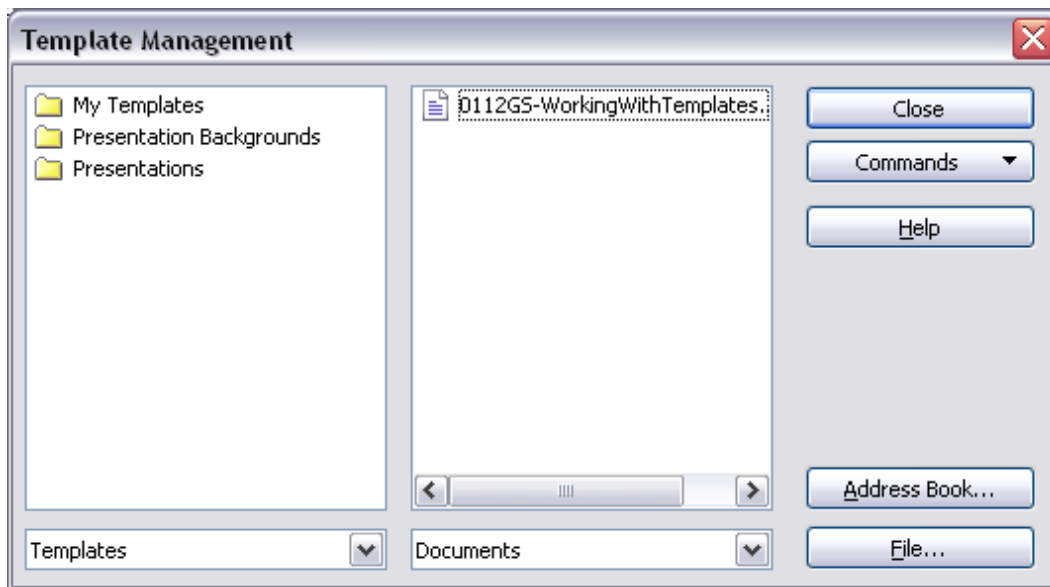


Figure 260. Template management window

- 2) In the box on the left, double-click the folder containing the template that you want to edit. A list of all the templates contained in that folder appears underneath the folder name.
- 3) Click the template that you want to edit.
- 4) Click the **Commands** button.
- 5) From the drop-down menu, choose **Edit**. The Template Management window closes and the selected template opens in Writer.
- 6) Edit the template just as you would any other document. To save your changes, choose **File > Save** from the main menu.

The next time that you open a document that was created from the changed template, the following message appears.

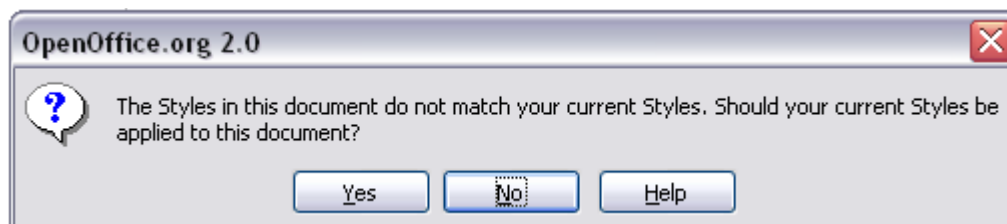


Figure 261. Apply current styles message

Click **Yes** to apply the template's changed styles to the document. Click **No** if you do not want to apply the template's changed styles to the document. Whichever option you choose, the message box closes and the document opens in Writer.

---

**Note** Automatic updating from a template did not work in OOo2.0.2. This bug was fixed in OOo 2.0.3. To re-enable updating in files created using OOo 2.0.2:

- 1) Use **Tools > Macros > Organize Macros > OpenOffice.org Basic**. Select the document from the list, click the +, and select Standard. If Standard has a + beside it, click that and select a module.
- 2) Name the macro. For example, you could call it FixDocument. If the **Edit** button is active, click it. If the Edit button is not active, click **New**, type a module name in the pop-up dialog, and click **OK**.
- 3) In the Basic window, enter the following:

```
Sub FixDocument
  TemplateName = ThisComponent.DocumentInfo.Template
  if TemplateName <> "" then
    ThisComponent.DocumentInfo.Template = TemplateName
  end if
End Sub
```

- 4) Click the **Run BASIC** icon, then close the Basic window.
- 5) Save the document.

Next time when you open this document you will have the update from template feature back.

---

## Setting a default template

---

If you create a document by choosing **File > New > Text Document** from the main menu, Writer creates the document from the Default template. You can, however, set a custom template to be the default. You can reset the default later if you choose.

### Setting a custom template as the default

You can set any template to be the default, as long as it is in one of the folders displayed in the Template Management window.

To save a template in one of these folders, do one of the following:

- Create and save the template as described in “Creating a template” on page 246.
- Import the template into the desired folder as described in “Importing a template” on page 252.

To set a custom template as the default:

- 1) From the main menu, choose **File > Templates > Organize**. The Template Management window (Figure 260) opens.
- 2) In the box on the left, double-click the folder that contains the template that you want to set as the default.
- 3) Click the template that you want to set as the default.
- 4) Click the **Commands** button.

- 5) From the drop-down menu, choose **Set as Default Template**. The next time that you create a document by choosing **File > New > Text Document**, the document will be created from this template.

## Resetting Writer's Default template as the default

To reset Writer's Default template as the default:

- 1) From the main menu, choose **File > Templates > Organize**. The Template Management window (Figure 260) opens.
- 2) In the box on the left, click any folder.
- 3) Click the **Commands** button.
- 4) From the drop-down menu, choose **Reset Default Template > Text Document**. The next time that you create a document by choosing **File > New > Text Document**, the document will be created from Writer's Default template.

## Organizing templates

---

Writer can only use templates that are in OOO template folders. You can, however, create new OOO template folders and use them to organize your templates. For example, you might have one template folder for report templates and another for letter templates. You can also import and export templates.

To begin, choose **File > Templates > Organize** from the main menu. The Template Management window (Figure 260) opens.

### Creating a template folder

To create a template folder:

- 1) In the Template Management window, click any folder.
- 2) Click the **Commands** button.
- 3) From the drop-down menu, choose **New**. A new folder called Untitled appears.
- 4) Type a name for the new folder, and then press *Enter*. Writer saves the folder with the name that you entered.
- 5) To close the Template Management window, click **Close**.

### Deleting a template folder

To delete a template folder:

- 1) In the Template Management window, click the folder that you want to delete.
- 2) Click the **Commands** button.

- 3) From the drop-down menu, choose **Delete**. A dialog box appears and asks you to confirm the delete.
- 4) Click **Yes**. The dialog box closes and the selected folder is deleted.

## Moving a template

To move a template from one template folder to another template folder:

- 1) In the Template Management window, double-click the folder that contains the template that you want to move. A list of all the templates contained in that folder appears underneath the folder name.
- 2) Click the template that you want to move and drag it to the desired folder.

## Deleting a template

To delete a template:

- 1) In the Template Management window, double-click the folder that contains the template that you want to delete. A list of all the templates contained in that folder appears underneath the folder name.
- 2) Click the template that you want to delete.
- 3) Click the **Commands** button.
- 4) From the drop-down menu, choose **Delete**. A dialog box appears and asks you to confirm the delete.
- 5) Click **Yes**. The dialog box closes and the selected template is deleted.

## Importing a template

If the template that you want to use is in a different location, you must import it into an OOo template folder.

---

**TIP** When you download a template from a website or CD, you can save it anywhere on your computer and then import it into OOo as described here.

---

To import a template into a template folder:

- 1) In the Template Management window, double-click the folder into which you want to import the template.
- 2) Click the **Commands** button.
- 3) From the drop-down menu, choose **Import Template**. The Open dialog box opens.
- 4) Find the template that you want to import and click **Open**. The Open dialog box closes and the template appears in the selected folder.
- 5) If you want, type a new name for the template, and then press *Enter*.

## Exporting a template

To export a template from a template folder to another location:

- 1) In the Template Management window, double-click the folder that contains the template that you want to export. A list of all the templates contained in that folder appears underneath the folder name.
- 2) Click the template that you want to export.
- 3) Click the **Commands** button.
- 4) From the drop-down menu, choose **Export Template**. The Save dialog box opens.
- 5) Find the folder into which you want to export the template and click **Save**. Writer exports the template to the selected folder, and the Save dialog box closes.

---

**Note**

All the actions made by the **Commands** button in the Template Management window can be made as well by simply right-clicking on the templates or the folders.

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# *Chapter 11*

## *Using Mail Merge*

*Form letters, mailing labels, and envelopes*



## What is mail merge?

OpenOffice.org (OOo) Writer provides a very useful feature to:

- Create and print multiple copies of a document to send to a list of different recipients (form letters).
- Create and print mailing labels.
- Create and print envelopes.

This chapter describes the entire process. The steps include:

1. How to create and register a data source.
2. How to create and print form letters, mailing labels, and envelopes.
3. Optionally, how to save the output in an editable file as an alternative to printing it directly.

## Creating the data source

Although you can create and print mailing labels and envelopes without using a data source, in most cases using a data source is the most expedient approach. This chapter assumes that you are using a data source.

A data source is a file, spreadsheet or database, which contains the list of names and addresses the letter is to be sent to.

For this example, we will use the following column headers: *First name, Last name, Address 1, Address 2, Town/City, State/County, Country, Postal Code, Gender, Points*. A sample data source is shown in Figure 262.

OOo can access a wide variety of data sources, including spreadsheets, text files and databases such as MySQL, Adabas, and ODBC. If the information to be used in the mail merge is currently in a format that OOo can not access directly, you need to convert it, for example by exporting it to a comma-separated file.



You can now enter the data for the mail merge as part of the new Mail Merge Wizard. However, if you have more than a few records, you probably should use an external data source.

	A	B	C	D	E	F	G	H	I	J
1	First name	Last name	Address 1	Address 2	Town/City	County/State	Country	Postal Code	Gender	Points
2	Joe	Smith	20, Poplar Grove	Burnage	Manchester	Lancashire	UK	M24 5GJ	M	200
3	Kees	Smit	Nieuwstraat 12A		Leidschendam		Netherlands	2266 AD	M	247
4	Abigail	McTaggart	2490 Main Avenue		Titusville	FL	Unites States	34823	F	1025

Figure 262: Spreadsheet data source

## Registering a data source

Before any OOO documents can use a data source, it must be registered.

To register a data source:

- 1) Click **File > Wizards > Address Data Source**.

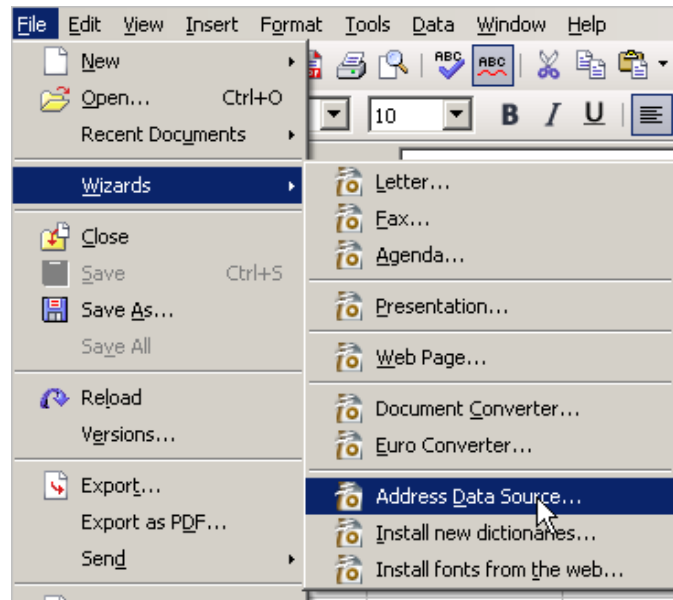


Figure 263: Starting the Address Data Source wizard

- 2) Select the appropriate type of data book (in this case, **Other external data source**). Click **Next**.

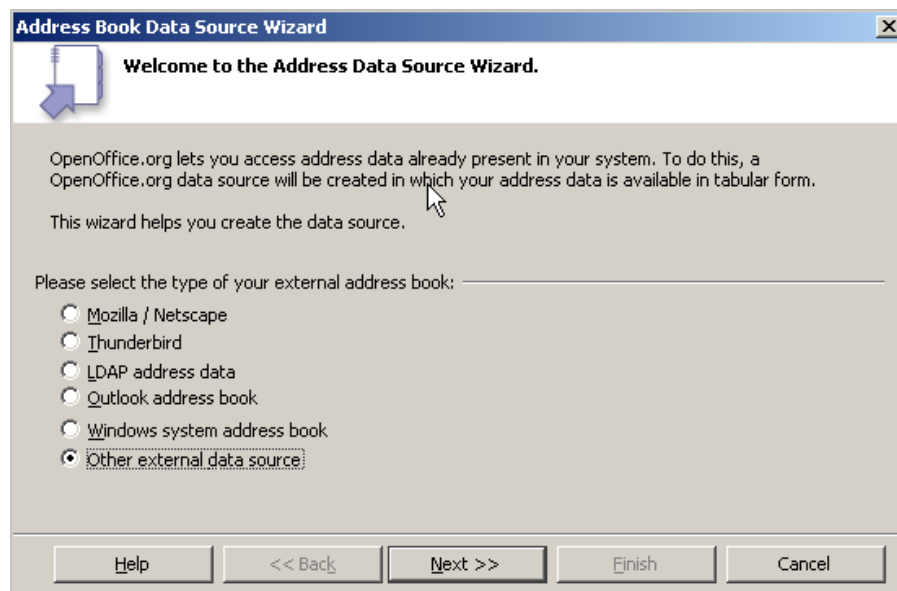


Figure 264: Select type of external address book

- 3) On the next page of the Wizard (Figure 265), click **Settings**.

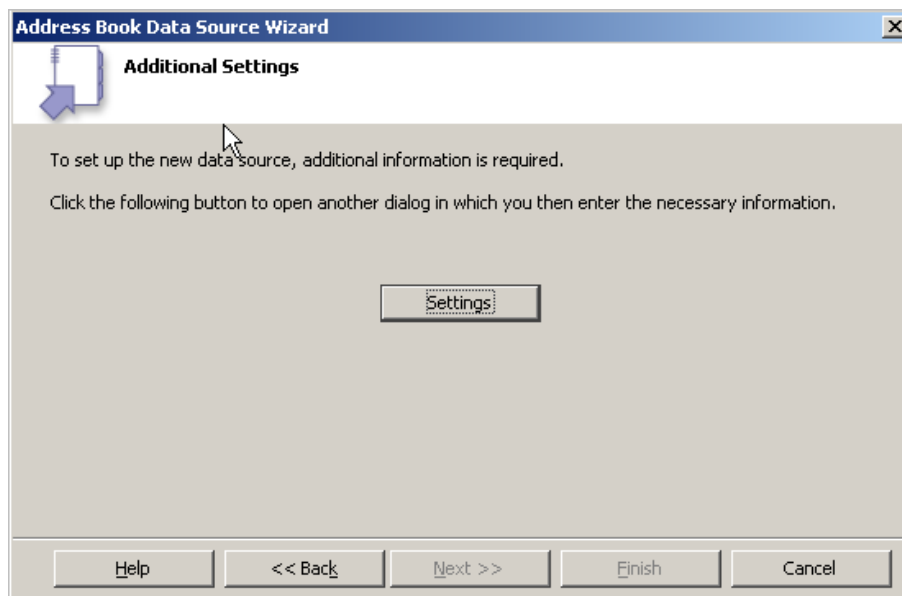


Figure 265: Starting the Settings part of the Wizard

- 4) On the Data Source Properties dialog (Figure 266), select the Database type (in this case, **Spreadsheet**). Click **Next**.

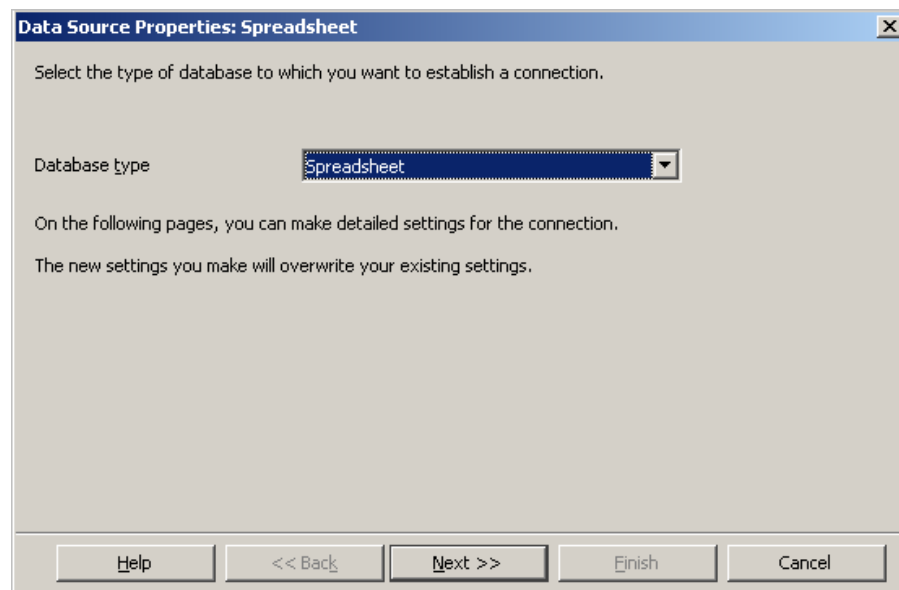


Figure 266: Selecting the database type

- 5) On the next dialog (Figure 267), click **Browse** and navigate to the spreadsheet that contains the address information. Select the spreadsheet and click **Open** to return to this dialog.

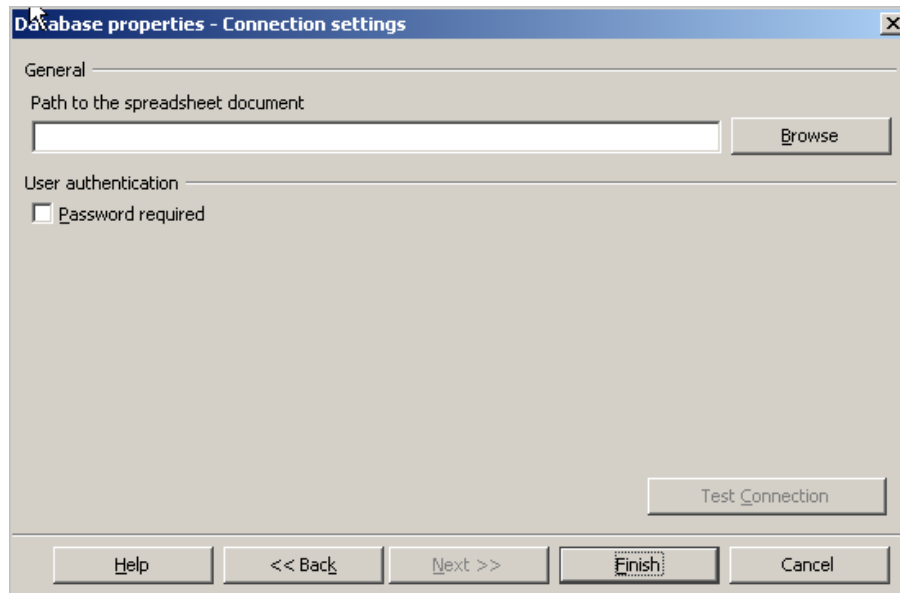


Figure 267: Selecting the spreadsheet document

- 6) Click **Finish**.
- 7) On the following dialog (Figure 268), click **Next**. (Do not click **Field Assignment**.)

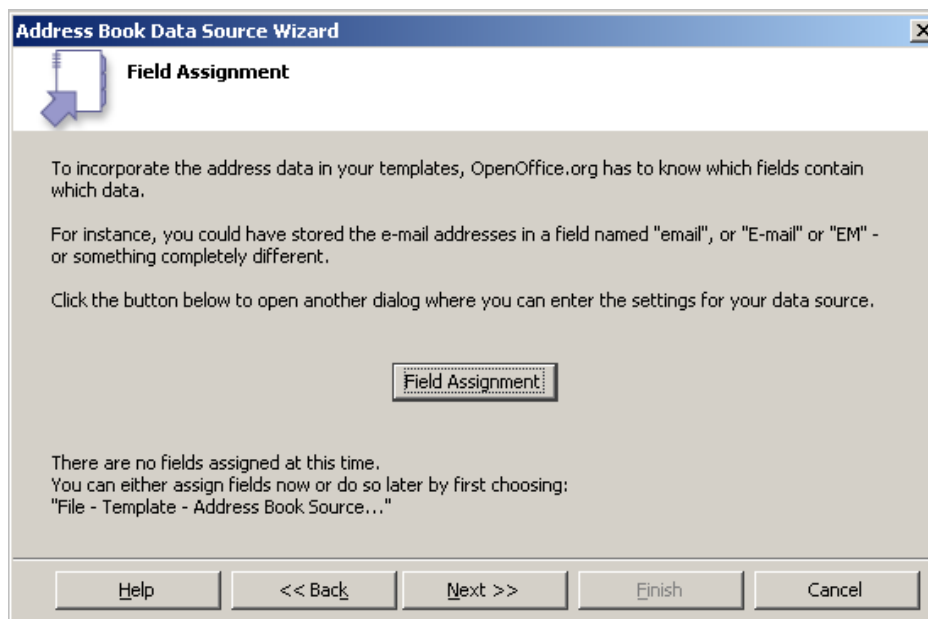


Figure 268: Because this is a spreadsheet, do **not** click **Field Assignment**.

- 8) Name the file in the location field. The default will be ...\**Addresses.odb**; you can replace **Addresses** with another name if you wish. You can also change the name in the **Address book name** field. In our example, the name “Points” was used for both.

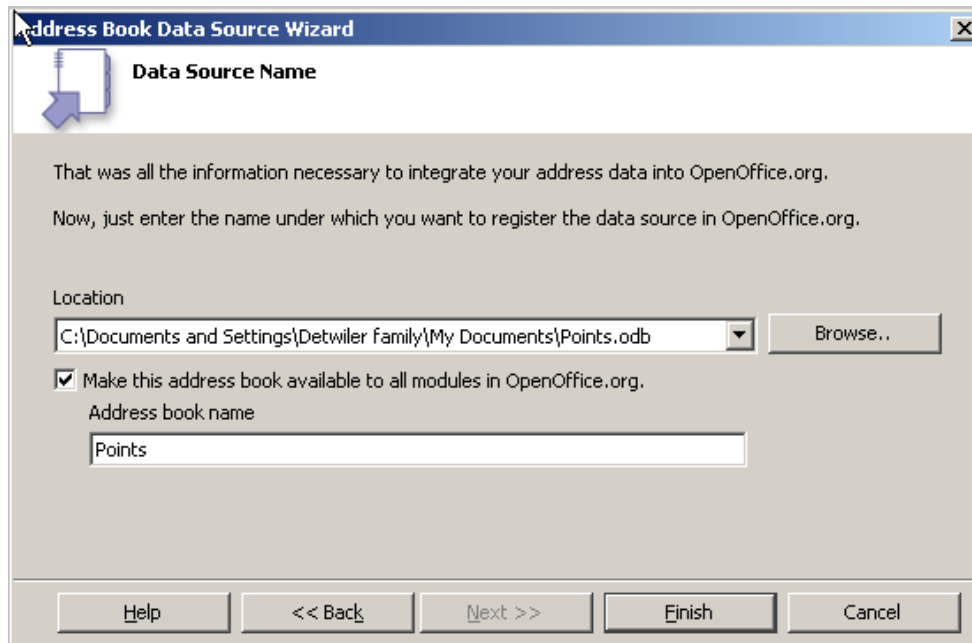


Figure 269: Name the .odb file and the address book.

- 9) Click **Finish**. The data source is now registered.

## Creating a form letter

---

### **Example: Sending a letter to your customer base**

A mail order company organized a campaign to assign credit points to their customers according to the quantity of goods they buy during one year.

At the end of the year, they want to send a letter to each customer to show the total of credit points collected.

You can use the Mail Merge wizard to create a form letter, or you can create the letter manually. See “Using the Mail Merge Wizard to create a form letter” on page 269 for instructions on using the Wizard.

This section describes how to create a form letter manually.

- 1) Create a new text document: **File > New > Text Document**.
- 2) Display the registered data sources: **View > Data sources** (or press **F4**).
- 3) Find the data source that you wish to use for the form letter, in this case **Points**. Expand the **Points** folder, expand the **Tables** folder, and select **Sheet1**. The data file is displayed. (See Figure 270.)

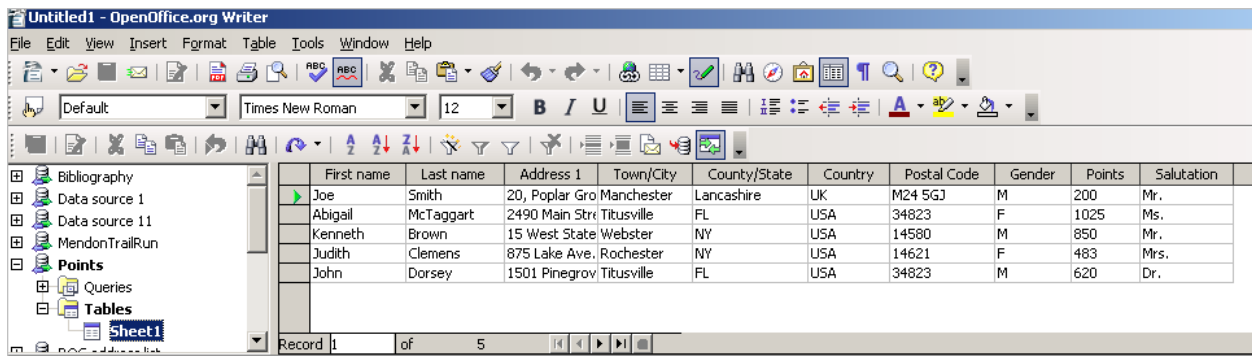


Figure 270: Selecting the data source.

- Now create the form letter by typing in text, punctuation, line breaks, and so on that will be present in all of the letters, and adding fields where needed by clicking in the field heading and dragging to the appropriate point in the letter. (See Figure 271.)

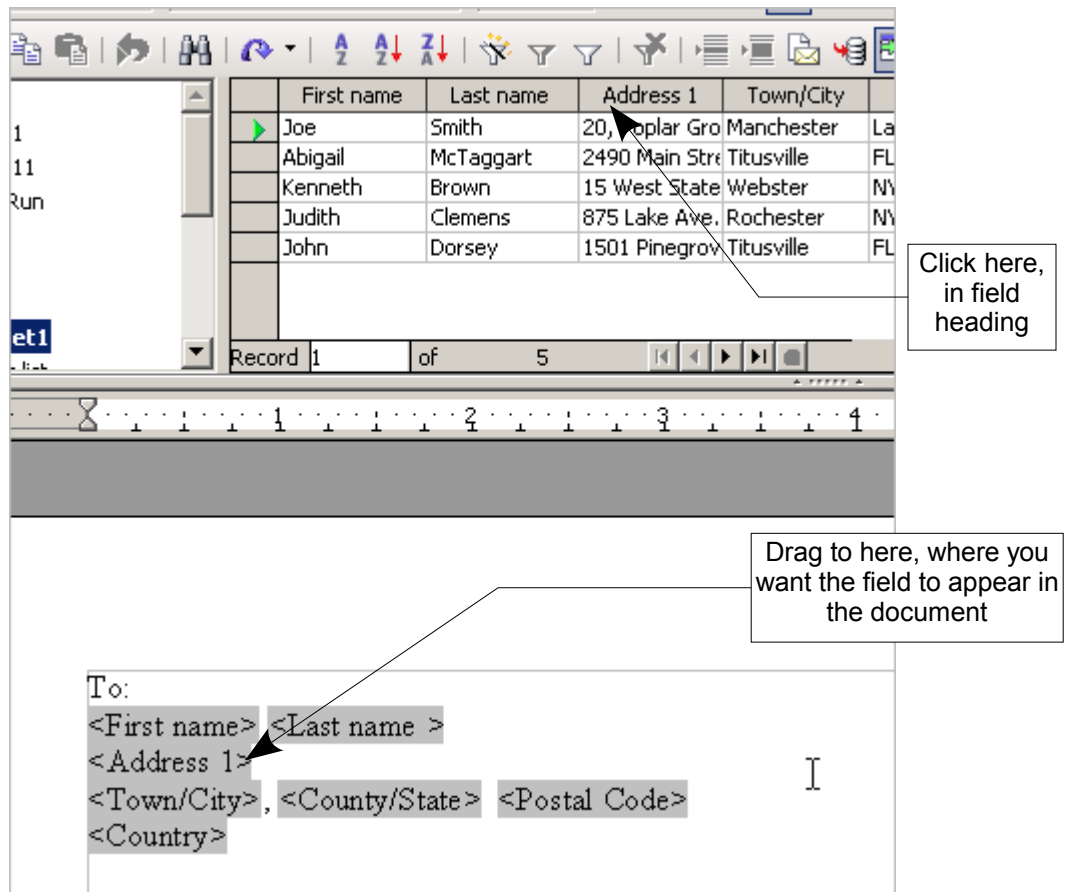


Figure 271: Dragging fields to the body of the form letter

- Continue until you have composed the entire document. (See Figure 272 for an example.)

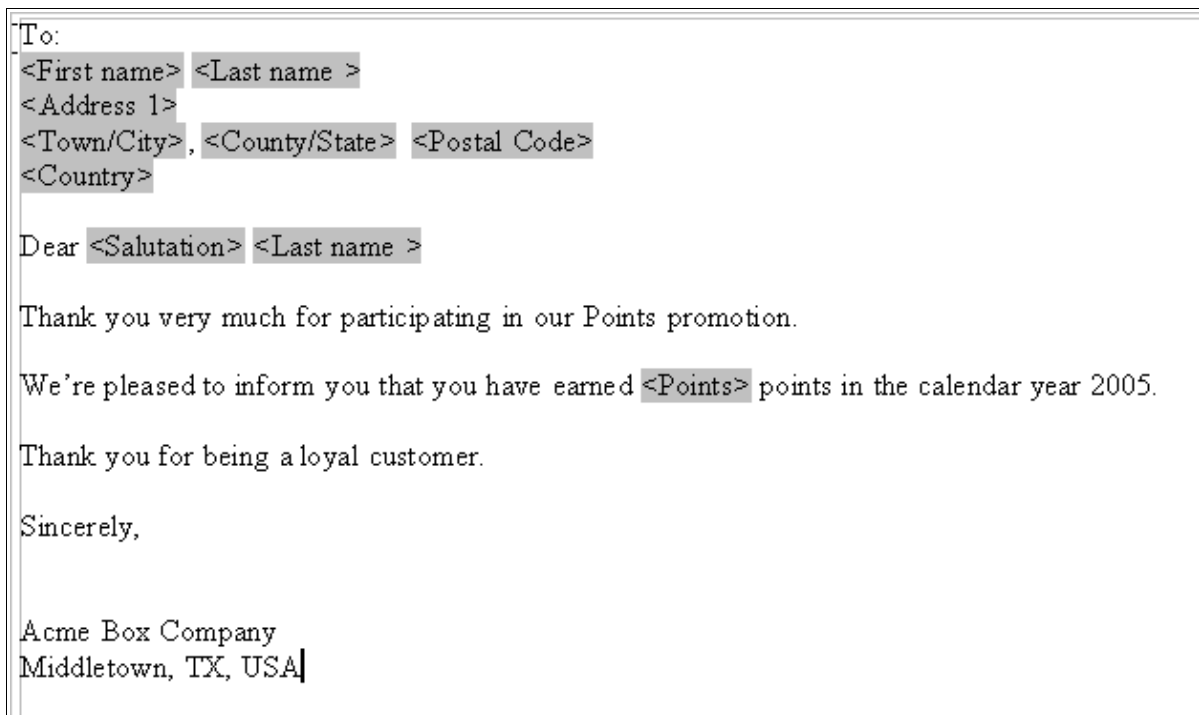
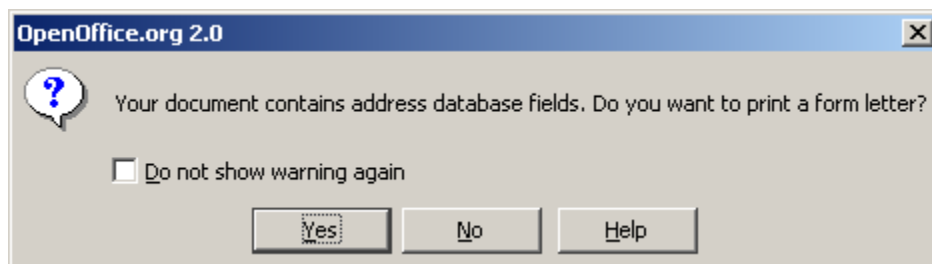


Figure 272: The completed form letter

- 6) The document is now ready to be printed. Click **File > Print**.
- 7) The following dialog appears. Answer **Yes**. Do not select the checkbox.



- 8) In the Mail Merge dialog (Figure 273), you can choose to print all records or selected records. To select records to be printed, use *Ctrl+click* to select non-contiguous records. To select a contiguous block of records, select the first record in the block, scroll to the last record in the block, and *Shift+click* on the last record.
- 9) Click **OK** to send the letters direct to the printer. If you wish to check the letters before printing, see “Saving as a file rather than printing” on page 279 for instructions.

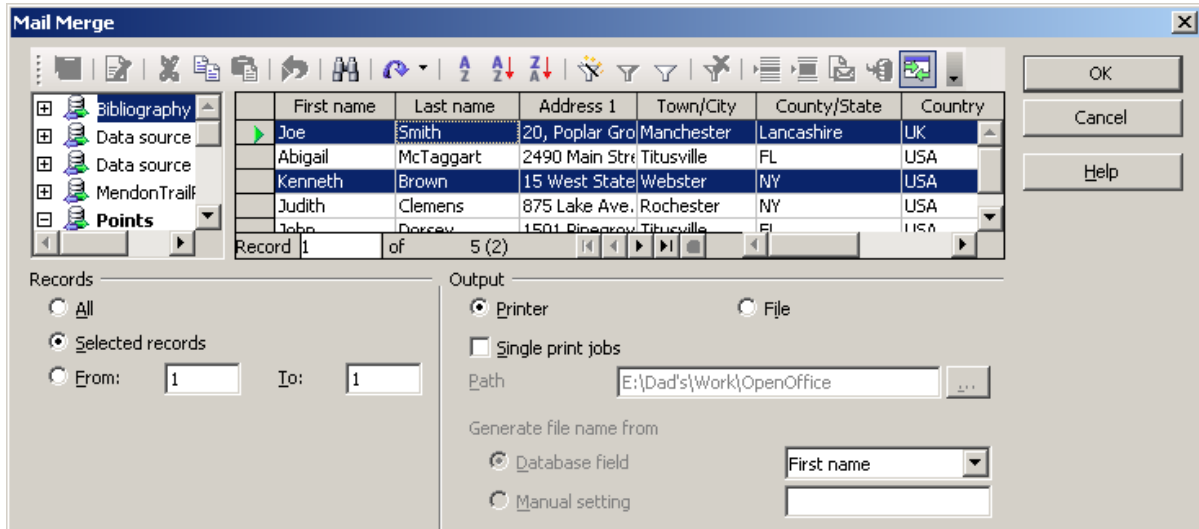


Figure 273: The Mail Merge dialog

## Printing mailing labels

Before beginning this process, check to see what brand and type of labels you have.

To print mailing labels:

- 1) Click **File > New > Labels**.
- 2) On the Labels dialog, go to the **Options** tab and uncheck **Synchronize contents** if it is checked (Figure 274).

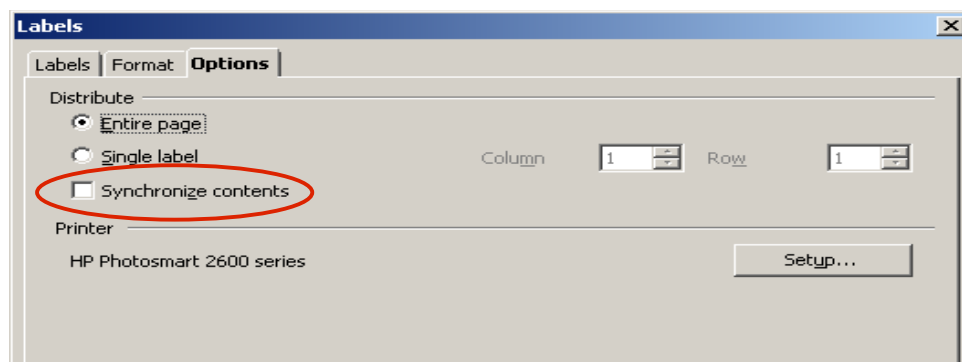


Figure 274: Uncheck Synchronize contents

---

**Note** If you need to suppress blank lines in some of your labels, read “Removing blank lines in labels” on page 283.

---



- 3) On the **Labels** tab (Figure 275), select the **Database** and **Table**. Select the **Brand** of labels to be used, and then select the **Type** of label.

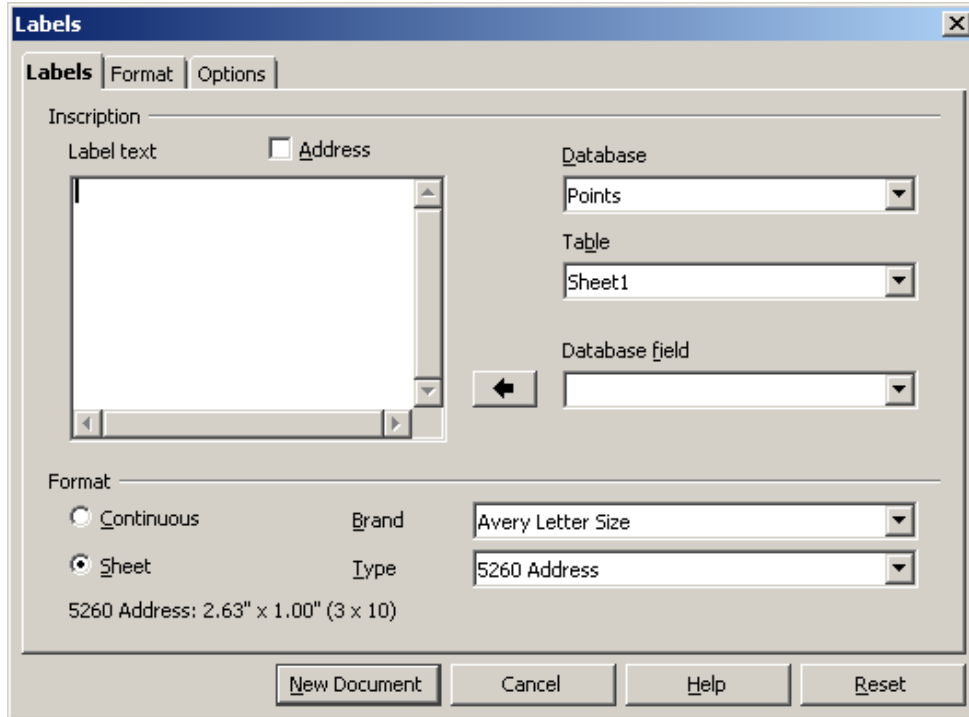


Figure 275: Select Database, Table, label Brand, and label Type.

- 4) Click the dropdown arrow under **Database field**. Select the first field to be used in the label (in this example, **First name**). Click the left arrow button to move this field to the **Label text** area (Figure 276).
- 5) Continue adding fields and inserting desired punctuation, spaces, and line breaks until the label is composed. Figure 277 shows the completed label.

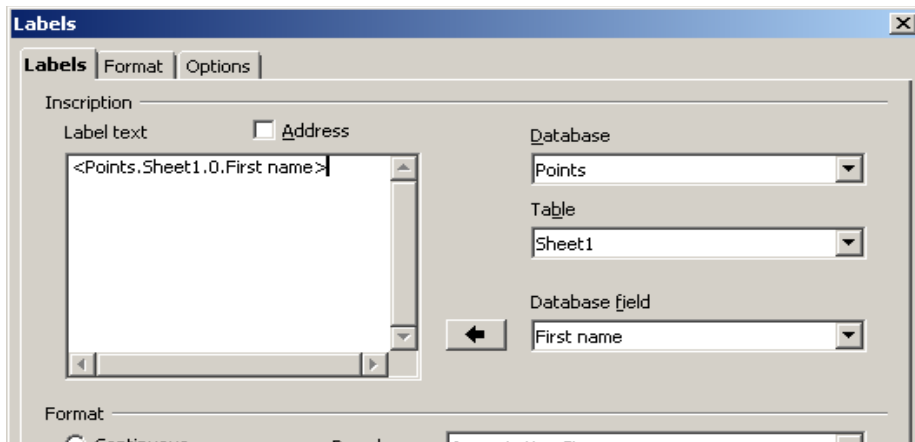


Figure 276: Move fields from Database field list to Label text area.

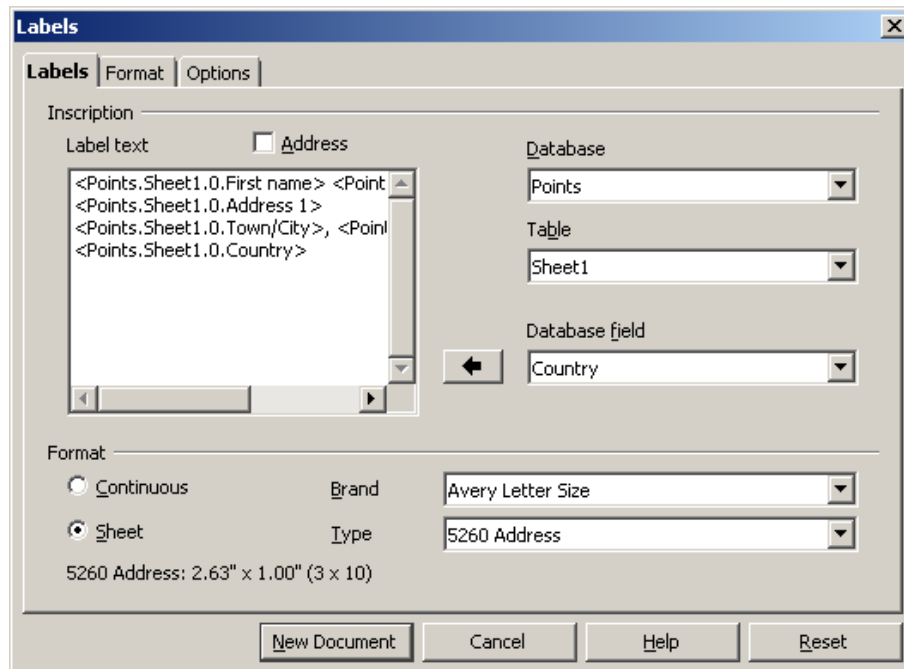
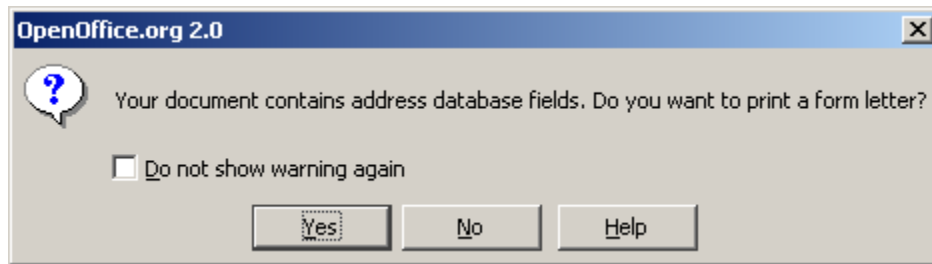


Figure 277: The completed label.

- 6) Click **New Document**.
- 7) Click **File > Print**. The following dialog appears. Click **Yes**. Do not select the checkbox.



- 8) In the Mail Merge dialog (Figure 278), you can choose to print all records or selected records. To select records to be printed, use *Ctrl+click* to select non-contiguous records. To select a contiguous block of records, select the first record in the block, scroll to the last record in the block, and *Shift+click* on the last record.

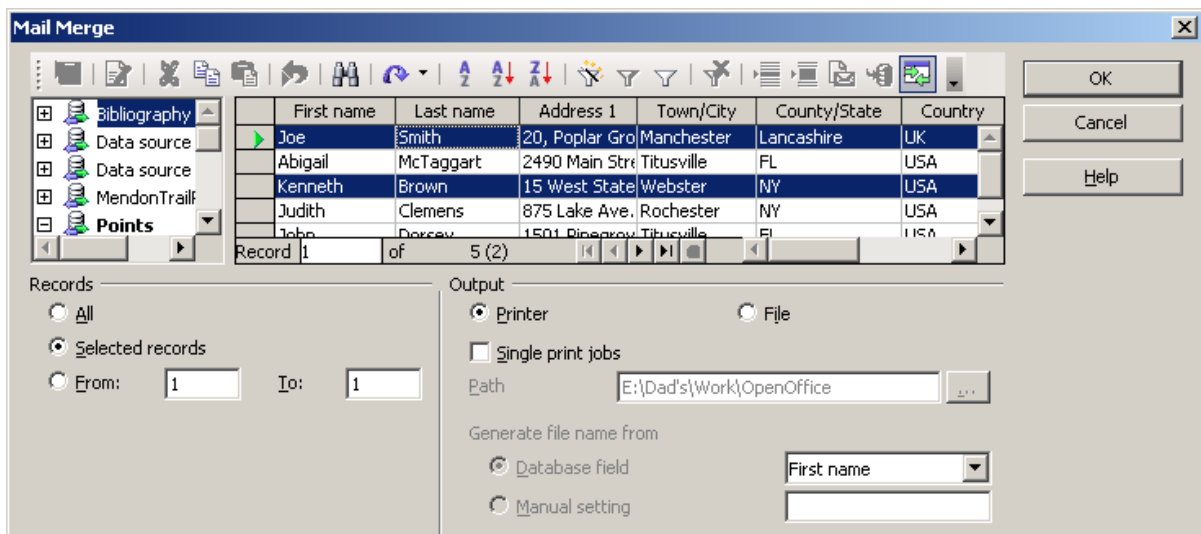


Figure 278: Mail Merge dialog

- 9) Click **OK** to send the letters direct to the printer. If you wish to check the labels before printing, see “Saving as a file rather than printing” on page 279 for instructions.

## Printing envelopes

Instead of printing mailing labels, you may wish to printing directly onto envelopes. Printing envelopes involves two steps: setup and printing.

### Setting up envelopes for printing

To set up envelopes to be printed with your letters:

- 1) Click **Insert > Envelope** from the menu bar.
- 2) In the Envelope dialog box, start with the **Envelope** tab (Figure 279). Verify, add, or edit the information in the Addressee and Sender boxes (Sender is the “from” on the envelope). You can use the right-hand dropdown lists to select the database or table from which you can draw the envelope information. Use the same method as described in “Creating a form letter” on page 259, in particular Figure 271.

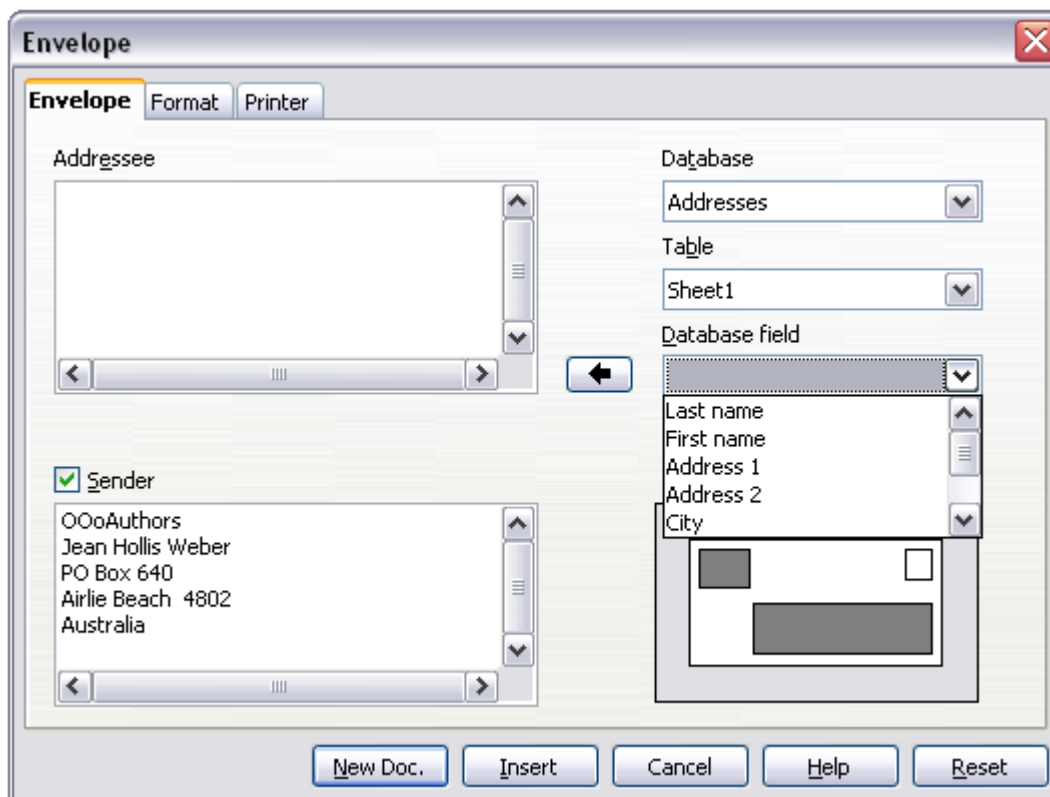


Figure 279: Choosing addressee and sender information for envelopes

- 3) On the **Format** tab (Figure 280), verify or edit the positioning of the addressee and the sender information. The preview area on the lower right shows the effect of your positioning choices.

To format the text of these blocks, click the **Edit** buttons to the right.

- In *Character*, you can choose fonts, sizes, underlines or color, rotating/scaling, backgrounds and more.

- In *Paragraph*, you can choose indenting, alignment, flow, tabs and more.

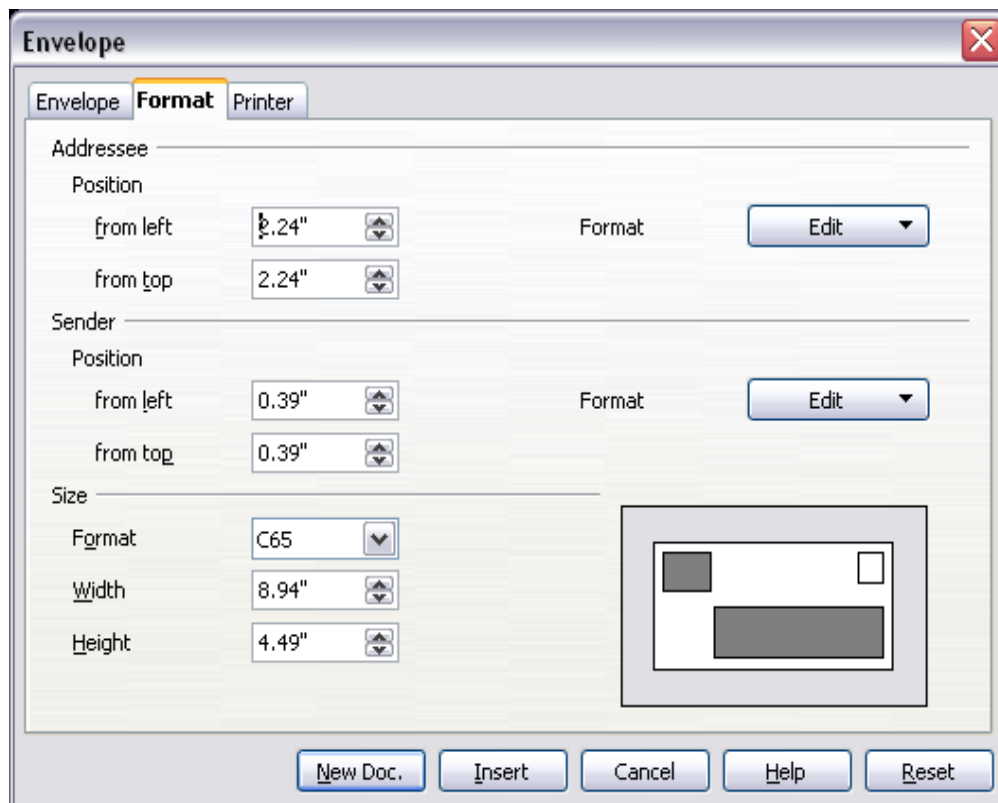


Figure 280. Choosing positioning and size of elements for an envelope

- 4) In the lower left of this tab, choose the envelope format from the dropdown list. The width and height of the selected envelope then show in the boxes below the selected format. If you chose a pre-existing format, just verify these sizes. If you chose *User defined* in the Format list, edit the sizes.
- 5) After formatting, select the **Printer** tab (Figure 281) to choose printer options such as envelope orientation and shifting. You may need to experiment a bit to see what works best for your printer.

You can also choose a different printer or alter the printer setup (for example, specify the tray that holds envelopes) for this print job.

- 6) When you have finished formatting, click either the **New Doc** or **Insert** button to finish. **New Doc** makes only the envelopes or starts a new document with the envelopes. **Insert** inserts the envelopes into your existing document as page 1.

To not proceed with this envelope, click **Cancel** or press the *Esc* key. You can also click **Reset** to remove your changes and return to the original settings when the dialog box opened.

- 7) To remove blank lines from the addresses, use the technique described in steps 1 through 5 in “Removing blank lines in addresses” on page 281.

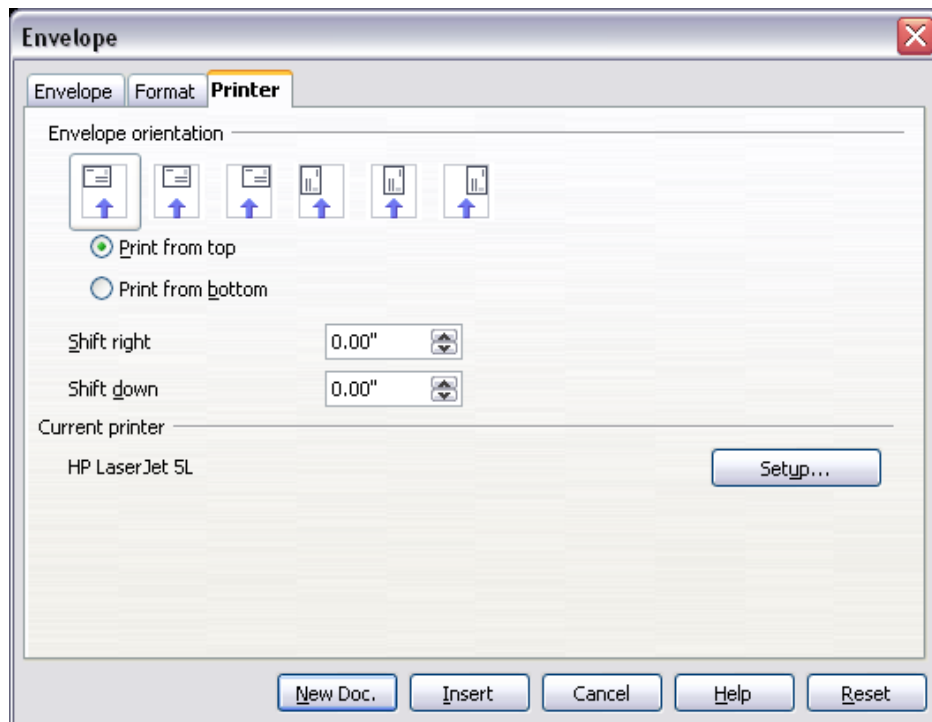


Figure 281. Choosing printer options for an envelope

## Merging and printing the envelopes

To merge addresses and print the envelopes:

- 1) Choose **File > Print**. The following dialog appears. Click **Yes**. Do not select the checkbox.

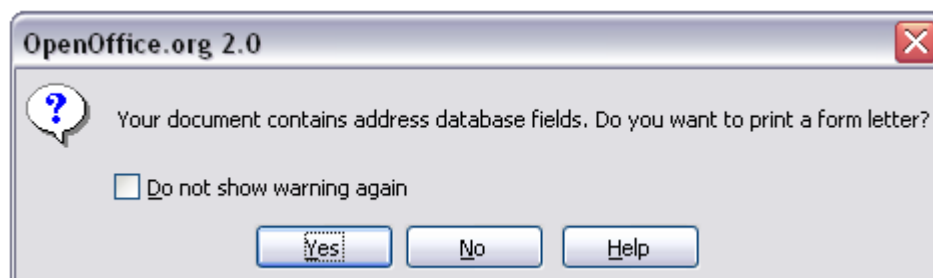


Figure 282: Confirmation dialog for merging database fields

- 2) The Mail Merge dialog (Figure 283) appears. As with form letters and mailing labels, you can choose to print envelopes for one, several or all address records in the database.
- 3) Make your selections and then click **OK** to print direct to the printer. If you wish to check the envelopes before printing them, see “Saving as a file rather than printing” on page 279 for instructions.

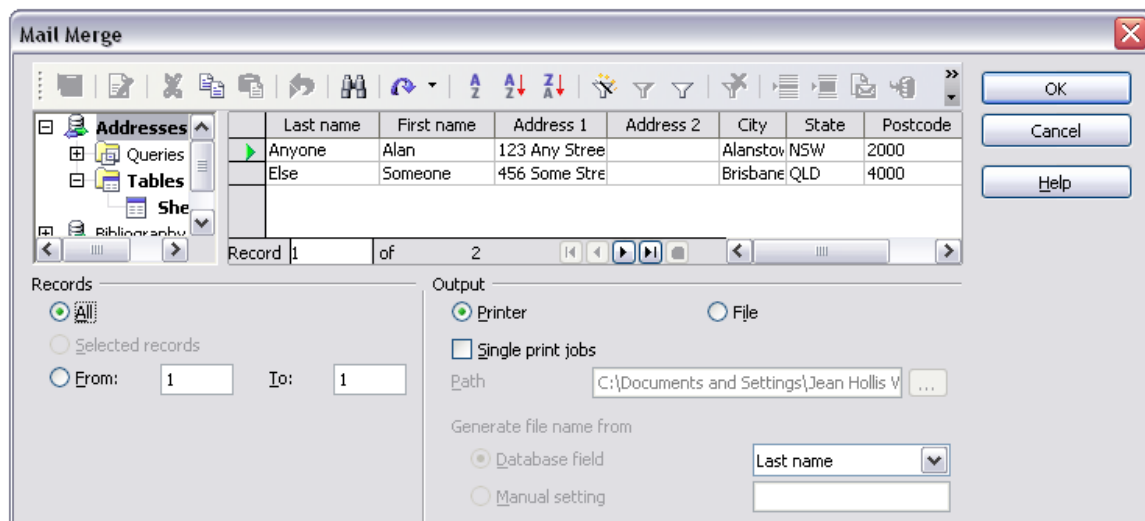


Figure 283: Choosing records to use when printing envelopes

## Using the Mail Merge Wizard to create a form letter

To start the Mail Merge wizard, select **Tools > Mail Merge Wizard**. The wizard opens, as shown in Figure 284.



The Mail Merge Wizard does not exist in OOO version 1.x; it is a new feature in version 2.0. If you are using version 1.x, refer to the Mail Merge chapter for that version.

### Step 1: Select starting document

The wizard gives various options to select your starting document:

- Use the current document.
- Create a new document.
- Use a template.
- Use an existing document.

You can write the letter later on in the wizard, but it is easier to use a draft you prepared earlier. For this example, select **Use the current document** and click **Next**.

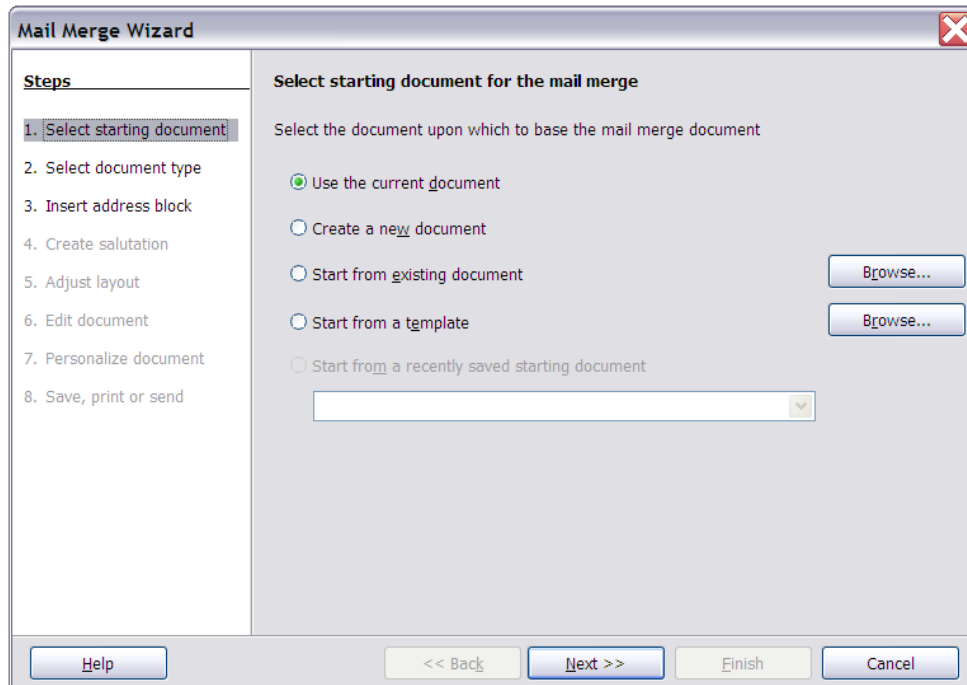


Figure 284: Select starting document

## Step 2: Select document type

The wizard can produce letters or, if a Java Mail connection exists, email messages. You can see these options in Figure 285. In this example, we are producing a letter. Select **Letter** and click **Next**.

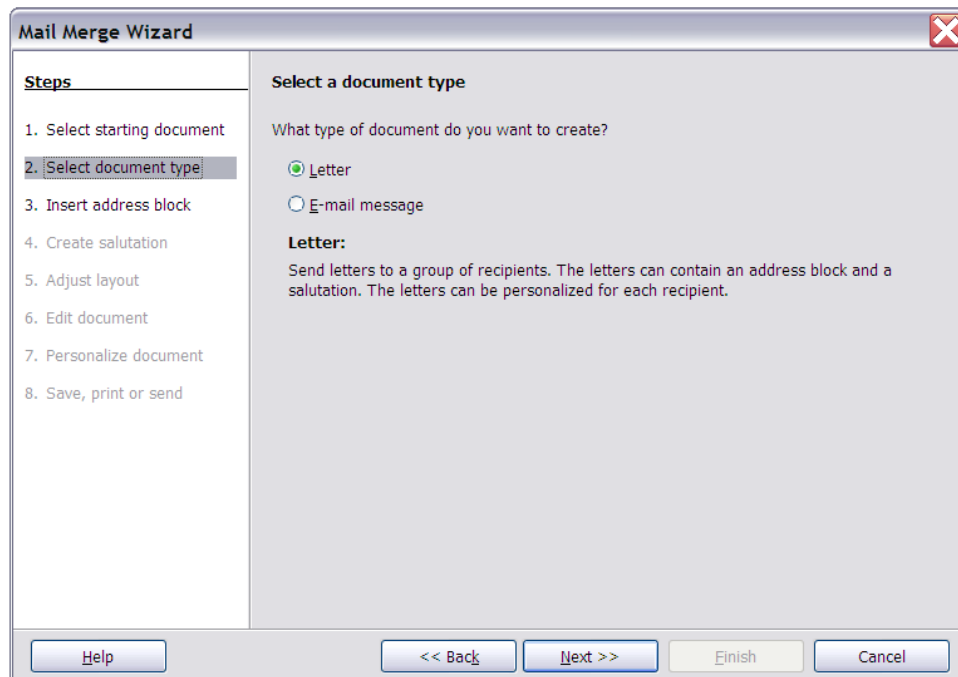


Figure 285: Choose document type



## Step 3: Insert address block

This is the most complex step in the wizard. In this step (Figure 286) you will do three things:

- 1) Tell the wizard which data source to use. The data source must be a file; in this example it is the spreadsheet created earlier.
- 2) Select the address block to use in the document. This means choosing which fields appear (for example, whether the country is included) and how they look.
- 3) Make sure that the fields all match correctly. This is very important. For example, the wizard has a field called <Last Name>. If your spreadsheet has a column called “Surname”, you need to tell the wizard that <Last Name> and “Surname” are the same thing. This is described in “Matching the fields” on page 274.

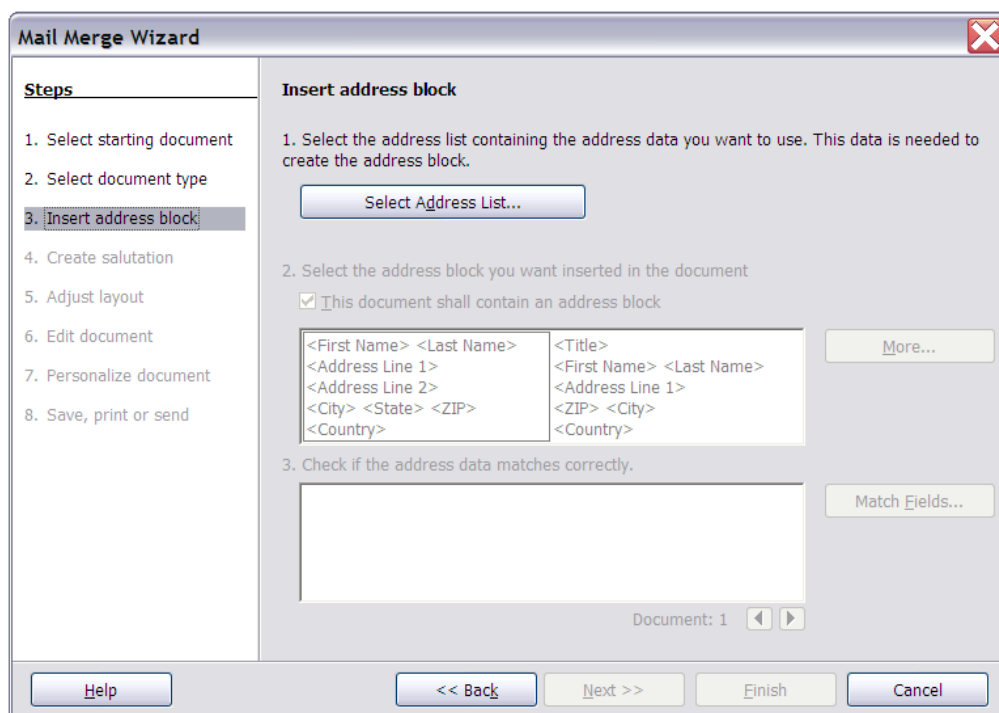


Figure 286: Insert address block

### Selecting the data source (address list)

- 1) Click **Select Address List** in section 1. This opens the Select Address List dialog box (Figure 287) for choosing a data source.
- 2) If you have not already created the address list, click **Create** to do so now. If you have an address list, as we have in this example, click **Add** and select the file.

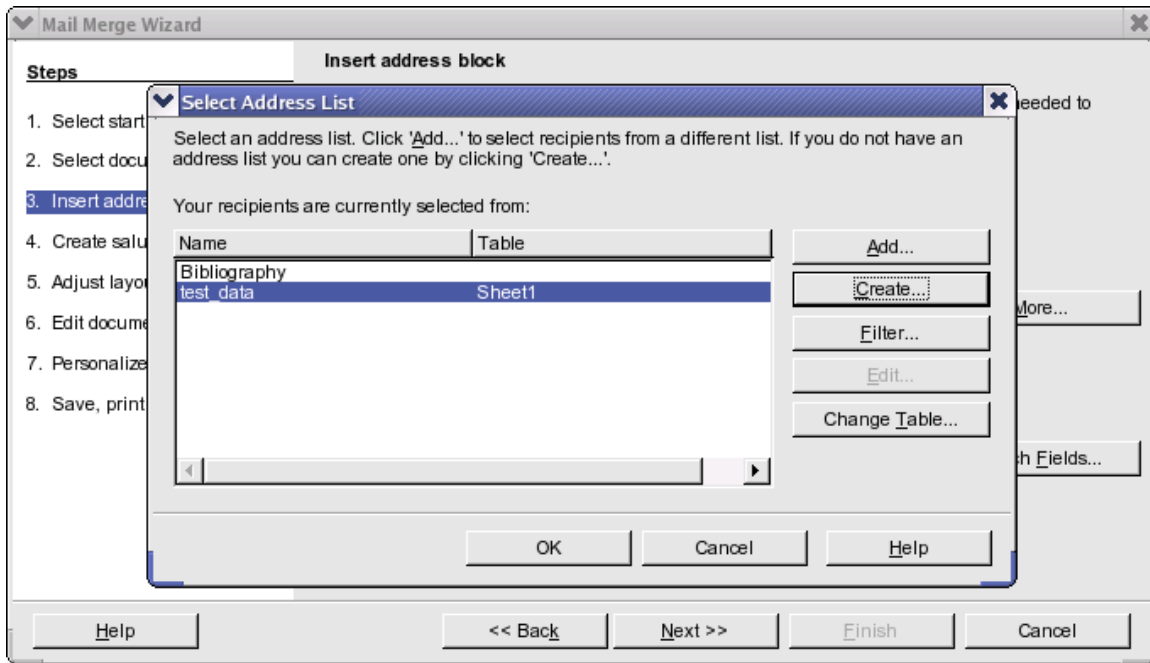


Figure 287: Select address list dialog

- 3) Select the spreadsheet file and click **OK** to return to step 3 of the wizard. For this example, the preceding steps are all you need to do. The wizard can also exclude certain records; click **Filter** to choose them.

### Selecting the address block

- 1) In step 3 of the wizard (shown in Figure 286), look at section 2. This is where you select the address block to appear on the letter, and define its appearance and the fields it contains. The main page gives two examples. If neither of those is exactly what you want, click **More** to see more choices, in the Select Address Block dialog box (shown in Figure 288).
- 2) The Select Address Block dialog offers six choices for the format of the address block (scroll down to see the last two choices). You can also optionally include or exclude the country (for example, only include the country if it is not USA). The six formats provided are relatively common, but they might not exactly match your preference. If this is the case, select the address block that is closest to what you want and click **Edit**, which opens the New Address Block dialog box.

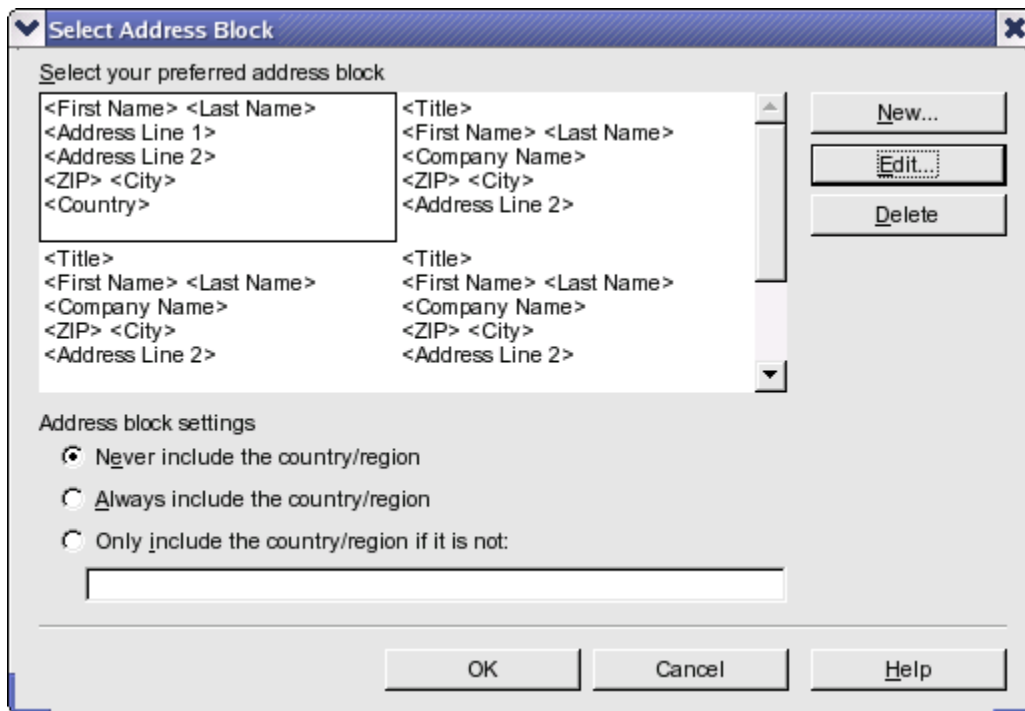


Figure 288: Select address block

- 3) In the New Address Block dialog (Figure 289), you can add or delete address elements using the arrow buttons on the left. To move elements around, use the arrow buttons on the right. For example, to add an extra space between first and last names in Figure 289, click <Last Name> and then click the right arrow button.

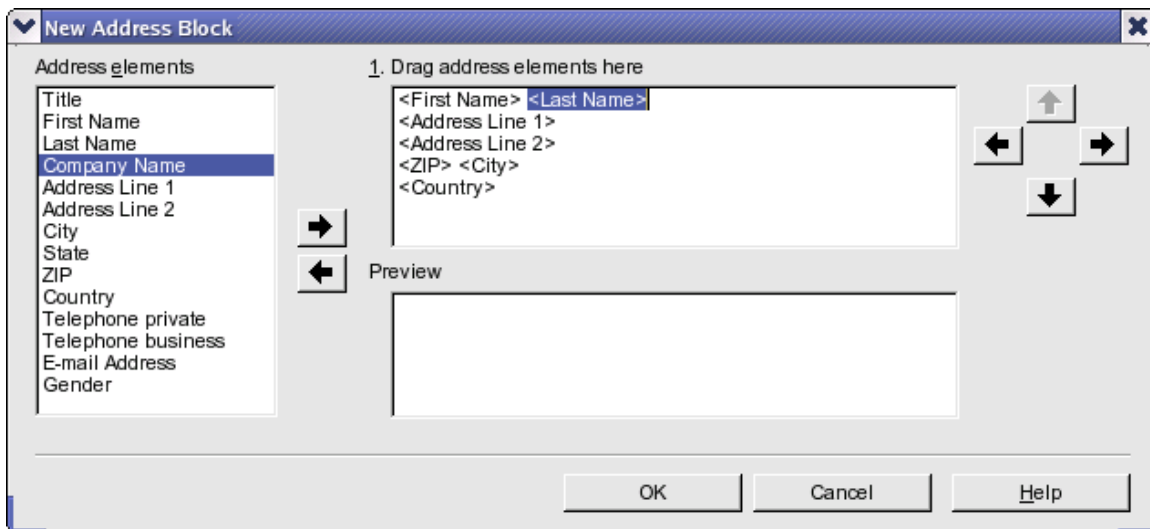


Figure 289: New address block

## Matching the fields

Finally, it is time to match the wizard's fields with the spreadsheet fields, so that items like <Last Name> and "Surname" match correctly.

- 1) Look at section 3 of step 3 of the wizard (shown in Figure 286 on page 271). The box at the bottom displays one record at a time, using the address block format you selected. Use the right and left arrow buttons below that address box to step through the addresses, checking that they display correctly. Do not assume that all the records display correctly, just because one or two do. Check them all if you can, or at least a good proportion.
- 2) If the addresses do not display correctly (and they probably will not right away), click **Match Fields**. The Match Fields dialog box opens, as shown in Figure 290.

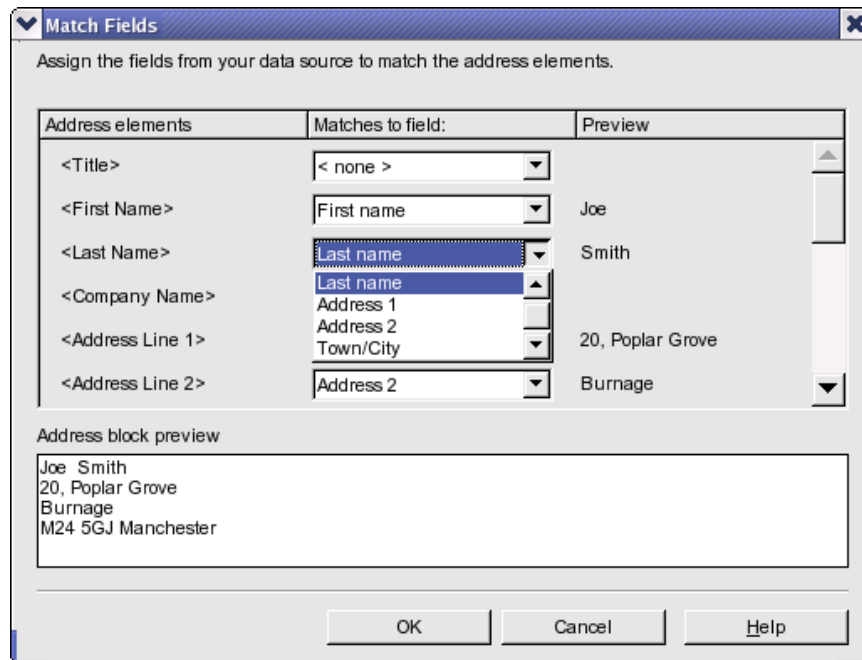


Figure 290: Match fields dialog

The Match Fields dialog has three columns.

- *Address Elements* are the terms the wizard uses for each field, such as <First Name> and <Last Name>.
  - The *Matches to Field* column allows you to select, for each address element, the field from your data source that matches it.
  - The *Preview* column shows what will be shown for this field from the selected address block, so you can double-check that the match is correct.
- 3) When you have matched all the fields, click **OK** to return to step 3 of the wizard. Now, when you use the arrow buttons to look at all the addresses, they should all look correct. If not, go back and change anything you're not happy with, before clicking **Next** to move to step 4.

## Step 4: Create salutation

The salutation is the initial greeting, for example, *Dear Mr Jones*. In step 4, select the salutation that will appear in the letter.

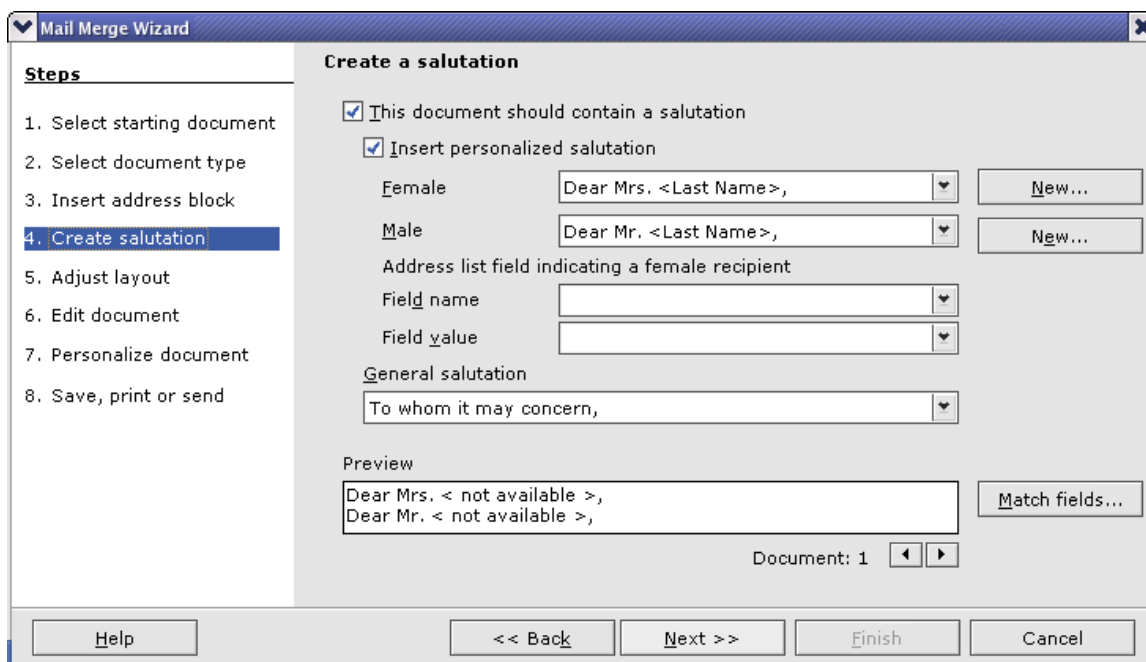


Figure 291: Create a salutation

You can use a different greeting for men and women. To do this, Writer must have some way of knowing whether a person is male or female. In our spreadsheet we had a column called *Gender*. In the section **Address list field indicating a female recipient**, set the field name to *Gender* and the field value to *F*. The male salutation is then printed for all men and the female salutation for all women.

---

**Note** You do not need to tell OOO who is a male, because it assumes that all non-female records are males.

---

If you do not select **Insert Personalized Salutation**, you can use a more general salutation without referring to the recipient directly, such as “To whom it may concern”.

As in step 3, step 4 of the wizard has a preview pane at the bottom. You should check more than one record to ensure that other records look the way you expect.

## Step 5: Adjust layout

In step 5, you can adjust the position of the address block and salutation on the page. You can place the address block anywhere on the page. The salutation is always on the left, but you can move it up and down the page. Use the buttons shown in Figure 292 to move the elements.

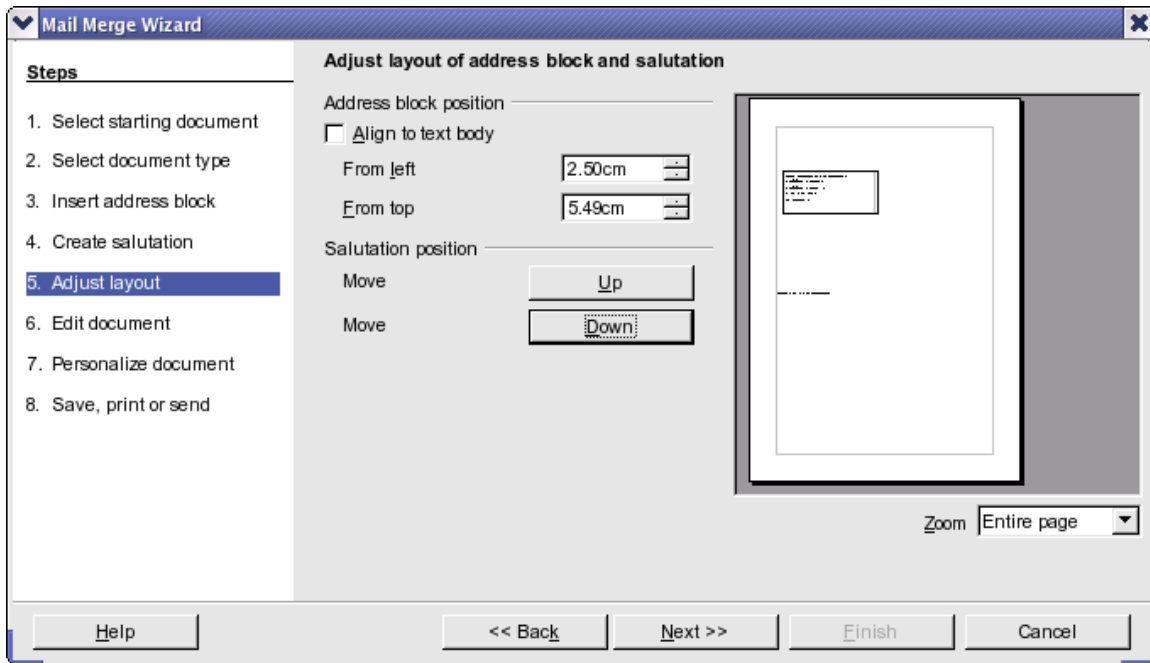


Figure 292: Adjust layout

## Step 6: Edit document and insert extra fields

In step 6 you have another opportunity to exclude particular recipients from the mail merge, as shown in Figure 293.

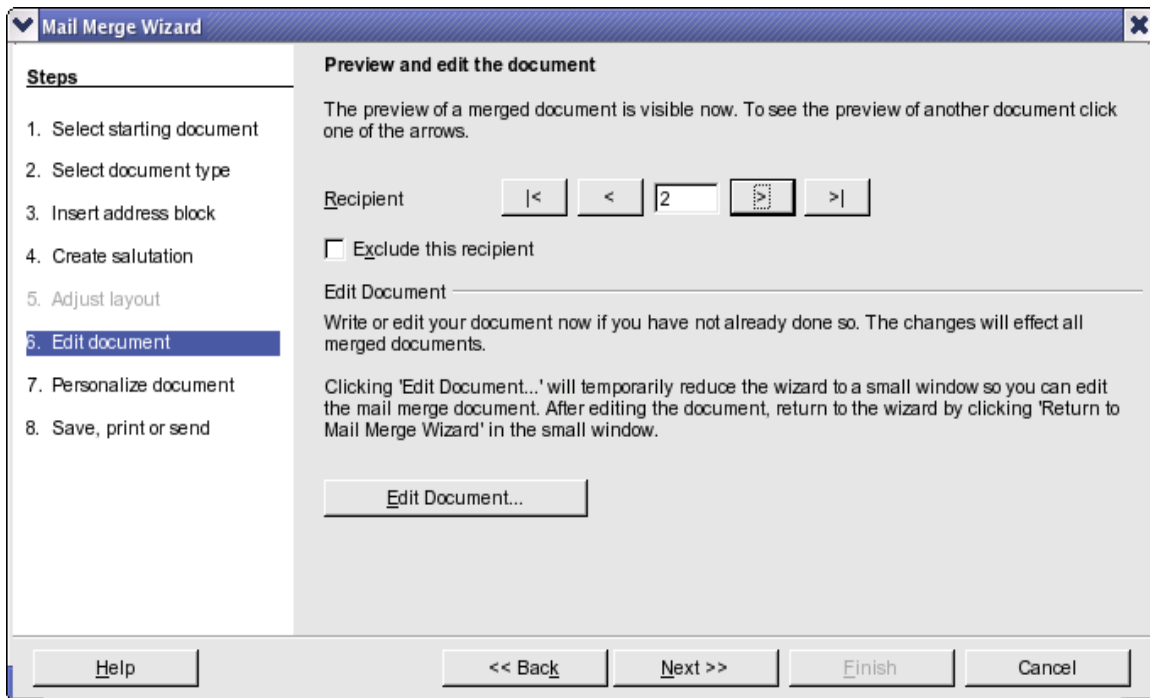


Figure 293: Edit document

You can also edit the body of the document. If you started with a blank document, you can write the whole letter in this step. Click **Edit Document** to shrink the wizard to a small window (Figure 294) so you can easily edit the letter.



Figure 294: Minimized mail merge wizard

You need to perform another important task in this step. The wizard only inserts information from the name and address fields, but you may wish to add additional data. In our example, we want to tell each person how many points they had accumulated during the year; that information is in the spreadsheet.

To do this:

- 1) Click **Edit Document** in step 6 of the wizard.
- 2) Select **Insert > Fields > Other**. The Fields dialog box opens, as shown in Figure 301.

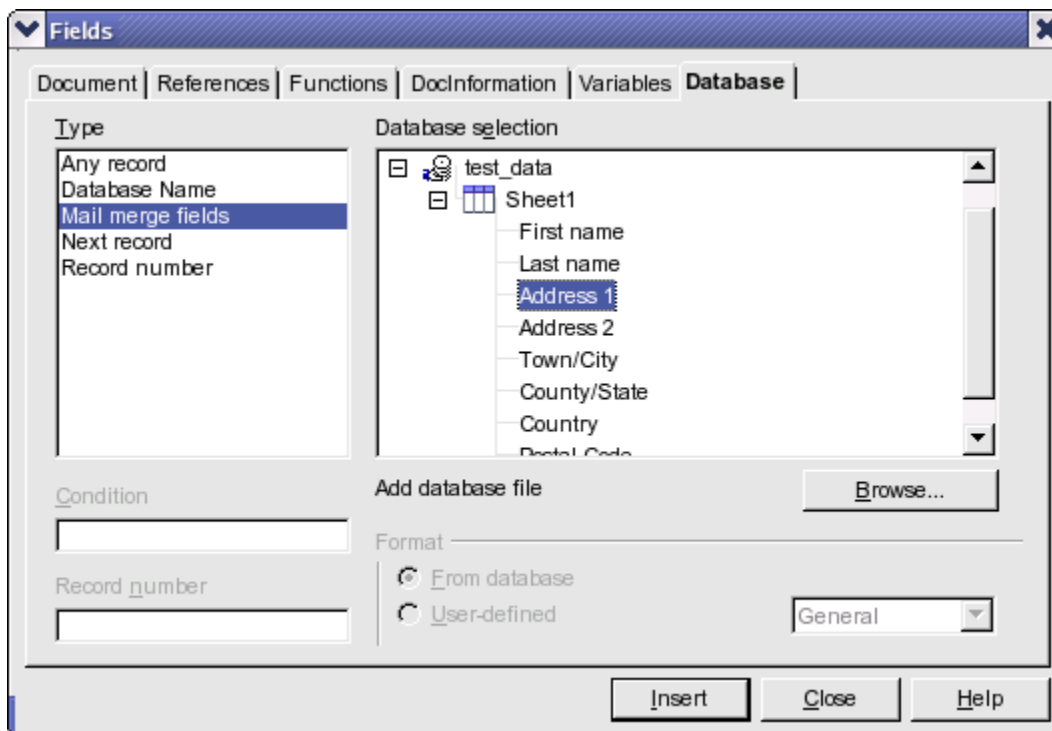


Figure 295: Insert mail merge fields dialog

- 3) Click the **Database** tab.
- 4) On the left hand side, select **Mail merge fields**.
- 5) Under **Database selection** find your data source (in this example, it is a spreadsheet). Expand it to see the fields.
- 6) Click the field you want to insert, then click **Insert** to insert the field.

You can insert any number of fields any number of times into your mail merge document.

7) Click **Close** when you are done.

---

**Note** The **Database selection** lists the data source you selected in step 3. All the information you need for the letter must be contained in that data source.

---

## Step 7: Personalize documents

In step 7, OOo creates all your letters, one per recipient.

Clicking the **Edit Document** button here is similar to step 6. The difference is that you now edit a long file containing all of the letters, so you can make changes to a particular letter to one person. In step 7 of the Mail Merge wizard (Figure 296), click **Find** to open a dialog box that allows searches within the document.

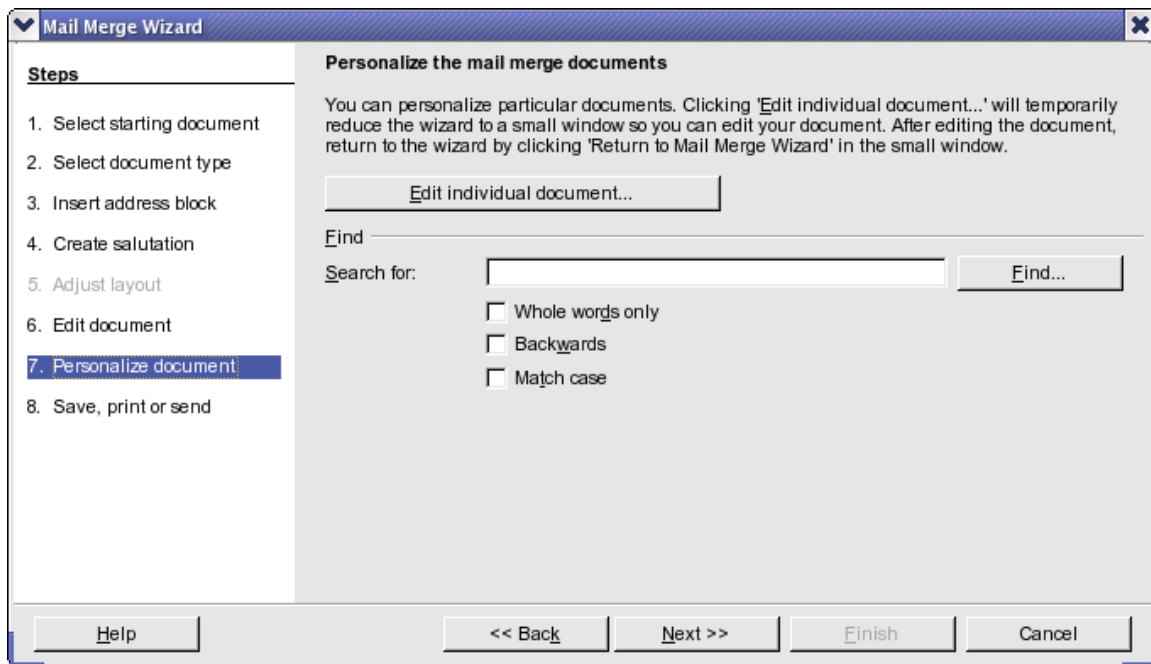


Figure 296: Personalize document

As with step 6, when editing the document, the wizard shrinks to small window. Click on this window (see Figure 294 on page 277) to expand the wizard to its full size.

## Step 8: Save, print or send

You have now completed the mail merge process. The last step is to do something with it. In step 8, you can save the original sample letter, save the merged document, print the letters right away or, if you created email messages, send them.



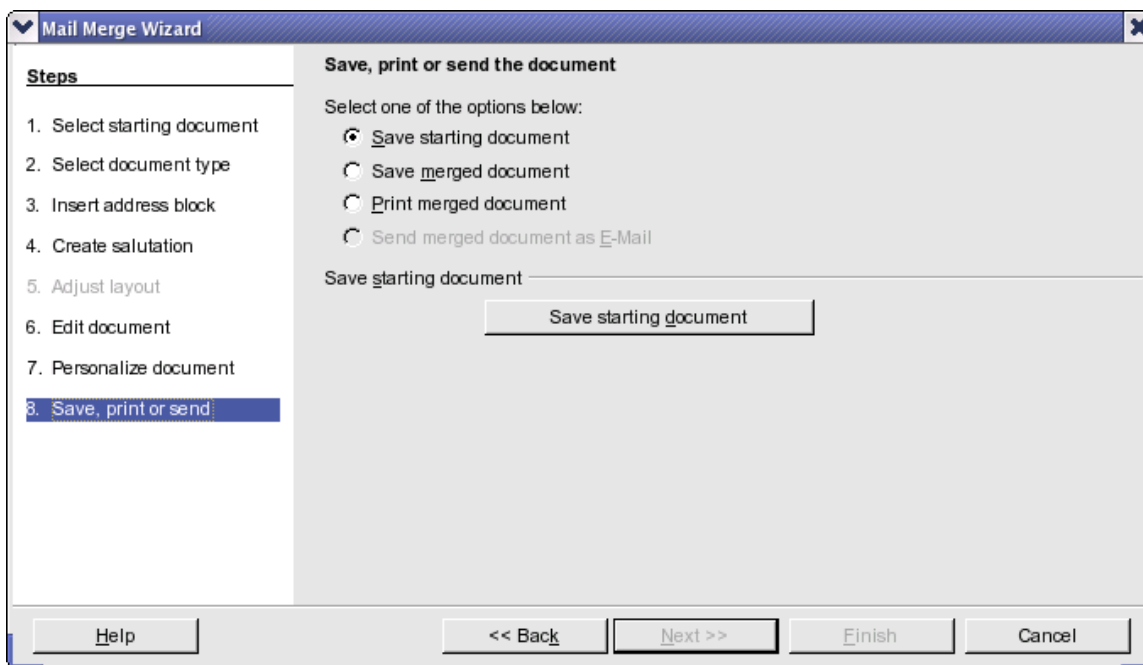


Figure 297: Save, print or send

You probably want to save the starting document and the merged document. The merged document can be saved as one big file or one file for each letter.

When you have saved the merged document, you can print the final letters now or later; and you can still manually check and edit the letters if necessary.

## Saving as a file rather than printing

You can save the output of a form letter, mailing labels, or envelopes as a file, rather than printing it directly. Saving as a file is useful for several reasons. For example, you may want to view the file to make sure it is correct before printing a large number of form letters or mailing labels, or you may want to edit the file (change the typeface, the type size, indentation, and so on).

To save as a file rather than printing directly, select the Mail Merge Wizard at the point where **File > Print** would normally be selected.

Thus, after selecting **New Document**, instead of selecting **File > Print**, do this:

- 1) Select **Tools > Mail Merge Wizard**.
- 2) In Step 1 of the wizard (Figure 284), select **Use the current document**.
- 3) Then select step 8 (**Save, print, or send**). In step 8, you can save the original sample letter, save the merged document, or print the letters right away. In the example below, **Save merged document** and **Save as single document** are selected. You can also save as individual documents, which means that there will be a separate document for each record. In most instances, saving as a single document is more desirable.

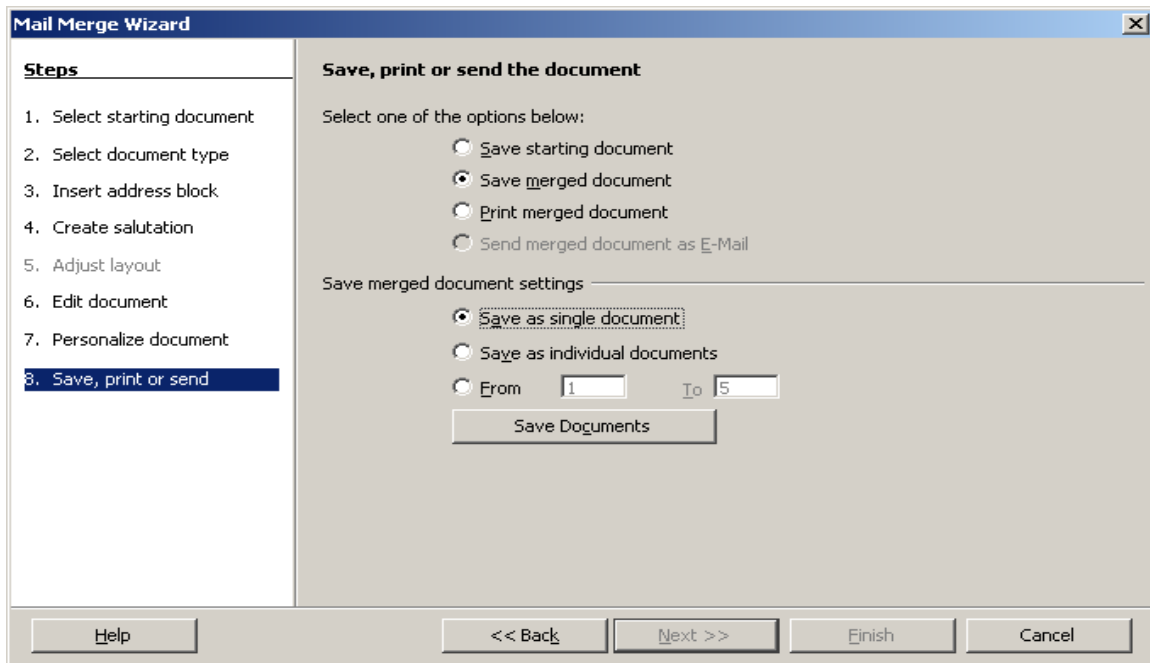


Figure 298: Step 8: Save, print or send

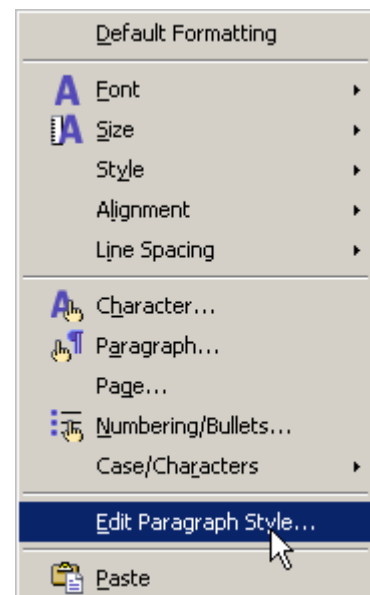
- 4) Click **Save Documents**. You will be prompted to give the document a name. You then return to the above dialog, where you can choose another option (for example, save the starting document), or click **Finish**.

## Editing a saved file of mailing labels

You can edit individual records in the normal fashion, by highlighting and changing the font name, for example. However, you cannot edit globally (changing the font name for all records, for example) by selecting the entire document.

To make global changes, you must edit the style:

- 1) Right-click any correctly spelled word in a label record. Select **Edit Paragraph Style** from the popu-up menu. (Note: If you click on a misspelled word, a different context menu will appear.)
- 2) Then from the paragraph style dialog, you can make change to the font name, the font size, the indents, etc.



## Removing blank lines in addresses

A common situation is that some addresses may have no information in some fields. For example, you may have an “address1” field and an “address2” field to deal with multi-line addresses, or a “company name” field that may be blank in some cases. When you print a form letter, address label, or envelope, you will not want a blank line to appear when the field is empty. This section describes how to suppress blank lines.

### Note – Very Important!

Be sure your field names (or column headings in a spreadsheet) do **not** contain spaces or the technique described here does not work.

Normally you would enclose a field name in quotation marks if the name contains a space. However, a quoted string is not acceptable in the Condition box for a hidden section (see Figure 301 and Figure 303) and an un-quoted string stops on the first space in the field name, effectively making the condition always True and causing the section to be hidden even if the field has data in it..

## Removing blank lines in addresses on form letters

- 1) Figure 299 shows a typical address block with field highlighting on. The field <ad2> is the second address line, which may be blank for some addresses, so you want to have that whole line hidden if the field is blank.

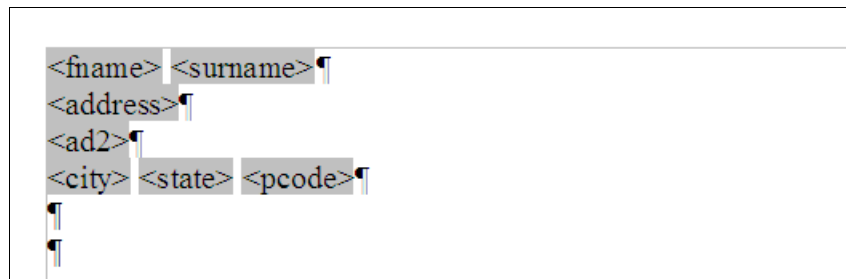


Figure 299: Typical address block

- 2) Select the <ad2> field, and then select **Insert > Section** from the menu bar. In the Insert Section dialog (Figure 301), select the **Hide** checkbox. In the **With Condition** box, type the field name (ad2 in this case) and EQ "" (which means “equals a blank record”). Click **Insert**.

Back in the document, if you have section markers showing, you will see something similar to Figure 300.

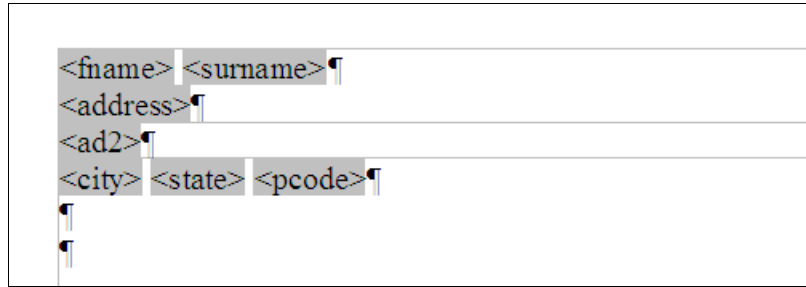


Figure 300: Section containing second address line

Now, when you do a mail merge using this document, the line inside the section (including its paragraph marker) will be hidden if the field <ad2> is blank.

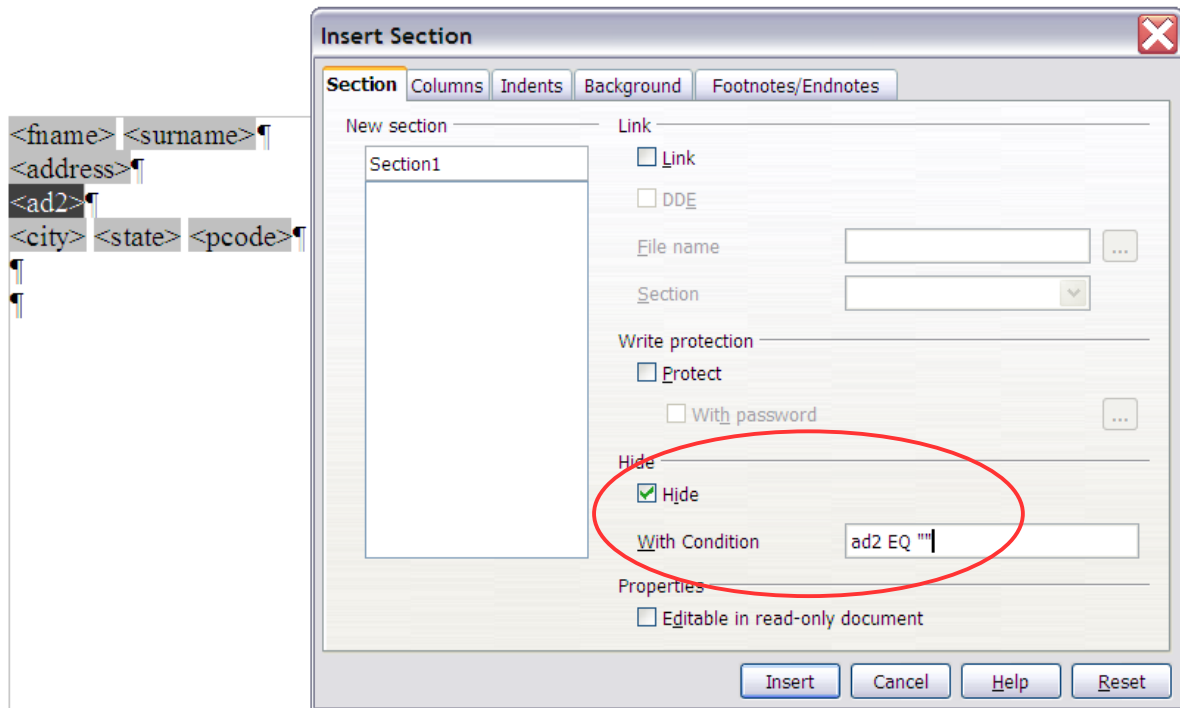


Figure 301: Setting a condition for a hidden section

## Removing blank lines in labels

The process for removing blank lines in labels is a bit different.

- 1) When setting up your labels (as described in “Printing mailing labels” starting on page 262), select the **Synchronise contents** checkbox on the Options tab of the Labels dialog (Figure 274). Continue as described in that section.
- 2) When you click **New Document**, a page of labels is displayed, showing the field names. If you do not already have paragraph markers showing, display them now. (Click the **Nonprinting Characters** icon, which looks like a backwards P.) Notice there is only one paragraph mark in each label, at the end of the last line (Figure 302).

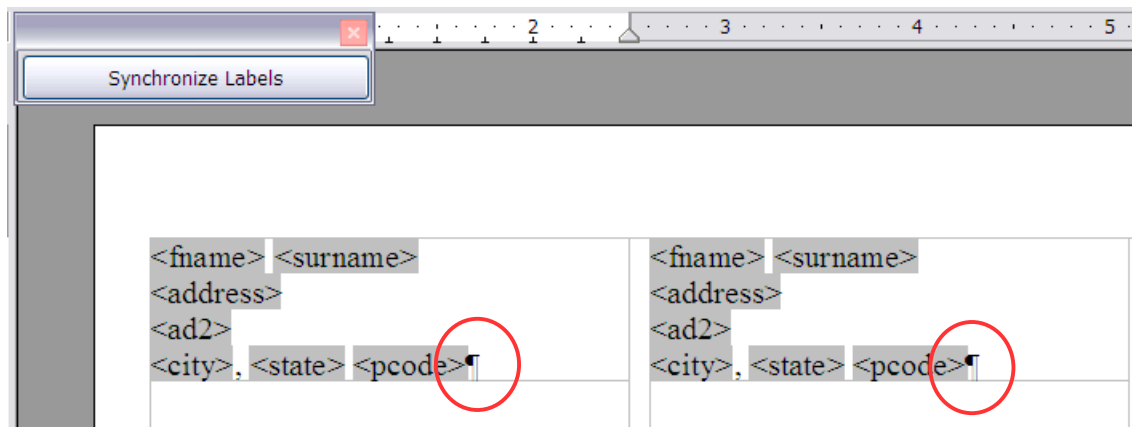


Figure 302: Labels showing only one paragraph mark each

- 3) To make this technique work, you need to have a paragraph mark at the end of each line. To do this, go to the first label (upper left corner), place the cursor at the end of the first line, press *Enter*, and then press *Delete*. This inserts a paragraph mark at the end of the first line. Repeat for each of the other lines except the last. Do this only in the first label.
- 4) Click the **Synchronize Labels** button in the upper left. Now all the labels have paragraph marks at the end of each line.
- 5) In the first label on the page, select the field you wish to hide if it is blank. In our example, that is <ad2>. Click **Insert > Section** on the menu bar. In the Insert Section dialog (see Figure 303), select the **Hide** checkbox. In the **With Condition** box, type the field name (<ad2 in this case) and EQ "". Click **Insert**.

The <ad2> line in the first label may disappear. Do not be concerned if this happens.

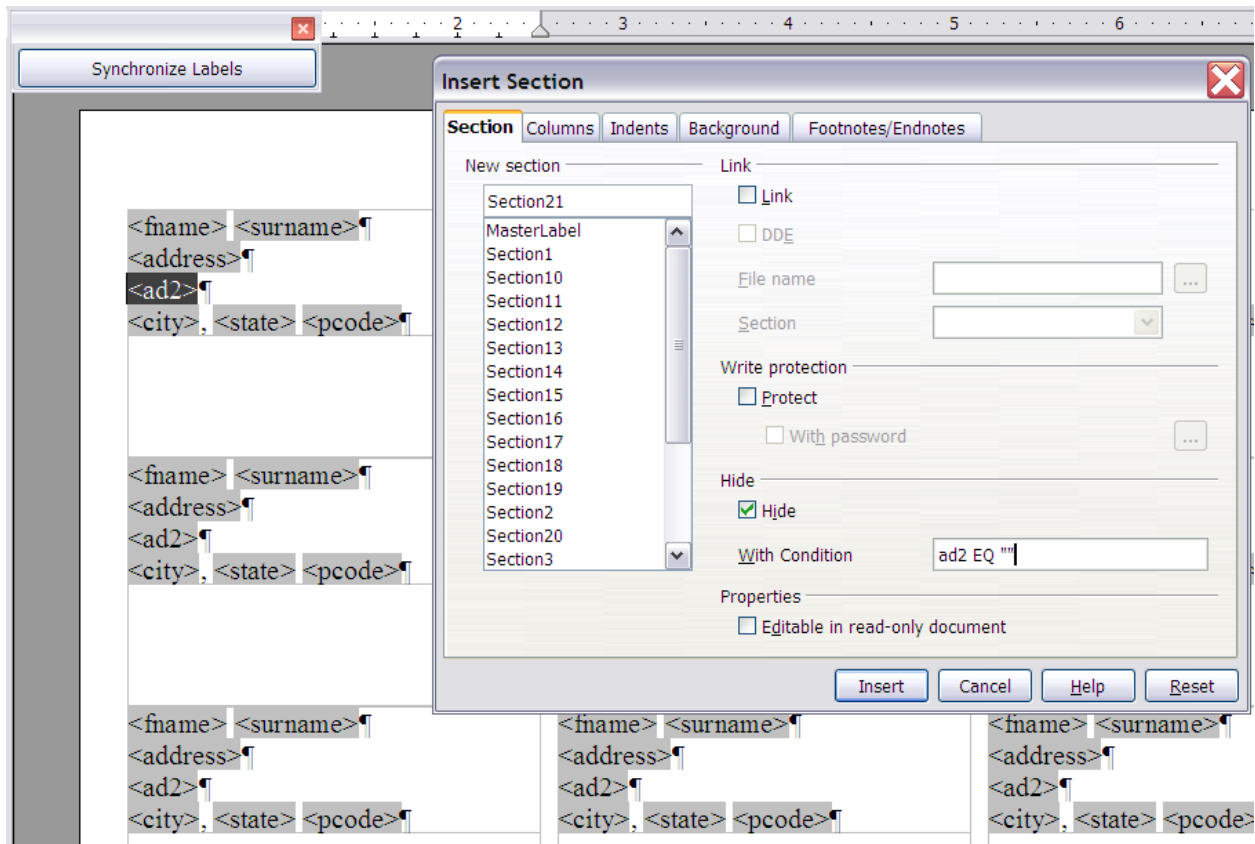


Figure 303: Setting the condition for a hidden section

- 6) Click **Synchronize Labels**. Now all the labels look the same.
- 7) Select **Tools > Mail Merge Wizard**. In Step 1 of the wizard (Figure 284), select **Use the current document**. Then select step 8 (**Save, print, or send**). A labels document is created, and the last page of the Mail Merge Wizard remains open (Figure 304).

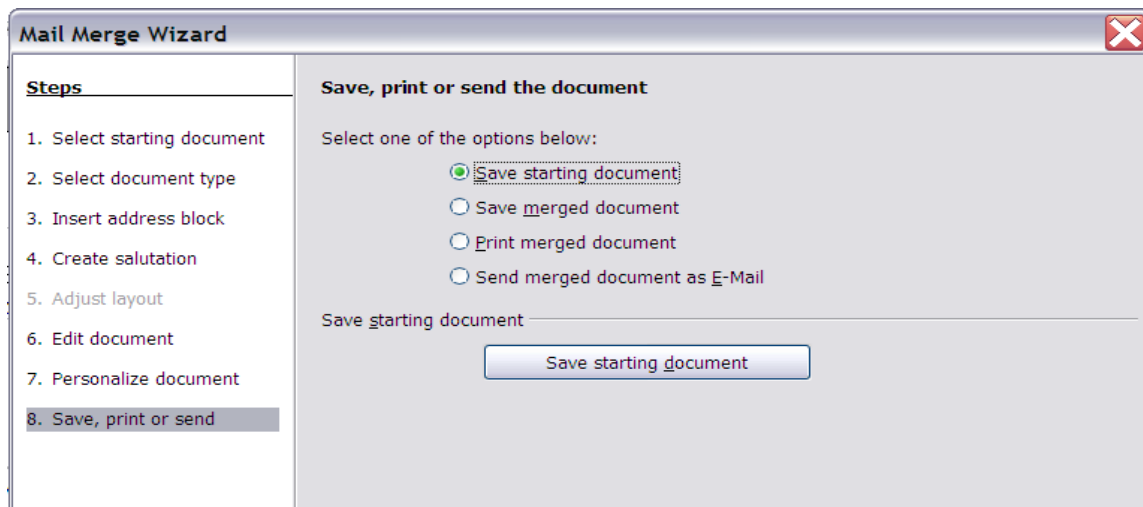


Figure 304: Saving the document you just created

- 8) Select **Save starting document** and click the **Save starting document** button. This saves all your work setting up the labels.
- 9) The dialog remains open. Select **Save merged document** and **Save as single document**, or select **Print merged document**. All the pages of labels are printed or saved.

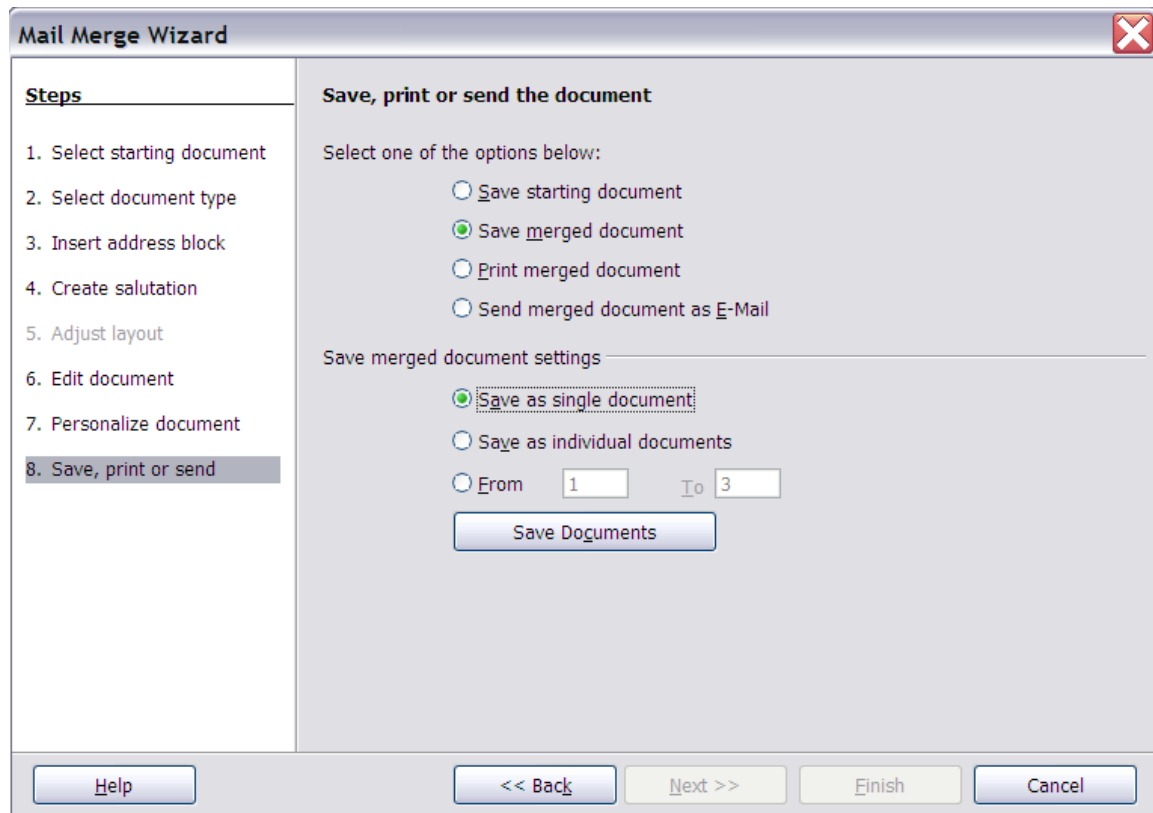


Figure 305: Saving or printing the merged labels

## Removing blank lines from envelope addresses

After you set up the envelope (see “Printing envelopes” on page 266), use the technique described in steps 1 through 5 in “Removing blank lines in addresses” on page 281 to remove the blank lines. Then continue with printing the envelopes as described in “Merging and printing the envelopes” on page 268.



*Chapter 12*  
*Creating Tables of Contents,  
Indexes and Bibliographies*



# Introduction

---

This chapter shows you step-by-step how to create and maintain a table of contents, an index, and a bibliography for a text document using OpenOffice.org Writer. To understand the instructions, you need to have a basic familiarity with Writer and styles.

## Creating a table of contents

---

Writer's table of contents feature lets you build an automated table of contents from the headings in your document. Before you start, make sure that the headings are styled consistently. For example, you can use the *Heading 1* style for chapter titles and the *Heading 2* and *Heading 3* styles for chapter subheadings.

This section shows you how to:

- Create a table of contents quickly, using the defaults.
- Customize a table of contents.

---

**Note** You can use custom styles for the different levels in the table of contents as well. This document uses the default styles for simplicity.

---

### Creating a table of contents quickly

Although tables of contents can be customized extensively in Writer, most of the time you will probably find the default to be fine. Creating a quick table of contents is simple:

- 1) When you create your document, use the following paragraph styles for different heading levels (such as chapter and section headings): *Heading 1*, *Heading 2*, and *Heading 3*. These are what will appear in your table of contents. You can use more levels of headings, but the default setting is to use only the first three levels in the table of contents. It could look like Figure 306 if you used the default styles.
- 2) Place the cursor where you want the table of contents to be inserted.
- 3) Select **Insert > Indexes and Tables > Indexes and Tables**.

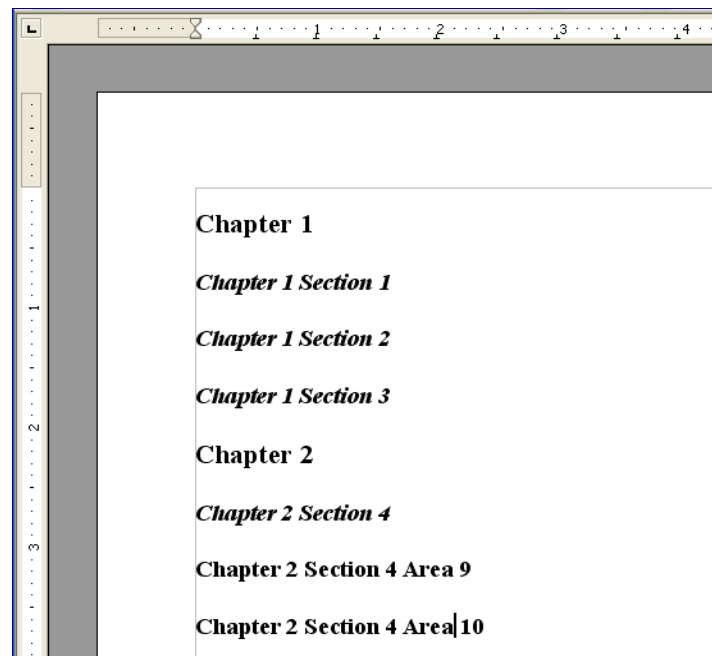


Figure 306: Headings example

4) Change nothing in the Insert Index/Table dialog box (Figure 308). Click **OK**. The result will look like Figure 307.

<b>Table of Contents</b>	
Chapter 1.....	1
Chapter 1 Section 1.....	1
Chapter 1 Section 2.....	1
Chapter 1 Section 3.....	1
Chapter 2.....	1
Chapter 2 Section 4.....	1
Chapter 2 Section 4 Area 9.....	1
Chapter 2 Section 4 Area 10.....	1
Chapter 2 Section 5.....	1
Chapter 3.....	1
Chapter 3 Section 6.....	1
Chapter 3 Section 7.....	1
Chapter 3 Section 8.....	1

Figure 307: Table of contents example

If you add or delete text (so that headings move to different pages) or you add, delete, or change headings, you need to update the table of contents. To do this:

- 1) Place the cursor within the table of contents.
- 2) Right-click and select **Update Index/Table** from the pop-up menu.

---

**Note** If you cannot place your cursor in the table of contents, choose **Tools > Options > OpenOffice.org Writer > Formatting Aids**, and then select **Enable** in the *Cursor in protected areas* section.

---

**TIP** You can customize an existing table of contents at any time. Right-click anywhere in it and select **Edit Index/Table** from the pop-up menu. Continue as described in the next section, “Customizing a table of contents”.

## Customizing a table of contents

To insert a customized table of contents into your document:

- 1) Place the cursor where you want to insert the table of contents.
- 2) From the main menu, choose **Insert > Indexes and Tables > Indexes and Tables**. The Insert Index/Table dialog box opens.

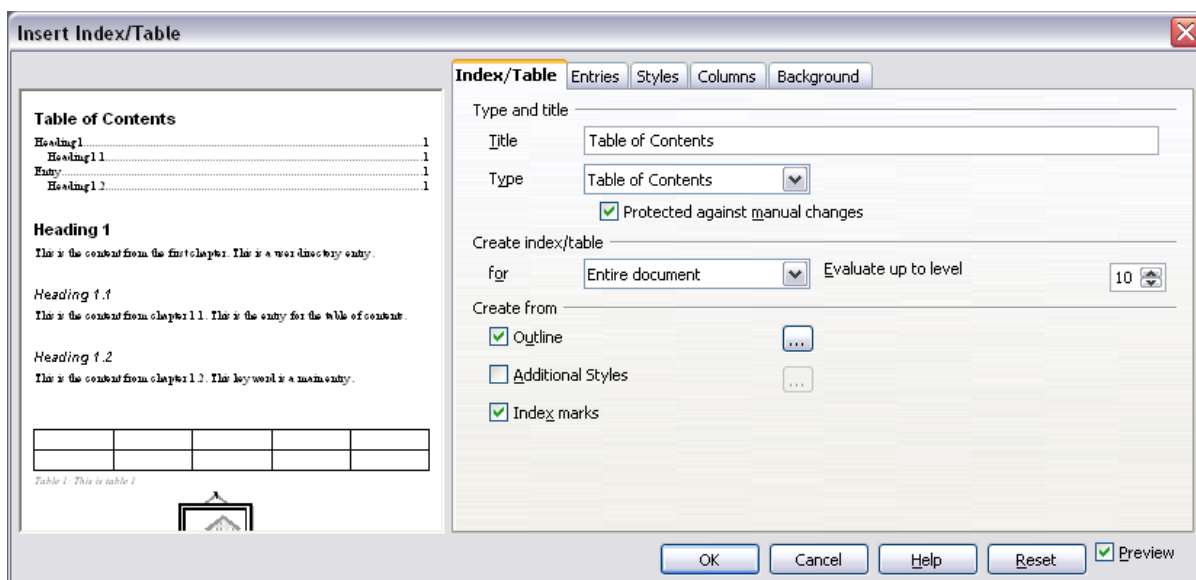


Figure 308. Index/Table page of Insert Index/Table dialog box

The Insert Index/Table dialog box (Figure 308) has five pages. Any or all of them can be used when creating or editing a table of contents:

- Use the *Index/Table* page to set the attributes of the table of contents.
- Use the *Entries* and *Styles* pages to format the entries in the table of contents.
- Use the *Columns* page to put the table of contents into more than one column.
- Use the *Background* page to add color or a graphic to the background of the table of contents.

The preview box, located on the left-hand side of each tab, shows as you work how the table of contents will look. (If you do not see the preview box, select the **Preview** checkbox in the lower right-hand corner of the dialog box.)

After making all your changes, click **OK** to save the table of contents so it appears in your document.

## Using the Index/Table page

Use the *Index/Table* page, pictured in Figure 308, to set the attributes of the table of contents.

### Adding a title

To give the table of contents a title, type it in the *Title* field. (You can change an existing title by typing over it.) To delete the title, clear the *Title* field.

### Setting the type of index

You can create several types of indexes. They include:

- Table of Contents
- Alphabetical Index
- Illustration Index
- Table of Objects
- Bibliography

You can also create user-defined indexes.

---

**Note** You can only change the type of index when you first create it. Once you define an index type (for example, make a table of contents) you cannot change the type.

---

### Choosing the scope of the table of contents

From the *for* drop-down list in the *Create index/table* area, select **Entire document**. There is an additional option to create a table of contents for just the current chapter. For more information, refer to **Help > OpenOffice.org Writer > Contents**.

### Creating a table of contents from an outline

This selection creates the table of contents using outline levels; that is, paragraphs formatted with one of the predefined heading styles (*Heading 1-10*) are added to the table of contents in order.

Click on the (...) button next to the checkbox to change the numbering properties of the table of contents. This can be useful if you want to put numbers in front of each level of the contents, as in Figure 309.

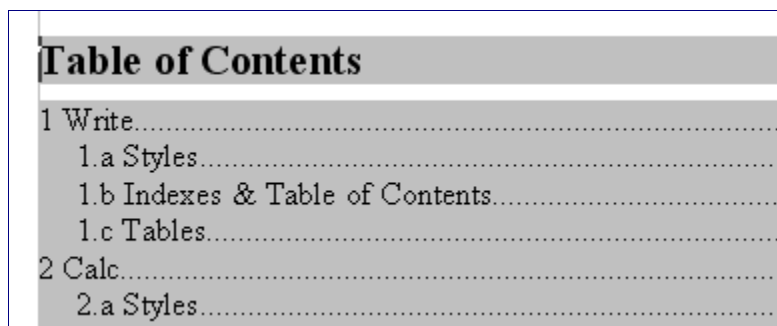


Table of Contents	
1	Write.....
1.a	Styles.....
1.b	Indexes & Table of Contents.....
1.c	Tables.....
2	Calc.....
2.a	Styles.....

Figure 309: Table of contents with numbers

### Creating from index marks

This selection adds any index entries that you have inserted into the document by using **Insert > Indexes and Tables > Entry**. Normally you would not use this selection for a table of contents.

### Protecting against manual changes

To stop the table of contents being changed accidentally, select the **Protected against manual changes** checkbox. If this box is checked, the table of contents can only be changed using the context menu or the Insert Table/Index dialog box. If the box is not checked, the table of contents can be changed directly on the document page, just like other text.

---

**TIP** Any manual changes to a table of contents are lost when you update it.

---

### Changing the number of levels included

Writer displays a default setting of 10 levels of headings when it builds the table of contents (or the number of levels used in the document, whichever is smaller). To change the number of levels, enter the required number in the *Evaluate up to level* box.

### Creating from additional styles

Writer automatically assigns to the table of contents all paragraphs formatted with the default heading styles (*Heading 1*, *Heading 2*, and so on). To assign paragraphs formatted with other styles, including custom styles:

- 1) In the *Create from* area, select the **Additional Styles** checkbox.
- 2) Click the (...) button to the right of the checkbox. The Assign Styles dialog box (Figure 310) opens.

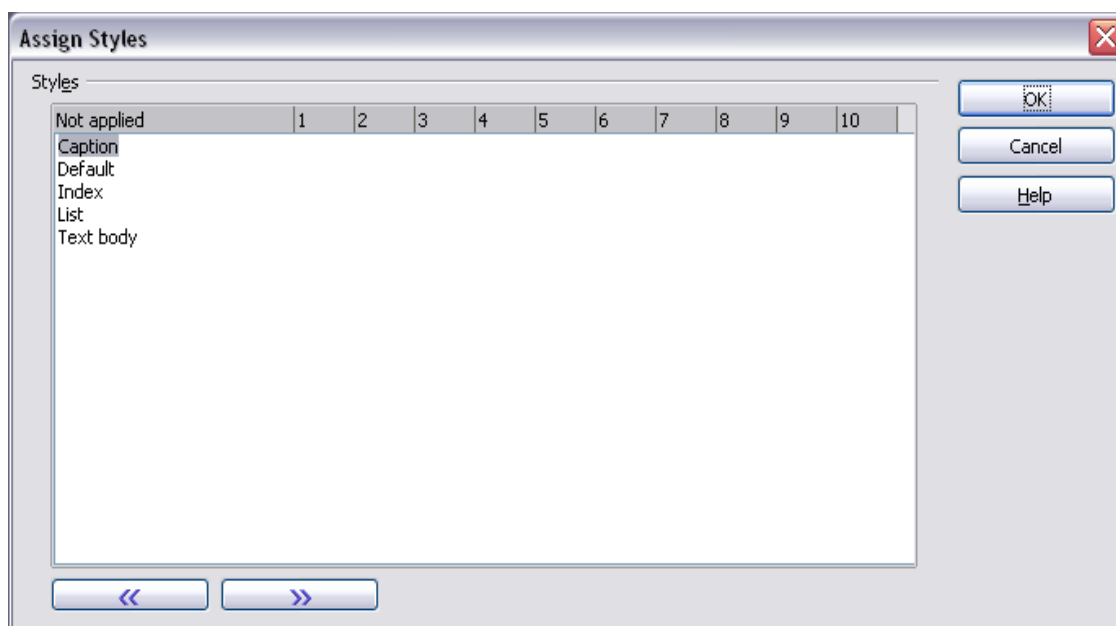


Figure 310. Assign Styles dialog box

- 3) In the *Not applied* column, click the style that you want to assign to the table of contents.

- 4) Use the >> button to move the selected style to the desired outline level. For example, to have paragraphs formatted with the selected style to appear as top-level entries in the table of contents, click the >> button once to move the style into the *l* column. To move the style in the opposite direction, use the << button.
- 5) Click **OK** to save your changes and return to the *Index/Table* tab or click **Cancel** to return without saving your changes.

---

**Note** If the outline box is checked, any changes you make to the position of one of the predefined *Heading* styles will be superseded by the default outline structure.

---

## Using the Entries page

Use the *Entries* page, pictured in Figure 311, to define and format the entries in the table of contents. For each outline level, you can add and delete elements such as chapter (heading) numbers, and you can also apply character styles to individual elements.

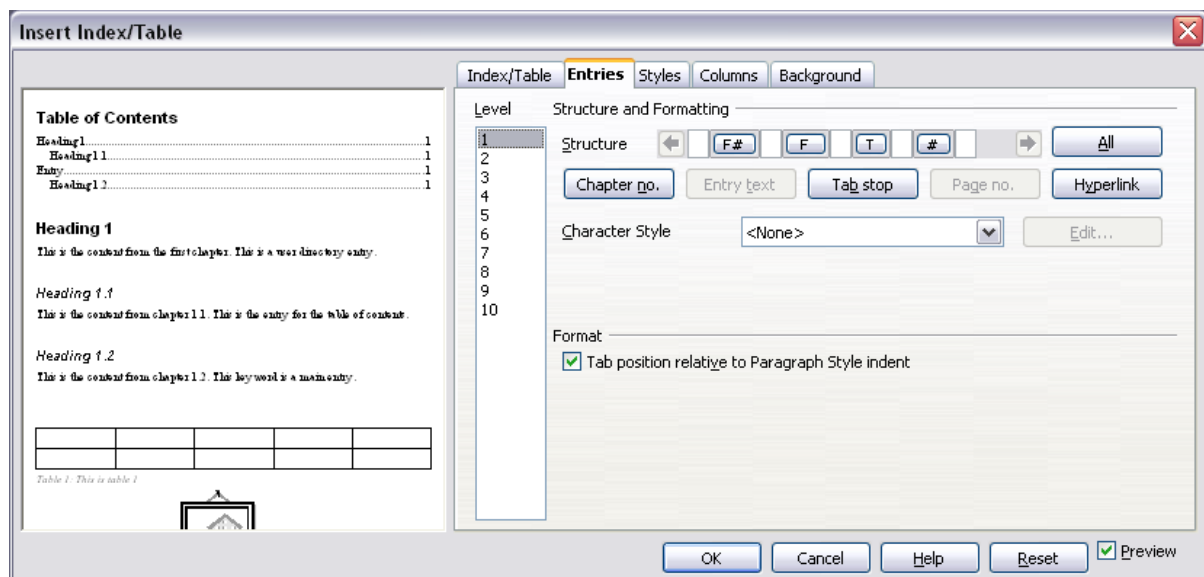


Figure 311. Entries page of Insert Index/Table dialog box

To begin, click a level number in the *Level* column to select the outline level whose elements you want to format. (You will be able to apply changes to all outline levels later.) The *Structure* line displays the elements for entries in that level. Each button on the *Structure* line represents one element:

- The **E#** button represents the “chapter number”, which means the heading number, not just for chapters but also for other levels of headings.
- The **E** button represents the entry text.
- The **T** button represents a tab stop.
- The **#** button represents the page number.

- The **LS** button represents the start of a hyperlink. (This button does not appear on the default *Structure* line.)
- The **LE** button represents the end of a hyperlink. (This button does not appear on the default *Structure* line.)

Each white field on the *Structure* line represents a blank space. You can add custom text if you desire.

---

**Note** On some operating systems, such as Windows XP, the **E#** and **E** buttons display as **F#** and **F**, and the **LS** and **LE** buttons display as **IS** and **IF**.

---

---

**Note** If the chapter number defined for your document includes the word “Chapter” before the number itself, then the **E#** field in the table of contents will also include the word “Chapter”. If you want to include the chapter number with the page number (for example, in the style “**1-1**, **1-2**, ...”), you will find that the page number appears in the table of contents as “**Chapter 1-1**”, which is probably not what you want.

---

### Changing elements

To change an element in the *Structure* line, click the button representing that element and then click the element that you want to substitute in the row of buttons just below the *Structure* line. For example, to change a chapter number to a tab stop, click the **E#** button on the *Structure* line (it shows then as being pressed) and then click the **Tab stop** button in the row of available elements.

### Deleting elements

To delete an element from the *Structure* line, click the button representing that element and then press the *Delete* key on your keyboard. For example, to delete a tab stop, click the **T** button and then press the *Delete* key.

### Adding elements

To add an element to the *Structure* line:

- 1) Place the cursor in the white field to the left of where you want to insert the element.
- 2) Click one of the five buttons just below the *Structure* line. (For example, to add a tab stop, click the **Tab stop** button.) A button representing the new element appears on the *Structure* line.

### Hyperlinking an entry

To change the default *Structure* line so that the chapter number and the entry text form a hyperlink, follow these steps:

- 1) On the *Structure* line, place the cursor in the white field to the left of the **E#** button.
- 2) Click the **Hyperlink** button. An **LS** button, representing the start of the hyperlink, appears on the *Structure* line.
- 3) On the *Structure* line, place the cursor in the white field to the right of the **E** button.

- 4) Click the **Hyperlink** button again. An **LE** button, representing the end of the hyperlink, appears on the *Structure* line.

Figure 312 represents the completion of the above steps. The number and the text of the entries on that level will now be hyperlinks.

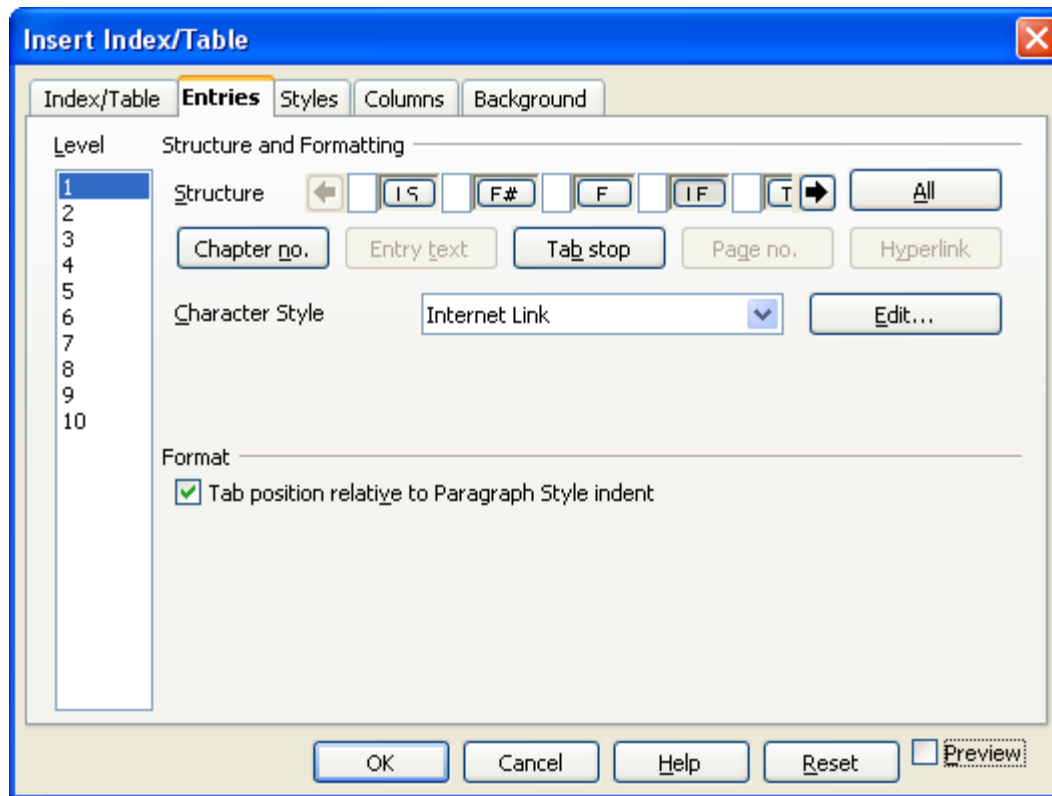


Figure 312: Hyperlink in table of contents

### Applying character styles

To apply a character style to an element:

- 1) On the *Structure* line, click the button representing the element to which you want to apply a style.
- 2) From the *Character Style* drop-down list, select the desired style. Writer applies the selected style to the selected element.

To view or edit the attributes of a character style, select the style from the *Character Style* drop-down list and then click the **Edit** button.

### Applying changes to all outline levels

To apply the displayed structure and formatting to all outline levels, click the **All** button.

### Tab position relative to Paragraph Style indent

When this checkbox is selected, entries are indented according to the settings of their individual formats. Where a paragraph style with an indent on the left is in use, tab stops will be relative to this indent. If this checkbox is not selected, tab stops will be relative to the left margin position.



## Using the Styles page

Use the *Styles* page, pictured in Figure 313, to apply paragraph styles to the table of contents. You can apply a different paragraph style to each outline level of the table.

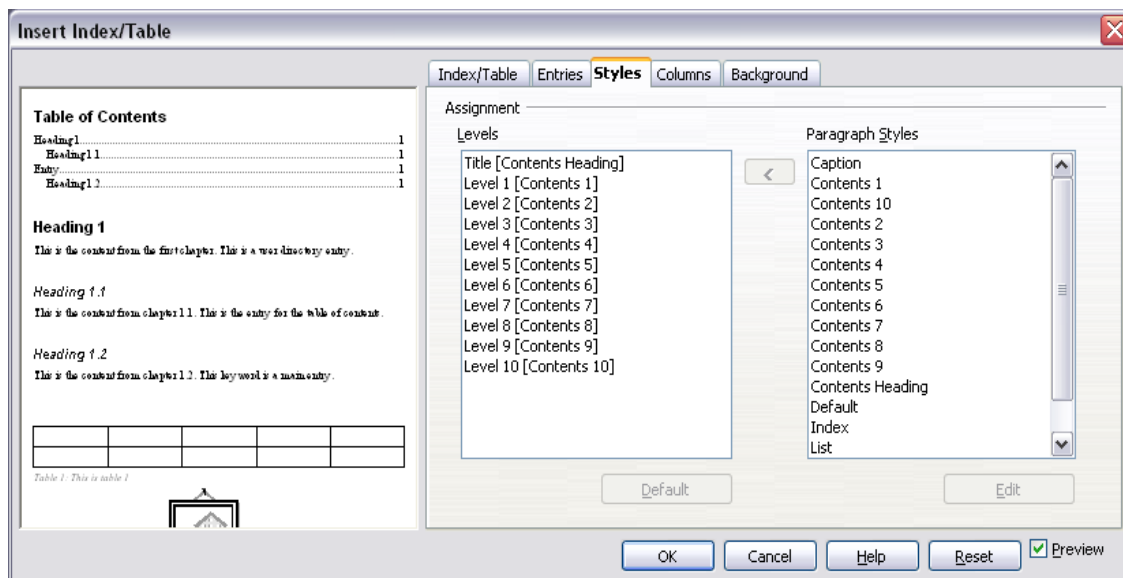


Figure 313. Styles page of Insert Index/Table dialog box

To apply a paragraph style to an outline level:

- 1) In the *Levels* list box, select the desired outline level by clicking it.
- 2) In the *Paragraph Styles* list box, click the paragraph style to apply.
- 3) Click the < button to apply the selected paragraph style to the selected outline level.

The styles of the level appears in the square brackets in the *Levels* list.

To remove paragraph styling from an outline level:

- 1) In the *Levels* list box, select the desired outline level by clicking it.
- 2) Click the **Default** button.

To view or edit the attributes of a paragraph style, click the style in the *Paragraph Styles* list box and then click the **Edit** button.

---

**Note** Changes to a paragraph style will affect any text in the document that is formatted using this style, not just the format of the table of contents.

---

## Using the Columns page

Use the *Columns* page (Figure 314) to change the number of columns for the table of contents.

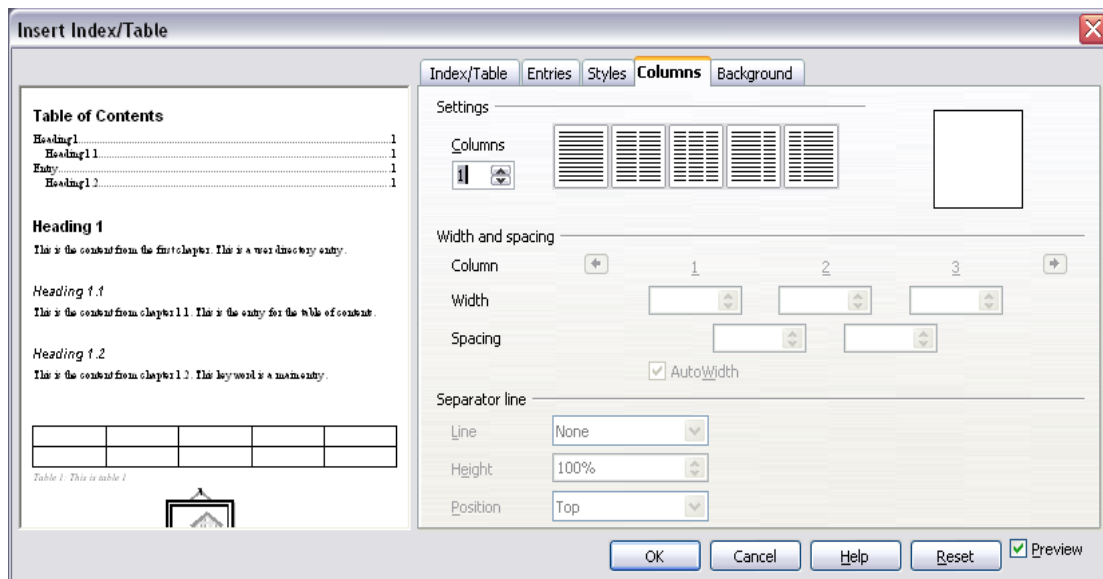


Figure 314. Columns page of the Insert Index/Table dialog box

### Adding multiple columns

To display the table of contents in more than one column:

- 1) Either enter the number of columns desired in the box labeled *Columns* or select the icon representing the number of columns.
- 2) To evenly distribute the columns according to the page width, check the **AutoWidth** box. If it is unchecked, you can manually set each of the following by altering the associated spin box:
  - *Width* between each of the columns
  - *Spacing* between each of the columns
- 3) You can choose to have a separator line between the columns:
  - *Line*: The width of the line.
  - *Height*: The height of the line.
  - *Position*: Relative position of the line to the table (top, middle, or bottom) if the height is less than 100%.

### Using the Background page

Use the *Background* page, pictured in Figure 315, to add color or a graphic to the background of the table of contents.

## Adding color

To add color to the background of the table of contents, select from the color grid.

**Note** Even though the table of contents may have a shade behind it while editing, it is actually not shaded by default. It appears shaded because it is a field and will appear to have the same shading all fields have.

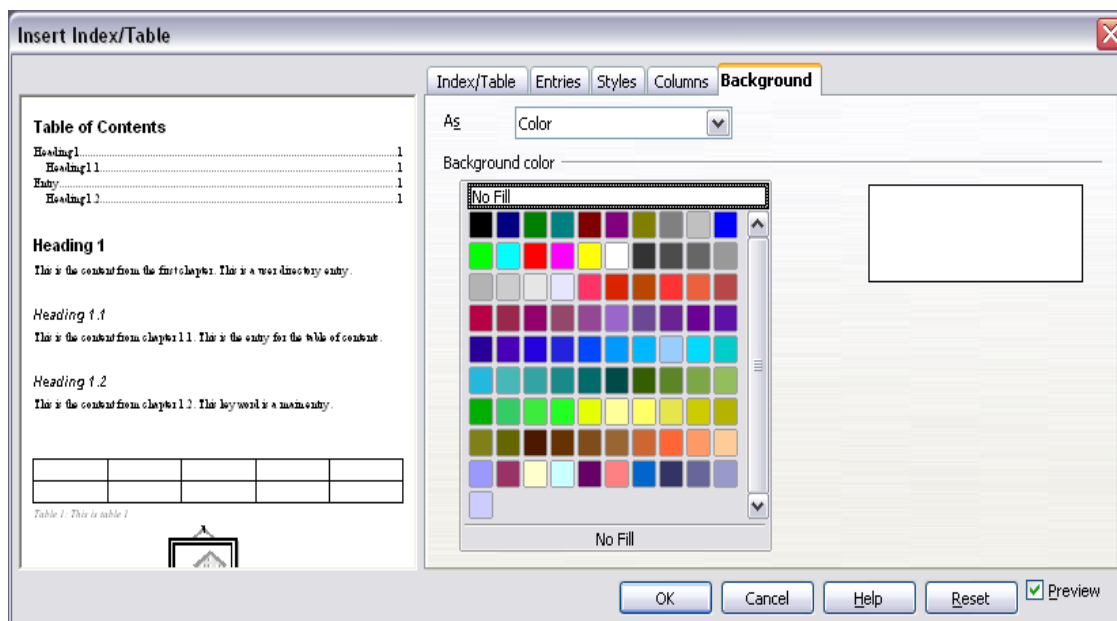


Figure 315. Background page of Insert Index/Table dialog box, showing Color choices

## Adding a graphic

To add a graphic to the background of the table of contents:

- 1) From the *As* drop-down list, select **Graphic**. The *Background* tab now displays the graphics options, as shown in Figure 316.
- 2) Click the **Browse** button. The Find graphics dialog box opens.
- 3) Find the graphic file you want and then click the **Open** button. The Find graphics dialog box closes and the selected graphic appears in the graphic preview box on the right-hand side of the *Background* tab. (If you do not see the graphic, select the **Preview** checkbox.)
- 4) To embed the graphic in your document, clear the **Link** checkbox. To link the graphic to the document but not embed it, select the **Link** checkbox.
- 5) In the *Type* area of the *Background* tab, choose how you want the background graphic to appear:
  - To position the graphic in a specific location, select **Position** and then click the desired location in the position grid.
  - To stretch the graphic to fill the entire background area, select **Area**.
  - To repeat the graphic across the entire background area, select **Tile**.

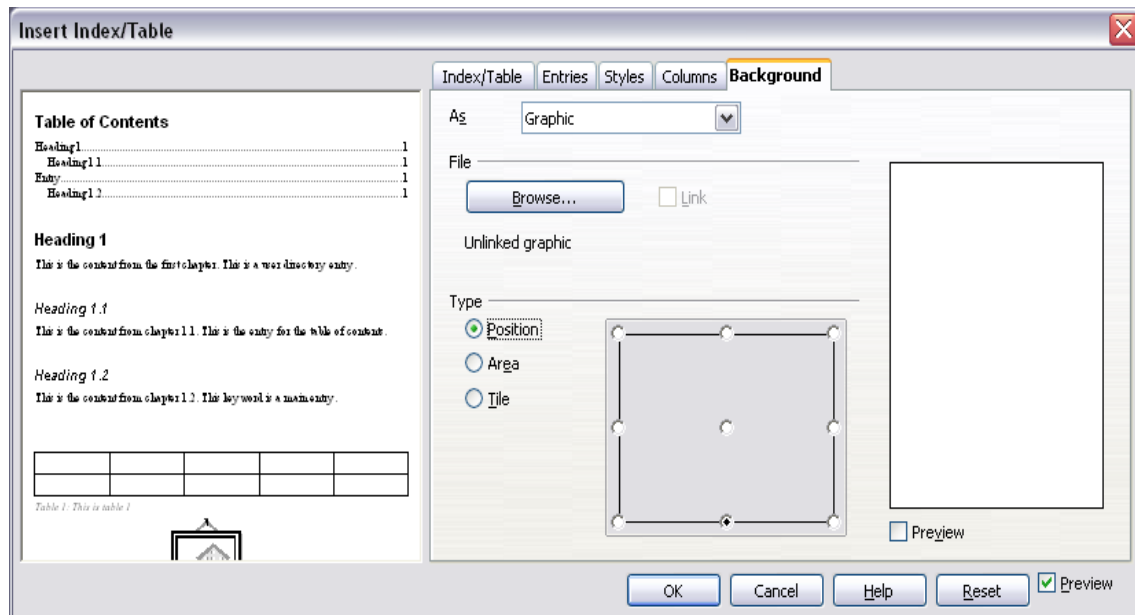


Figure 316. Graphic options on the Background page of the Insert Index/Table dialog box

## Deleting color or graphics

To delete color or graphics from the table background:

- 1) From the *As* drop-down list, select **Color**.
- 2) Click **No Fill** on the color grid.

## Maintaining a table of contents

This section shows you how to:

- Edit an existing table of contents.
- Update a table of contents when changes are made to the document.
- Delete a table of contents.

### Editing a table of contents

To edit an existing table of contents:

- 1) Click anywhere in the table of contents and then right-click.

---

**TIP** If you cannot click in the table of contents, it is probably because it is protected. To disable this protection, choose **Tools > Options > OpenOffice.org Writer > Formatting Aids**, and then select **Enable** in the *Cursor in protected areas* section. If you wish to edit the table of contents without enabling the cursor, you can access it from the Navigator as explained on page 299.

---

- 2) From the pop-up menu, choose **Edit Index/Table**. The Insert Index/Table dialog box (Figure 308 on page 289) opens and you can edit and save the table as described in the previous section.

You can also access the Index/Table dialog box from the Navigator (Figure 317).

- 1) Open the Navigator (press *F5*).
- 2) Click the + sign next to Indexes.
- 3) Right-click on the desired index.
- 4) Select **Index > Edit**.

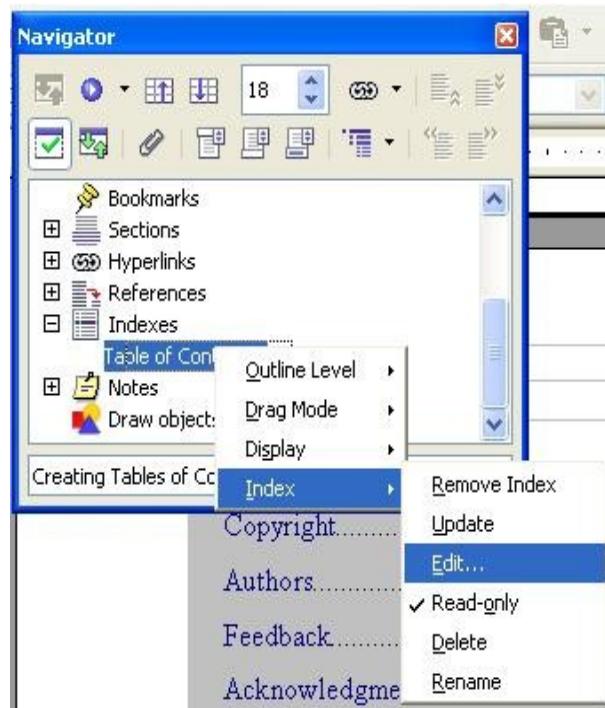


Figure 317: Access an index from the Navigator

### Updating a table of contents

Writer does not update the table of contents automatically, so after any changes to the headings, you must update it manually. To update a table of contents when changes are made to the document:

- 1) Click anywhere in the table of contents and then right-click.
- 2) From the pop-up menu, choose **Update Index/Table**. Writer updates the table of contents to reflect the changes in the document.

---

**Note** You can also update the index from the Navigator by selecting **Index > Update** from the menu in Figure 317.

---

### Deleting a table of contents

To delete the table of contents from a document:

- 1) Click anywhere in the table of contents and then right-click.

- 2) From the pop-up menu, choose **Delete Index/Table**. Writer deletes the table of contents.

---

**Note** Writer will not prompt you to confirm the delete! Use caution when deleting a table of contents.

You can also delete the index from the Navigator by selecting **Index > Delete** from the menu shown in Figure 317.

---

## Creating an alphabetic index

---

An alphabetical index (referred to as an index) is a list of keywords or phrases used throughout a document that, if listed in order, may help the reader find information quickly. Generally an index is found in the back of book or document and lists several keywords or phrases in alphabetical order with page numbers.

This section describes how to:

- Add index entries.
- Create an alphabetic index quickly.
- Customize the display of index entries.
- View and edit existing index entries.

### Adding index entries

Before you create an index, you must create some index entries.

- 1) Either highlight the word or phrase to add to the index or place the cursor at the beginning of the word or phrase. (If you want to add multiple words as one entry it will generally be better to highlight the entire phrase.)
- 2) Click **Insert > Indexes and Tables > Entry** to display a dialog box similar to that shown in Figure 318. You can accept the word or phrase shown in the *Entry* box or change it to whatever you want. If you placed the cursor at the beginning of a word, clicking on the *Entry* text box inserts the word into the text box.
- 3) Click **Insert** to create the entry.
- 4) You can create multiple entries without closing the dialog box. For each one:
  - Click at the location in the document that you want to index.
  - Click again on the dialog box.
  - Change the entry if needed, and click **Insert**.
- 5) When you are satisfied with the entries, click **Close**.

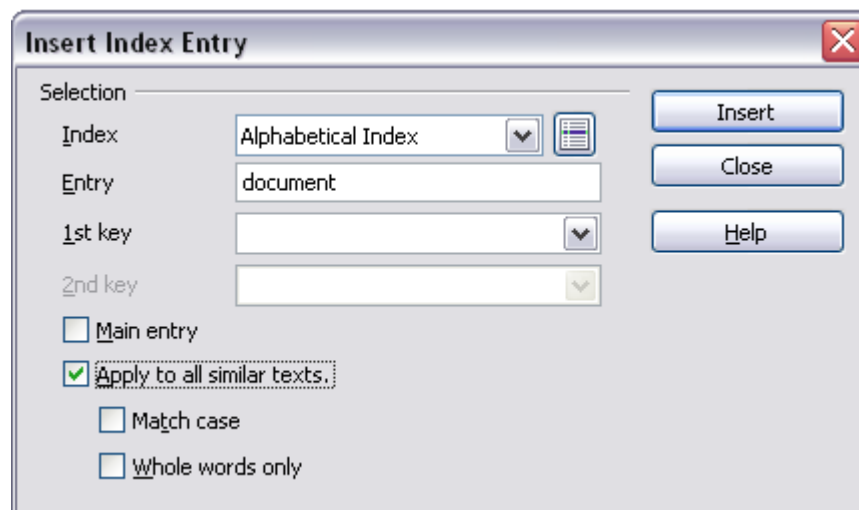


Figure 318. Inserting an index entry

---

**Note** If field shading is active (see **Tools > Options > OpenOffice.org > Appearance > Text Document > Field shadings**), when a selected word or phrase has been added to the index, it is shown in the text with a gray background. Index entries whose text is different from the text in the document are marked by a small gray rectangle.

---

**TIP** You can also open the Insert Index Entry dialog box by clicking the **Entry** icon on the Insert toolbar, as shown in Figure 319.

---

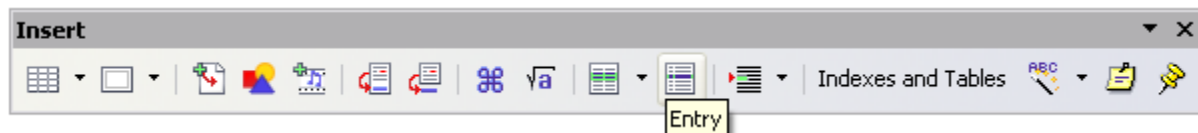


Figure 319. Entry icon on Insert toolbar

## Creating an alphabetic index quickly

Now that there are index entries, you can create the index.

Although indexes can be customized extensively in Writer, most of the time you will need to make only a few choices. To create an index quickly:

- 1) Place the cursor where you want to add the index and click **Insert > Indexes and Tables > Indexes and Tables**.
- 2) In the *Type* box on the Index/Table page of the Insert Index/Table dialog box (Figure 320 on page 303), select **Alphabetical Index**.
- 3) In the *Options* section, you may want to uncheck the **Case sensitive** checkbox.
- 4) Click **OK**.

If you add, delete, or change the text of index entries, you need to update the index. Writer does not update an index automatically. To do this, follow the steps outlined in “Updating a table of contents” on page 299.

## Customizing index entries

Below is a brief explanation of the fields in the Insert Index Entry dialog box and how to use them.

- *Index* – The type of index this entry is for. The default is **Alphabetical Index**, but you can use this field to create extra entries for a table of contents or user-defined indexes or lists of almost anything. For example, you might want an index containing only the scientific names of species mentioned in the text, and a separate index containing only the common names of species. See “Creating and using other types of indexes” on page 307.
- *Entry* – The word or phrase to be added to the selected index. This word or phrase does not need to be in the document itself; you can add synonyms and other terms that you want to appear in the index.
- *1st key* – An *index key* is an index entry that has no associated page number and has several subentries that do have page numbers. Keys are useful ways of grouping related topics. (See “Example of using an index key” on page 302.)
- *2nd Key* – You can have a three-level index, where some of the first-level keys have level-2 entries that are also keys (without page numbers). This degree of index complexity is not often necessary.
- *Main entry* – When the same term is indexed on several pages, often one of those pages has more important or detailed information on that topic, so it is the main entry. To make the page number for the main, or most important, entry stand out, select this checkbox and then define the character style for the page number of a main index entry to be bold, for example.
- *Apply to all similar texts* – Select this checkbox if you want Writer to automatically identify and mark any other word or phrase that matches the current selection. The **Match case** and **Whole words only** checkboxes become available if this checkbox is selected.

### Example of using an index key

An *index key* is a primary entry under which subentries are grouped. For example, you might want to create a grouping similar to this:

```
OpenOffice.org
  Writer.....5
  Calc.....10
  Impress.....15
```



In this example, *OpenOffice.org* is the *1st key*. The subentries (with the page numbers showing) are the indexed entries. To insert an index entry for the topic *Writer*, on the Insert Index Entry dialog box (Figure 318 on page 301), type “**Writer**” in the *Entry* box and “**OpenOffice.org**” in the *1st key* box.

## Customizing the appearance of an index

The Insert Index/Table dialog box (Figure 320 on page 303) has five pages. Any or all of them can be used to customize the appearance of an index.

- Use the *Index/Table* page to set the attributes of the index.
- Use the *Entries* and *Styles* pages to format the entries in the index.
- Use the *Columns* tab to put the index into more than one column.
- Use the *Background* tab to add color or a graphic to the background of the index.

The preview box, located on the left-hand side of the dialog box, shows as you work how the index will look. (If you do not see the preview box, select the **Preview** checkbox in the lower right-hand corner of the dialog box.)

After making your changes, click **OK** to save the index so it appears in your document.

### Using the Index/Table page

Use the Index/Table page (Figure 320) to set the basic attributes of the index.

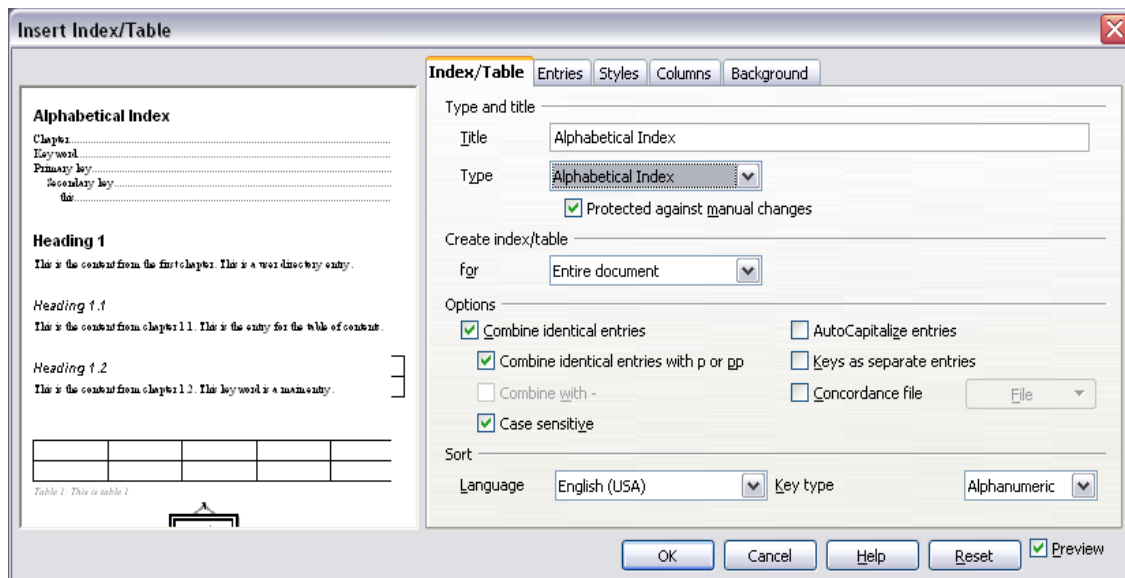


Figure 320. Index/Table page of Insert Index/Table dialog box

- 1) To give the Index a title, type it in the **Title** field. (You can change an existing title by typing over it.) To delete the title, clear the **Title** field.

- 2) To prevent the index from being changed accidentally, check the **Protected against manual changes** checkbox. If this box is checked, the index can only be changed using the context menu or the Insert Table/Index dialog box. If the box is not checked, the index can be changed directly on the document page, just like other text.

---

**TIP** Any manual changes to an index are lost when you update it.

---

- 3) From the drop-down list in the *Create index/table* area, select **Entire document**. You can also choose to create an index for just the current chapter.
- 4) Various other options determine how the index handles entries:
- **Combine identical entries.** Defines how identical entries are dealt with. Normally each page number of an indexed word or phrase will be shown in the index; however these can be combined using the **Combine identical entries with p or pp**. If you want a page range displayed, select **Combine with –** (which will produce something similar to 23–31). If you want different entries based on what letters are capitalized, select **Case sensitive**.
  - **AutoCapitalize entries.** Automatically capitalizes the first letter of each entry regardless of how they show within the document itself.
  - **Keys as separate entries.** For the keys to have their own page numbers, select this option.
  - **Concordance file.** Enables a list of words in an external file to be imported (select using the **File** button) and then used within the index. The concordance file has a special file format; for further information, refer to *concordance file* in **Help > OpenOffice.org Help**. Using a concordance file can speed up production of an index, but unless the words are very carefully selected and you edit the index afterwards, the resulting index can be full of entries for minor mentions of a term, making it less useful than a more selective index.
  - **Sort.** Defines how the entries are sorted when displayed. The only option is alphanumeric, but you can define which language alphabet will be used.

### Using the Entries page

Use the *Entries* page to set exactly how and what will be displayed for each of the entries. The dialog box is similar to Figure 321.

To begin, click a number in the *Level* column to select the index level whose elements you want to format. (You will be able to apply your changes to all index levels later.) The *Structure* line displays the elements for entries in that level. Each button on the Structure line represents one element:

- The **E** button represents the entry text.
- The **T** button represents a tab stop.
- The **#** button represents the page number.
- The **CI** button represents chapter information. This may not be displayed immediately, but can be added.

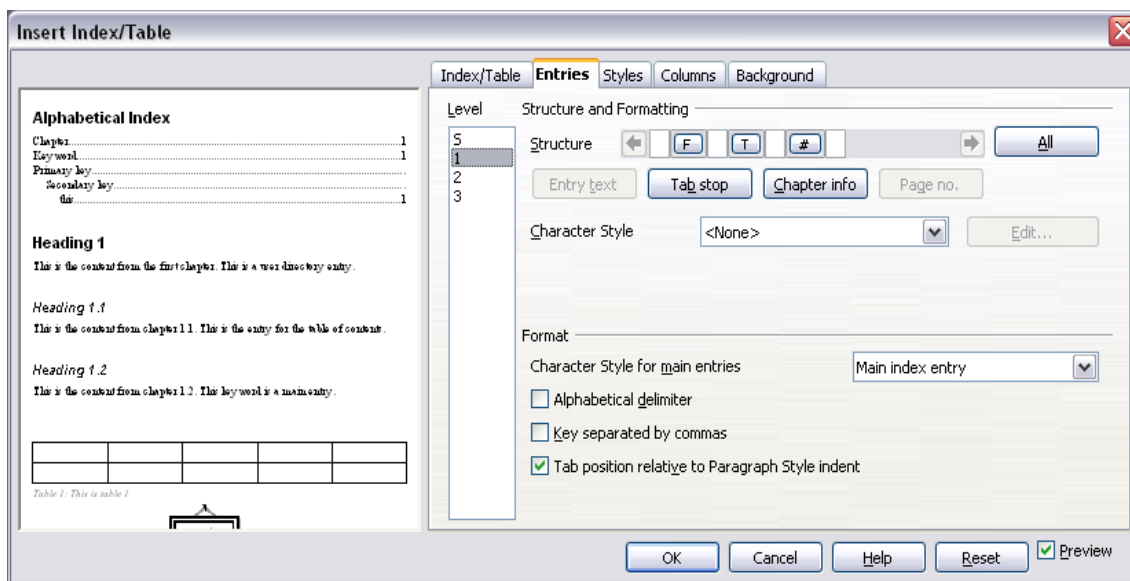


Figure 321. Entries page for creating an alphabetical index

Each white field on the *Structure* line represents a blank space. You can add custom text if you desire.

---

**Note** On some operating systems, the **E#** and **E** buttons display as **F#** and **F**, and the **LS** and **LE** buttons display as **IS** and **IF**.

---

## Changing elements

To change an element in the *Structure* line, click the button representing that element and then click the element that you want to substitute in the row of buttons just below the *Structure* line. For example, to change entry text to a tab stop, click the **E#** button on the *Structure* line (it shows then as being pressed) and then click the **Tab stop** button in the row of available elements.

## Deleting elements

To delete an element from the *Structure* line, click the button that represents that element and then press the *Delete* key on your keyboard. For example, to delete a tab stop, click the **T** button and then press the *Delete* key.

## Adding elements

To add an element to the *Structure* line:

- 1) Place the cursor in the white field to the left of where you want to insert the element.
- 2) Click one of the buttons below the *Structure* line. (For example, to add a tab stop, click the **Tab stop** button.) A button representing the new element appears on the *Structure* line.

## Applying character styles

Each of the items that can be added to the *Structure* line may have additional formatting. For example, you may want the page number to be a different size from the rest of the index text. To do this, apply a character style to one of the elements in the *Structure* line.

To apply a character style to an element:

- 1) On the **Structure** line, click the button representing the element to which you want to apply a style.
- 2) Select the desired style from the *Character Style* drop-down list. Writer applies the style to the selected element.

To view or edit the attributes of a character style, select the style from the *Character Style* drop-down list and then click the **Edit** button.

## Formatting entries

Apply additional formatting using the options in the **Format** section.

- **Alphabetical delimiter.** This will display, as a means of separating index entries, the first letter of all the subsequent index entries. For example:

**A**  
apple, 4  
author, 10

**B**  
break, 2  
bus, 4

- **Key separated by commas.** Arranges the entries in the index on the same line but separated by commas.
- **Tab position relative to Paragraph Style indent.** When checked, entries are indented according to the settings of their individual formats. Where a paragraph style with an indent on the left is in use, tab stops will be relative to this indent. If this checkbox is not selected, tab stops will be relative to the left margin position.

## Using the Styles, Columns and Background pages

Refer to

## Maintaining an index

To modify the appearance of an index:

- 1) Click anywhere in the index and then right-click.
- 2) From the pop-up menu, choose **Edit Index/Table**. The Insert Index/Table dialog box opens and you can edit and save the index using the five tabs described in the previous section.

To update or delete an index, follow the process described in the sections “Updating a table of contents” and “Deleting a table of contents” on page 299.

## Viewing and editing existing index entries

Once you have added the initial entries, you can make some amendments or add some new ones. You can view and edit these using the following steps:

- 1) Ensure that field shading is active (**Tools > Options > OpenOffice.org > Appearance > Text Document > Field shadings**), so you can locate index entries more easily.
- 2) Place the cursor immediately to the left of an existing index entry in the body of your document and select **Edit > Index Entry**. Alternatively, right-click on the word or phrase and from the context menu select **Index Entry**.
- 3) A dialog box similar to Figure 322 appears. You can move through the various index entries using the forward and back arrow buttons. If there is more than one entry for a single word or phrase, then you can scroll through each of the entries.
- 4) Make the necessary modifications or additions to the index entries and, when finished, click **OK**.

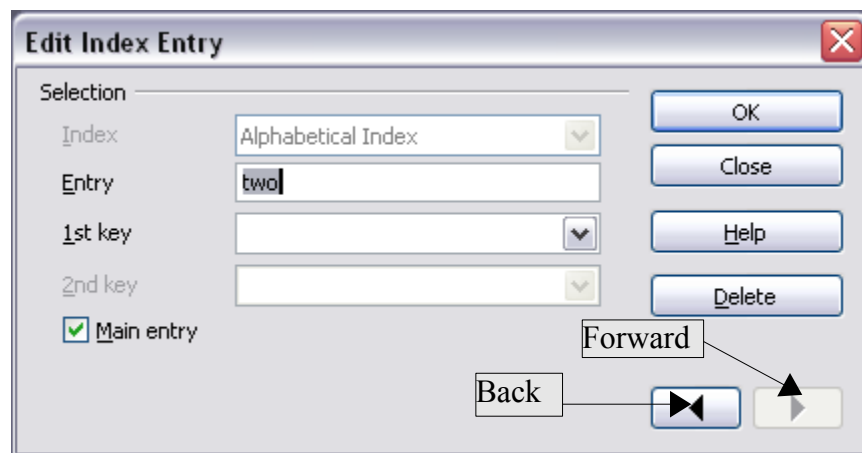


Figure 322. Viewing and editing index entries

## Creating and using other types of indexes

An alphabetical index is not the only type of index that you can build with Writer. Other types of indexes supplied with Writer include those for illustrations, tables, and objects, and you can even create a user-defined index. For example, you might want an index containing only the scientific names of species mentioned in the text, and a separate index containing only the common names of species.

To create other indexes:

- 1) Place the cursor where you want the index created.
- 2) Select **Insert > Indexes and tables > Indexes and tables** from the menu bar.
- 3) On the Insert Index/Table dialog box (Figure 323), in the **Type** dropdown list, select the index wanted.

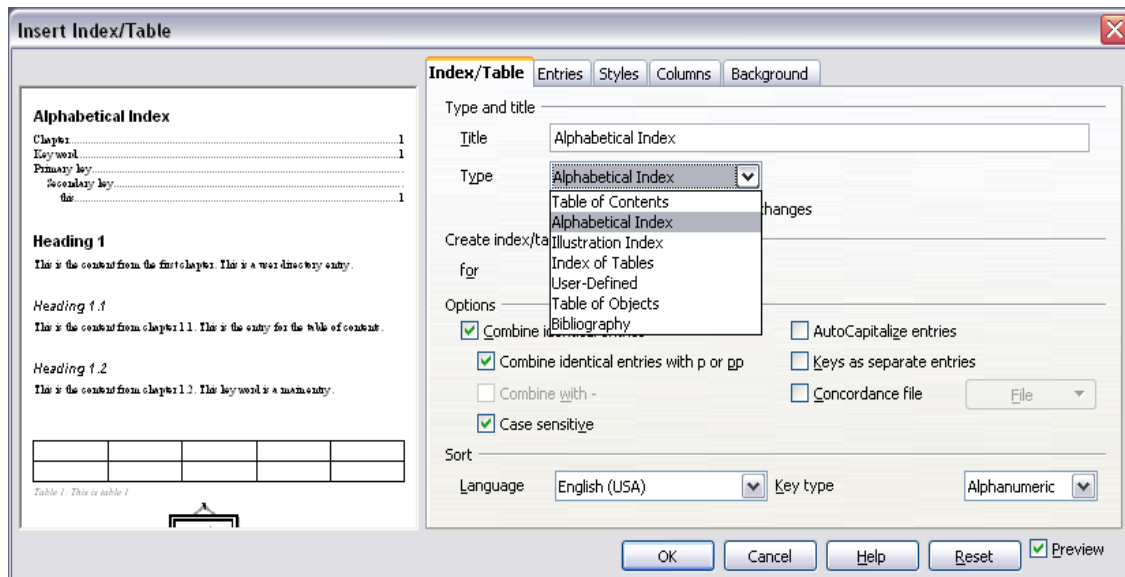


Figure 323. Creating other types of indexes

- 4) Modify the various pages, which are very similar to those discussed in previous sections.
- 5) Select **OK** when everything has been set.

## Creating a bibliography

A bibliography is useful for displaying references used throughout a document. These references are either stored in a bibliographic database or within the document itself.

This section shows you how to:

- Create, add, and maintain entries within a bibliographic database.
- Add a reference into a document.
- Format the bibliography.
- Update and edit an existing bibliography.

For most of this section, the database used is the sample one that comes with Writer.

### Creating a bibliographic database

Although you can create references within the document itself, creating a bibliographic database allows reuse in other documents and saves a lot of time.

Follow these steps to create a bibliographic database:

- 1) Select **Tools > Bibliography Database**. A window similar to that in Figure 324 is shown.

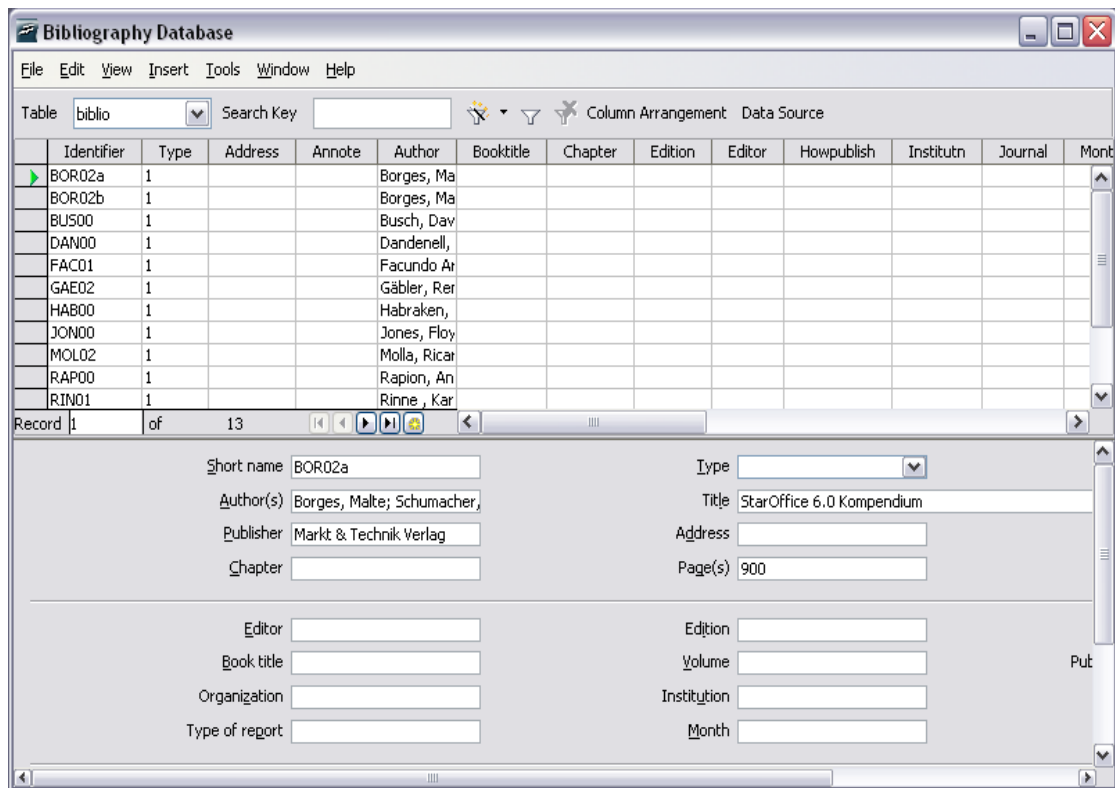


Figure 324. Bibliography Database main window

2) You can use the top portion of this window to:

- Filter for specific records within the database (see “Filtering records” below).
- Change some details of columns in the database (see “Changing column details”).
- Select an alternative data source (another database or table) or change details of the fields in the database.

The middle portion of the window shows each of the records in a table layout similar to that of a spreadsheet. Additional fields can be viewed by scrolling the table to the right.

The bottom portion of the window shows the contents of the selected record.

### Filtering records

To set up a filter for specific records within the bibliographic database, select **Tools > Filter** from the Bibliographic Database menu bar. On the Standard Filter dialog box (Figure 325), choose the fields, conditions and values for the filter and click **OK**.

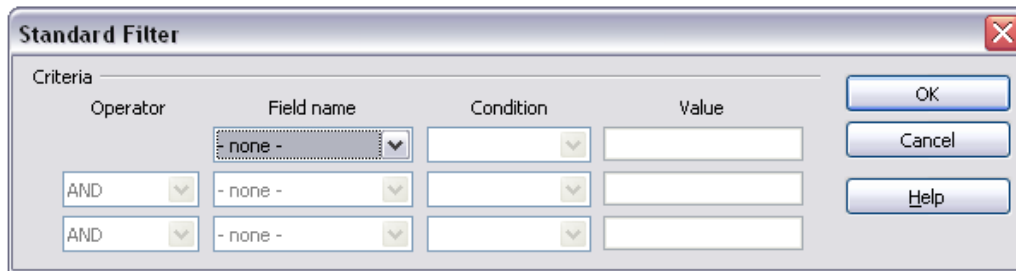


Figure 325. Setting up a filter for the bibliographic database

## Changing column details

To change the details of columns in the bibliographic database, select the **Column Arrangement** button near the top of the window. The Column Layout for Table biblio dialog box (Figure 326) is displayed.

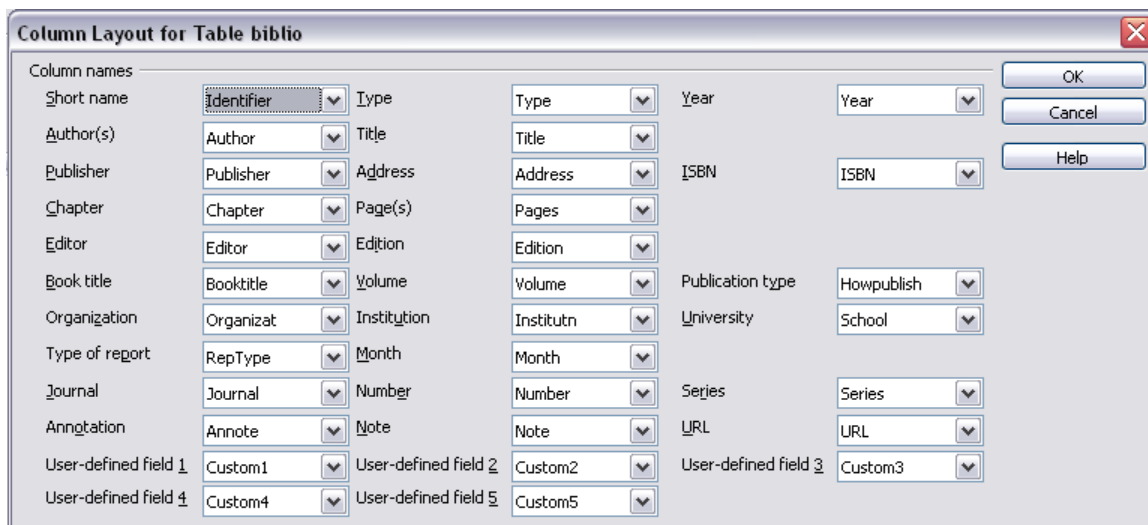


Figure 326. Changing column layout for bibliographic database

## Changing field details

You can make changes to the bibliography database (for example, rename fields or change the length of fields) by doing the following:

- 1) In the main document (not the Bibliography Database screen), press *F4* or click **View > Data Sources** to open the data source window, similar to Figure 327.
- 2) Make sure that the Bibliography database is selected as well as the correct table. You may have to expand some levels to be able to select the correct ones.



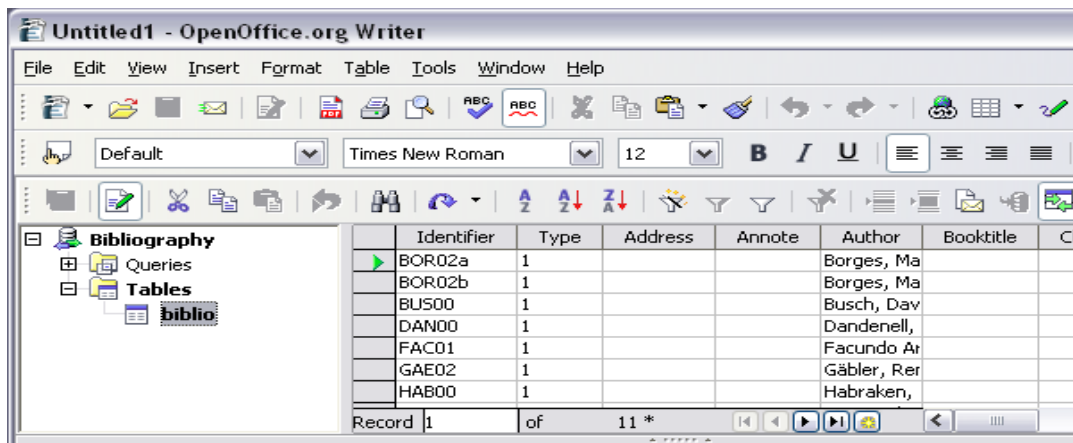


Figure 327. Data Source view of Bibliography database

- 3) Right-click on the table entry (*biblio* in the example) and select **Edit Database File** from the pop-up menu. This opens a window similar to Figure 328, which is the main menu for Base, the database component of OpenOffice.org.

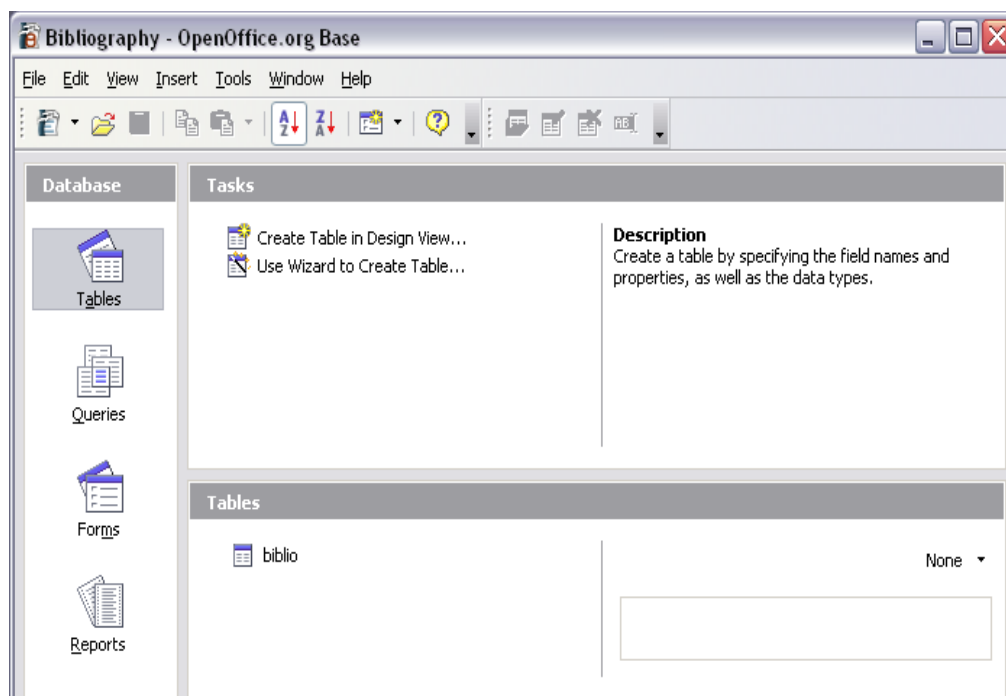


Figure 328. Main window for working with databases

- 4) If **Tables** (under the **Database** view) is not selected, select it now.
- 5) Right-click on the **biblio** table name in the *Tables* section and select **Edit** from the context menu to display a window similar to that shown in Figure 329.
- 6) You can now select each of the rows and modify the Field Properties as required.
- 7) When finished, you will be asked to confirm that you want the changes saved.

**Note** For more information on how to use OOo's database features, see Chapter 10, "Getting Started with Base" in the *Getting Started* book.

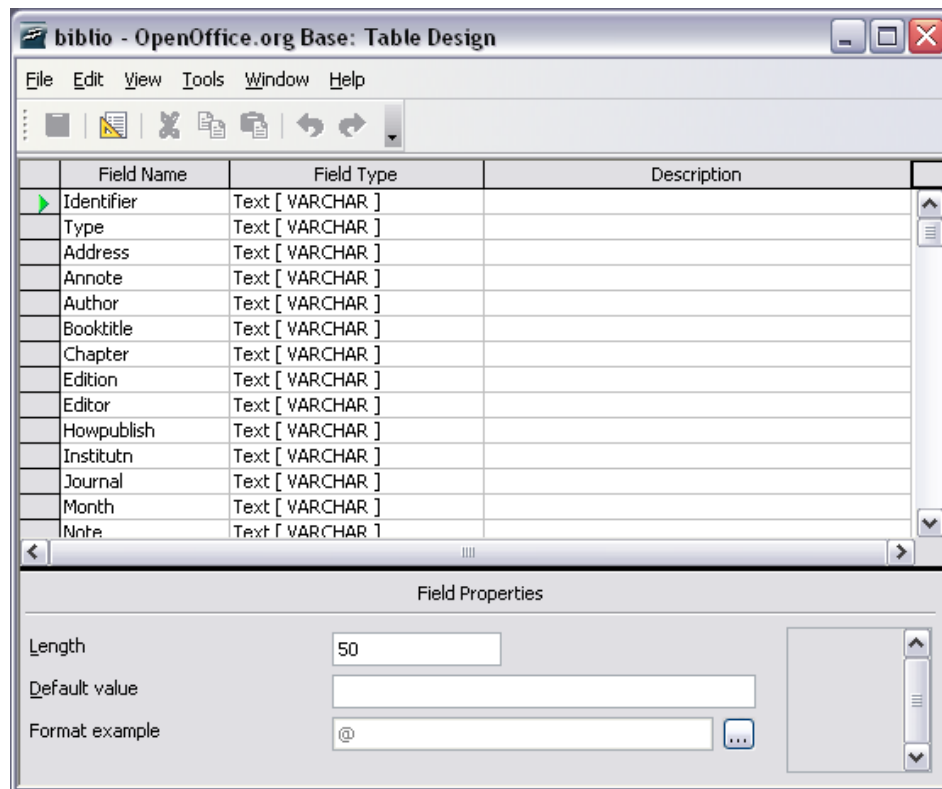


Figure 329. Modify table properties window

## Adding entries to the database

To add entries to the database:

- 1) You can add records directly into the database using the lower portion of the window shown in Figure 324 on page 309.
- 2) Complete each of the fields as required. Use the *Tab* key to move between fields.
- 3) It is best to use a unique name in the *Short name* field. This is used when inserting entries into documents.
- 4) To complete the entry move to the last field and press *Tab* once more.

**Notes** The *Identifier* column in the upper portion of the Bibliography Database window is labeled *Short name* in the lower portion of the window.

If your document requires [Author, date] style citations, use the Identifier (Short name) field of the database to record the information in the required format. If you are using a simple citation numbering system (e.g., [1],[2],...), use a unique reference of some sort in the Identifier (Short name) field. Writer will auto-number entries based on the position within the document.

## Maintaining entries in the database

To maintain entries in the database, use the Bibliography Database window as in the previous section. Click on the appropriate field and modify the text as appropriate.

Modified entries will be saved automatically to the database when the cursor moves off the record.

## Adding a reference (citation) into a document

Writer supports two ways of showing references (citations) in the text of a document:

- Using authors' names and dates of the referenced documents, for example [Smith, 2004], as recorded in the Identifier (Short name) of each bibliographic entry.
- By numbering the referenced documents in the sequence they occur in the text, for example [1].

---

**Tip** To specify which citation style is used in the document, use the Index/Table page on the Insert Index/Table dialog, described on page .

---

To add references from the bibliographic database into a document:

- 1) Place the cursor where you want the reference to appear.
- 2) From the main menu, choose **Insert > Indexes and tables > Bibliographic entry**.
- 3) In the Insert Bibliographic Entry dialog box, shown in Figure 330, choose **From bibliography database** at the top of the dialog box. (You can also insert a reference from the document itself by selecting **From document content**, but that method is not covered in this chapter.)
- 4) Select the reference from the **Short name** dropdown list near the bottom of the dialog box. The Author and Title of the selected reference are shown in the middle of the dialog box, to help you verify that it is the reference you want.
- 5) To insert the reference into the document, click **Insert**.
- 6) You can keep the dialog box open and insert another reference into the document; you don't need to close and reopen it.
- 7) When you have finished inserting all the references, select **Close**.

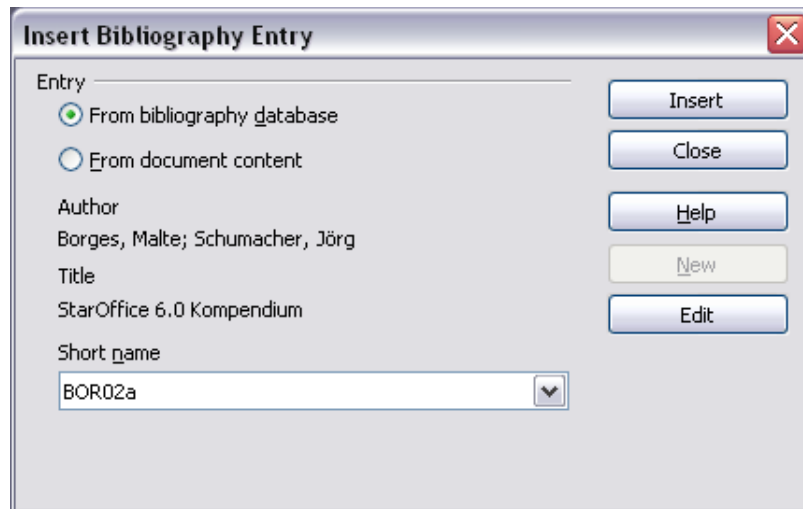


Figure 330. Inserting bibliographic entries into a document

## Formating the bibliography

Formatting the bibliography involves choices made in two places:

- Insert Index/table dialog (covered in this section)
- Bibliography 1 paragraph style (see page 316)

To create the bibliography:

- 1) Place the cursor at the point where you wish to insert the bibliography.
- 2) Select **Insert > Indexes and tables > Indexes and tables** and change the *Type* to **Bibliography**, to see a dialog box similar to that shown in Figure 331.

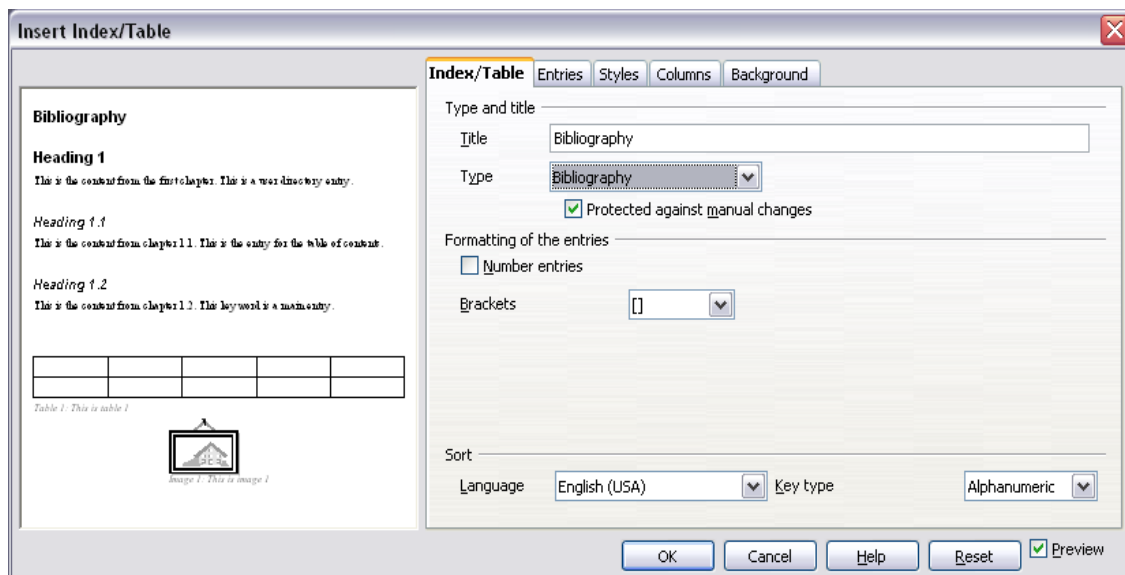


Figure 331. Inserting a bibliography

The Insert Index/Table dialog box has five pages.

### Using the Index/Table page

The basic settings are selected on this page.

- 1) To give the bibliography a title, enter it in the **Title** field. (A title is not required.)
- 2) You can protect the bibliography from being changed accidentally, by checking the **Protected against manual changes** checkbox. If this box is checked, the bibliography can only be changed using the context menu or the Insert Table/Index dialog. If the box is not checked, the bibliography can be changed directly on the document page, just like other text.
- 3) To have the bibliographic entries numbered within the body of the document (for example, [1], [2], ...), select **Number entries**. If, however, you wish to have the field *Identifier* (from the database) appear in the document, clear this checkbox.
- 4) Select the type of brackets that you want for the referenced entries shown within the body of the document.
- 5) Define the sorting you require. Currently only alphanumeric sorting is supported. Sorting by the the sequence that entries appear in the text is done on the *Entries* tab.

### Using the Entries page

The structure of this page is similar to that of the previous sections (see Figure 332).

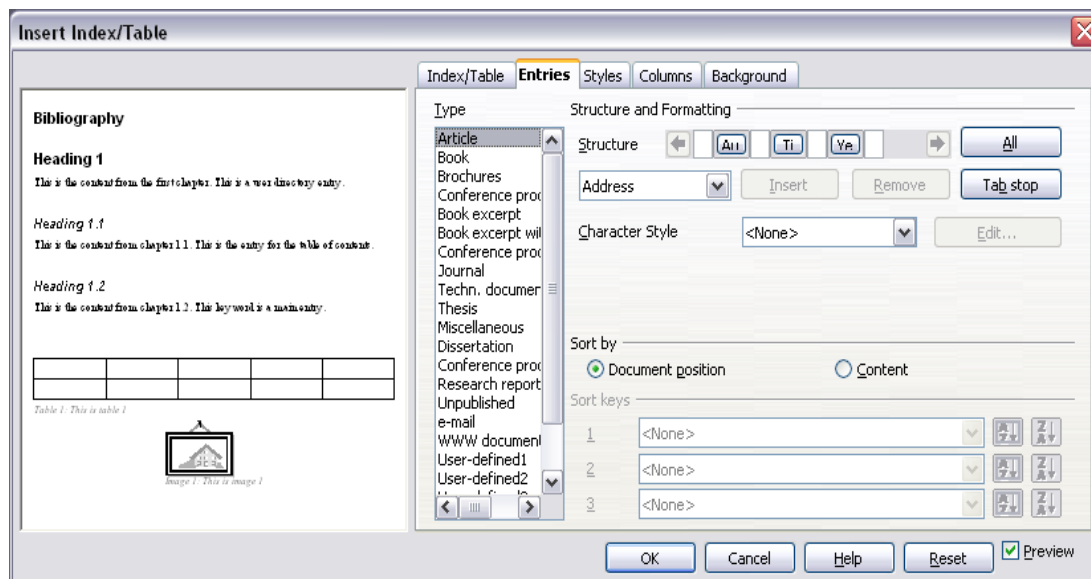


Figure 332. Entries page for bibliographies

You can define how the entry will appear based on the *Type* of the entry, or simply apply the same format to all entries by selecting the **All** button.

The *Structure* of the entry is based on the fields available in the bibliographic database. The ones shown by default are:

- **Au** – Author
- **Ti** – Title
- **Ye** - Year

To determine how entries are sorted, modify the *Sort by* options. To sort by the sequence that entries appear in the text, choose *Document position*. To sort alphanumerically, choose *Content*. Use **Sort keys** to group similar references.

## Using the Styles, Columns and Background pages

Refer to

### Generating the bibliography

To generate the bibliography so that it appears in your document, click **OK**. The Insert Index/Table dialog box closes and the bibliography appears in your document.

## Defining the paragraph style for the bibliography

You can modify the *Bibliography 1* paragraph style to suit your requirements. For example, to number the entries in the bibliography list, you need to define a numbering style and link that numbering style to the *Bibliography 1* paragraph style. To do this:

- 1) On the Styles and Formatting window, click on the **List Styles** icon. You can either define a new list style or modify one of those supplied. In this example, we will modify the *Numbering 1* style. Right-click on *Numbering 1* and choose **Modify** from the pop-up menu. (See Figure 333.)

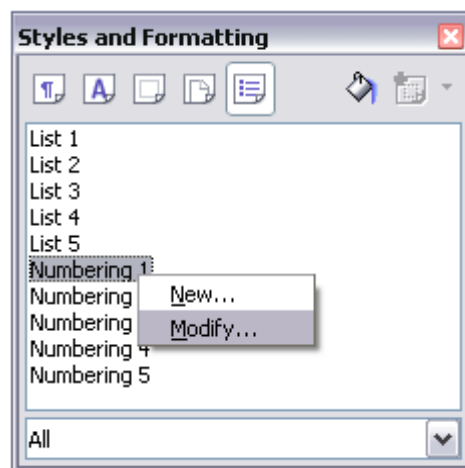


Figure 333: Modify a numbering style

- 2) On the Numbering Style dialog, go to the *Options* page. In our example we want to have the numbers enclosed in square brackets. To do this, type [ in the *Before* box and ] in the *After* box, as shown in Figure 334.

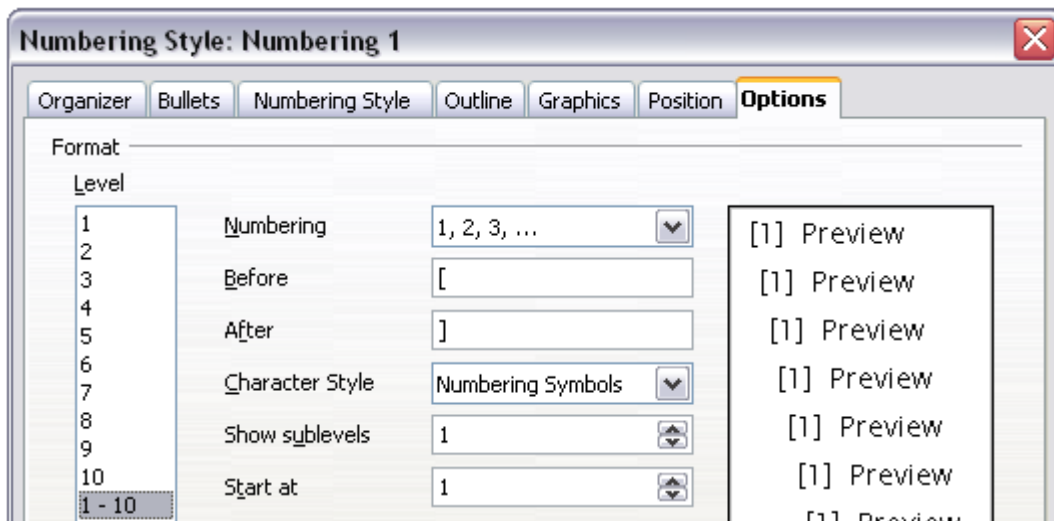


Figure 334: Specifying square brackets before and after the number in a list

- 3) Now go to the *Position* tab of the Numbering style dialog. In the *Spacing to text* box, specify how much indentation you want for the second and following lines of any item in the bibliography list of your document. Often you will need to experiment a bit to see what is the best setting. In our example (Figure 335), we have chosen 0.80 cm.

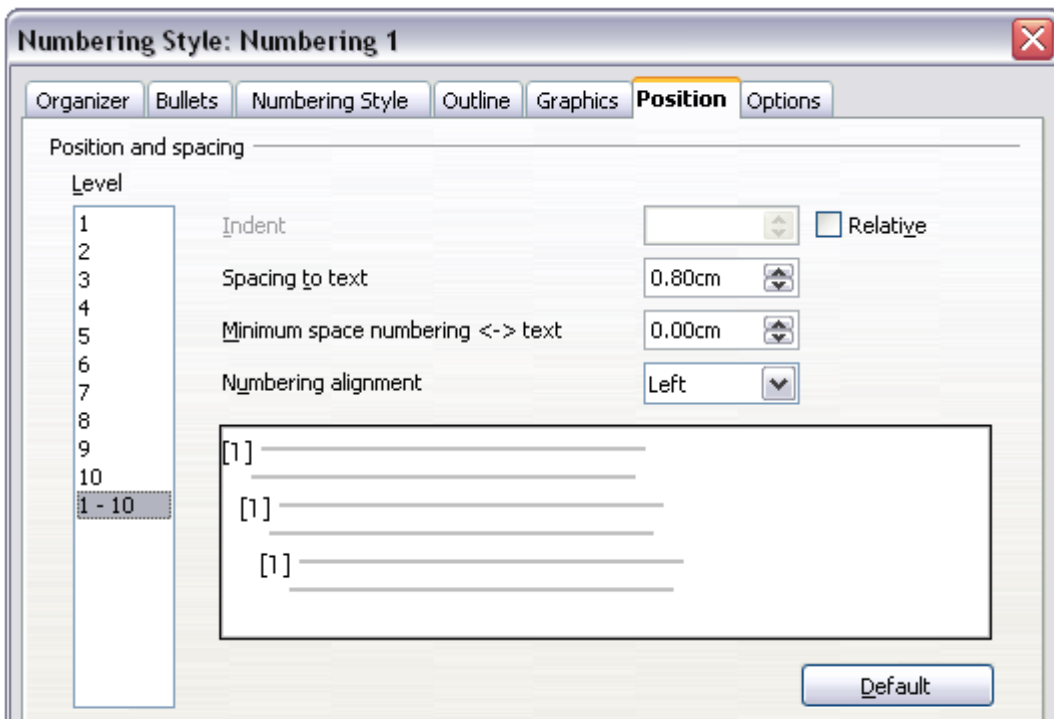


Figure 335: Setting the spacing between the margin and the text

- 4) Click **OK** to save these settings and close the Numbering Style dialog. Return to the Styles and Formatting window, click on the **Paragraph Styles** icon, choose **All Styles** from the list at the bottom of that window, then right-click on *Bibliography 1* and choose **Modify**.

- 5) On the Paragraph Style dialog, go to the *Numbering* tab and select *Numbering 1* from the drop-down list. (See Figure 336.) Click **OK** to save this change to the *Bibliography 1* paragraph style.

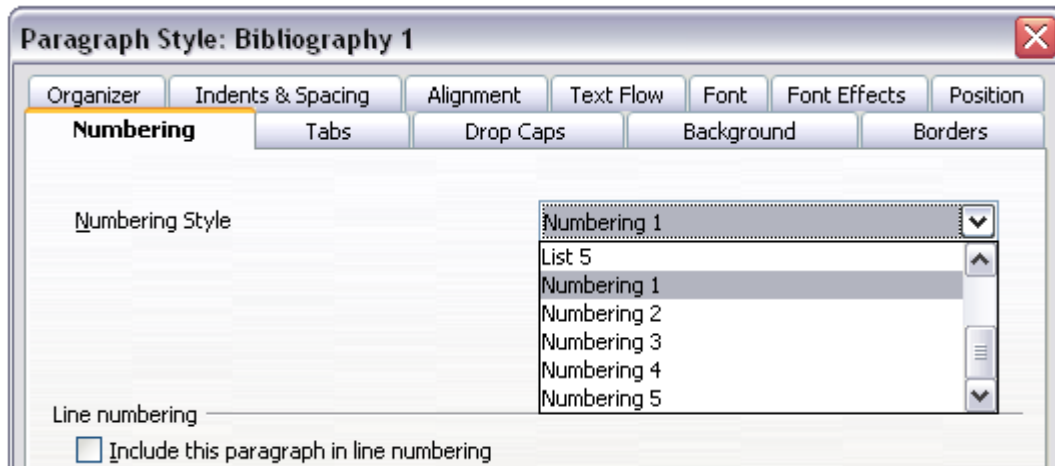


Figure 336: Applying a numbering style to a paragraph style

Now when you generate the bibliography, the list will look something like the one shown in Figure 337.

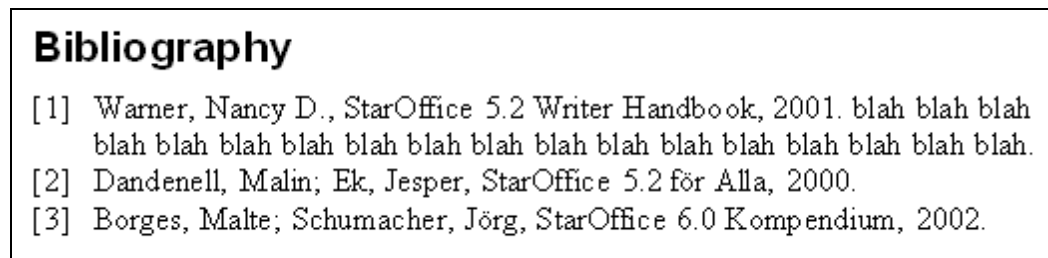


Figure 337: Result of settings for Bibliography 1 paragraph style

## Updating and editing an existing bibliography

To modify the display of bibliography entries:

- 1) Click anywhere in the bibliography and then right-click.
- 2) From the pop-up menu, choose **Edit Index/Table**. The Insert Index/Table dialog box opens and you can edit and save the table using the five pages described in the previous section.

To update or delete the bibliography, follow the same process as described in the sections “Updating a table of contents” and “Deleting a table of contents” on page 299.





*Chapter 13*  
*Working with Master*  
*Documents*

## Why use a master document?

---

Master documents are typically used for producing long documents such as a book, a thesis, or a long report. A master document is especially useful when graphics, spreadsheets, or other material causes the file size to become quite large. Master documents are also used when different people are writing different chapters or other parts of the full document, so you don't need to share files. A master document joins separate text documents into one larger document, and unifies the formatting, table of contents (ToC), bibliography, index, and other tables or lists.

Yes, master documents do work in OOoWriter. However, their use is full of traps for inexperienced users. Until you become familiar with the traps, find out whether they affect what you are doing, and learn how to avoid (or work around) them, you may think that master documents are unreliable or difficult to use. In fact, avoiding or working around most of the traps is quite easy to do.

You can use several methods to create master documents. Each method has its advantages and disadvantages. Which method you choose depends on what you are trying to accomplish. The different methods are described in this chapter, along with suggestions on when to use each one.

## Styles and master documents

---

Styles that are used in subdocuments, such as paragraph styles, are automatically imported into the master document after you save the master document. When you modify the style in the master document, the style in the subdocument remains unaffected. That is, the style in the master document takes precedence over the style in the subdocument.

---

**Note** Use the same document template for the master document and its subdocuments. When you modify or create a style, add it to the document template, and then reload the styles from the template into the master document and the subdocuments. This way the subdocuments will look the same when they are loaded into the master document as they do when viewed as individual files.

---

## Using the Navigator

---

The Navigator is a very useful tool that helps you move quickly to specific parts of your document. It also provides information about the content of the document and enables you to reorganize some of the content. For example, if each chapter in your final book is a separate document, then in the master document they can be reordered, and the references are renumbered automatically and the table of contents and index can be updated.

In Writer, the Navigator has two distinct forms. One form is used in ordinary text documents and the other in master documents.

In an ordinary text document, the Navigator displays lists of the graphics, tables, index entries, hyperlinks, references, and other items in the document, as shown in Figure 338. Click the + sign by any list to display the contents of the list. You can double-click an entry in the Navigator and jump immediately to that place in the document.

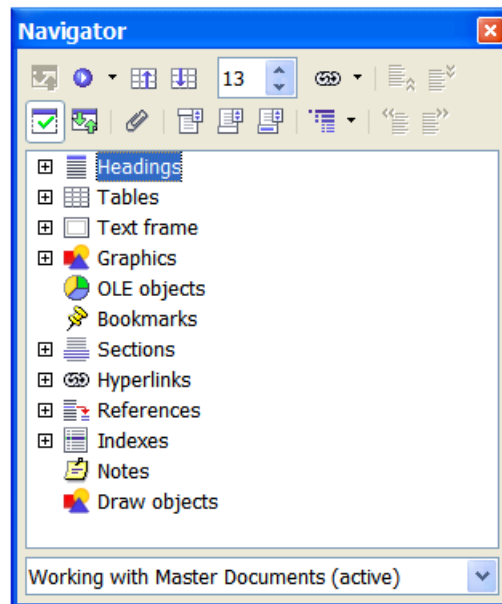


Figure 338. The Navigator for a text document

In a master document, the Navigator lists the subdocuments and text sections, as shown in Figure 339. The use of the Navigator in a master document is covered in more detail later in this chapter (see “Step 5. Insert the subdocuments into the master document” on page 329 and “Cross-referencing between subdocuments” on page 333).

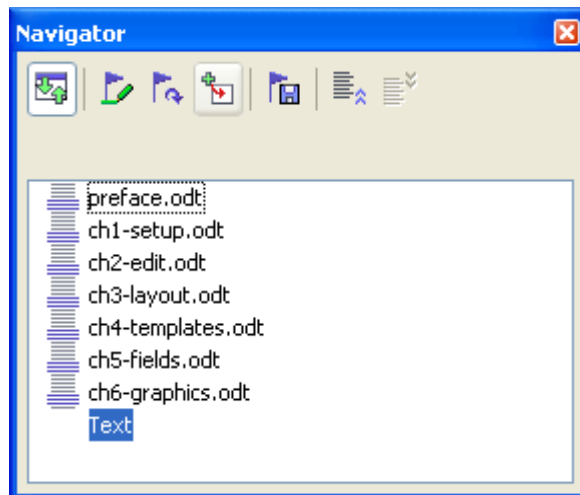


Figure 339. The Navigator for a master document

## Creating a master document

---

The three most common scenarios for creating a master document depend on the current state of your document:

- You have one existing document (a book) that you want to split into several subdocuments (chapters) that will be controlled by the master document.
- You have several existing documents (chapters) by one or more authors that you want to combine into one book, controlled by the master document.
- You have no existing documents but intend to write a long book containing several chapters, possibly by multiple authors.

We will look at each of these scenarios in turn.

### Splitting one document into a master document and subdocuments

When you have one existing document that you want to split into several subdocuments that will be controlled by the master document, you can split the document automatically.

Use this method if the original document uses only the *Default* page style, is numbered sequentially from the first page, and uses the *Heading 1* style to identify the start of each chapter. In these conditions, this method will work well.

**Advantages:** This method is quick and easy, and any existing cross-references between chapters are preserved. Although cleanup work may be necessary, once you have done the cleanup, the document will behave itself.

**Disadvantages:** If the original document was complex, you may have major cleanup work to do because some formatting will be lost—for example, page styles, page breaks, restarted page numbering.

**How to do it:** Open the document and click **File > Send > Create Master Document** to split the document. You will find that each of the subdocuments begins with a *Heading 1* and the file names are all *maindocnameX.odt*, where X is 1, 2, 3, and so on. If you have a Preface or other “chapter” starting with a *Heading 1* before Chapter 1, the file names will not directly correspond to the chapter numbers.

### Combining several documents into a master document

This method works best when all of the documents were created from the same template, but you can also use it when the documents were created from different templates.

Use one of the techniques described in “Starting with no existing documents” to create a blank master document and insert the other documents as subdocuments of the master document.

This method is especially useful if the subdocuments are created or maintained by multiple writers. All writers on the project can work on their subdocuments without fear of version control issues that can occur when multiple people work on the same document.

## Starting with no existing documents

The ideal situation is to start with no existing documents, because you can do everything the way you want from the beginning. Writer provides three ways to create a master document:

Method 1. Quick and easy, but not recommended

Method 2. Not too complicated, but with restrictions

Method 3. Complete control

In each case, you need to have a disciplined approach to make sure the master document works correctly and reliably. Each method below describes the steps to take. Be sure to do the steps in the order given.

### Method 1. Quick and easy, but not recommended

Writer provides a quick and easy way to create a master document, but the master document is not associated with a template, so changes to styles and formatting are more difficult to apply reliably.

---

**Note** If the subdocuments were all created with the same template and the styles were not modified in the documents, then the styles are imported into the master document with the subdocuments, and styles and formatting should be correct in the master document. This method works best when these conditions are met.

---

How to do it:

- 1) Click **File > New > Master Document**.
- 2) Use the Navigator to insert new documents or existing files into the master document, as described in “Step 5. Insert the subdocuments into the master document” on page 329.

### Method 2. Not too complicated, but with restrictions

This technique works well if you want to use sequential page numbering throughout the final document (not restarting at 1 at any point), and each chapter starts with a *Heading 1* on a new page. If you want to restart page numbering anywhere in the document, use Method 3.

How to do it: Follow the instructions in the next section (Method 3. Complete control), but do not put in the text sections between the subdocuments or try to change the page numbering.

### Method 3. Complete control

This method gives you complete control over complex documents with several page styles or restarted page numbering. It is a bit more work to set up, but works reliably.<sup>1</sup>

How to do it: Follow these steps, in the order given. Each step is explained in detail in the following subsections.

Step 1. Plan the project

Step 2. Create a template containing the required styles, fields, and other elements

Step 3. Create the master document and subdocuments from the same template

Step 4. Insert some information directly into the master document

Step 5. Insert the subdocuments into the master document

Step 6. Add a table of contents, bibliography, or index

#### Step 1. Plan the project

Although you can make changes at most steps in this process, the more you can plan before you start, the less work you will have to do to correct any problems later. Here are some things you need to plan:

- Parts of book or report required, and the page numbering to be used in different parts of the book. Consider as an example a book with these parts:

<b>Part</b>	<b>Length</b>	<b>Page numbering</b>
Title (cover) page	1 page	no page number
Copyright page	1 page (back of title page)	no page number
Table of Contents	unknown length	start with i
Preface (Foreword)	2 pages	continue from ToC
Chapters 1 to 8	unknown length	start with 1
Appendixes A, B	unknown length	continue from Chapter 8
Index	unknown length	continue from Appendix B

- What pages will be in the master document and what will be in the subdocuments. The ToC and index must be in the master document. A typical arrangement would be:

<b>Part</b>	<b>Location</b>
Title (cover) page	In master document
Copyright page	In master document
Table of Contents	In master document
Preface (Foreword)	Subdocument
Chapters 1 to 8	Subdocuments
Appendixes A, B	Subdocuments
Index	In master document

---

<sup>1</sup> However, the method does not work in some situations. See “Problem solving” on page 336 for details.

- Page, paragraph, character, frame, and numbering styles. See Chapter 6, “Introduction to Styles” for instructions on how to create or modify styles. Some styles for the example book are:

### **Page styles**

<b>Name</b>	<b>Characteristics</b>	<b>Next page style</b>
Title page	No header, footer or page numbers; layout different from other pages	Copyright page
Copyright page	No header, footer or page numbers; layout different from other pages	Front matter first page
Front matter first page	No header; page number in footer, Roman numbers (i, ii, iii); layout different from following pages	Front matter left page
Front matter left page	Header and footer, one containing the page number (Roman)	Front matter right page
Front matter right page	Margins mirrored from Front matter left page; Roman page number	Front matter left page
First page	No header; page number in footer, Arabic numbers (1, 2, 3); layout same as Front matter first page	Left page
Left page	Layout as for Front matter left page, but Arabic page numbers	Right page
Right page	Layout as for Front matter right page, but Arabic page numbers	Left page

### **Paragraph styles**

<b>Name</b>	<b>Characteristics</b>	<b>Next paragraph style</b>
Heading 1	18 pt, bold, 0.30” above, 0.15” after, page break before	Body text
Heading 2	14 pt, bold, 0.30 “ above, 0.15” below	Body text
Body text	12 pt, double space, 0.25” indent before	Body text
Page break	6 pt, no space before or after, page break before	Body text

### **Character styles**

<b>Name</b>	<b>Characteristics</b>
Emphasis	12 pt, italic
Body text	12 pt

- Insert fields and AutoText entries as required. See other chapters in this book for ideas.

## Step 2. Create a template containing the required styles, fields, and other elements

You can create your template from an existing document or template that contains some or all of the styles you want for this document, or you can create the template from a blank document. For more about templates, see Chapter 10, “Working with Templates”.

If you use an existing document or template, delete all the text from it except for fields in headers and footers before saving it as the template for this project. It will still have all the styles you defined, even if the text is not there. You can change the styles in the template as your project develops.

Be sure to use **File > Templates > Save** when creating the template.

## Step 3. Create the master document and subdocuments from the same template

If you are starting a new project, create the master document and all the subdocuments from the same template. Not using the same template could create style inconsistencies that require time and effort to correct. For example, if two subdocuments have a style with the same name that is formatted differently in each document, the master document will use the formatting from the first subdocument that was added. This could cause your document not to look like you expect. Using the same template for all subdocuments saves time and frustration.

It does not matter in what order you create the master and subdocuments, and you do not have to create all the subdocuments at the same time, when you are starting the project. You can add new subdocuments at any time, as you need them—as long as you always create them from the same template.

### Create the master document

Follow this process to create the master document. You can use other methods, but each method (including this one) has its drawbacks.

- 1) Open a new document from the template you created in Step 2, by clicking **New > Templates and Documents**, then selecting the template you created. Be sure the first page of this new document is set to the page style you want for the first page of the final document; if it is not, change it. In our example, the style for the first page is *Title page*.
- 2) If any text or page breaks came into this document from the template, delete the text. (Fields in headers and footers can stay.)
- 3) Click **File > Send > Create Master Document**. Save the master document in the folder for this project, not in the templates folder. We will return to this master document later. For now, you can either leave it open or close it, as you prefer.

### Create subdocuments

A subdocument is no different from any other text document. It becomes a subdocument only when it is linked into a master document and opened from within the master document. Some settings in the master document will override the settings in a subdocument, but only when the document is being viewed, manipulated, or printed through the master document.



Create a subdocument in the same way as you create any ordinary document:

- 1) Open a blank document based on the project template (very important) by clicking **New > Templates and Documents**, then selecting the template.
- 2) Delete any unwanted text, and set the first page to the page style you specified for the first page of a chapter.
- 3) Click **File > Save As**. Give the document a suitable name and save it in the folder for this project.


If you already have some of the chapters written, the files are probably not based on the template you just created for this project. You will need to change the template attached to the existing files. The only way to do this is:

- 1) Open a blank document based on the project template.
- 2) Copy the contents of the original document into this new document. Use **File > Paste Special** to avoid copying the styles from the original documents to the new document.
- 3) Apply the template styles throughout the document.
- 4) Click **File > Save As** and save the new document in the project folder with a suitable name.
- 5) Rename the original chapter file so you do not use it by mistake.

#### **Step 4. Insert some information directly into the master document**

The instructions in steps 4 and 5 use the page numbering requirements given in Step 1. If your book has different requirements, change these instructions to suit.<sup>1</sup>

These instructions are fairly tedious, but once you have the master document set up, you should not have to change it, and with a bit of practice setting it up goes quickly.

- 1) Open the master document and do the following.
  - Make sure paragraph marks are showing (you can set them in **Tools > Options > OpenOffice.org Writer > Formatting Aids**, or click the **Nonprinting characters** icon ).
  - Show text boundaries, table boundaries, and section boundaries (**Tools > Options > OpenOffice.org > Appearance**).
- 2) Type the contents of the title page (or leave placeholders and fill in later). With the insertion point in the last blank paragraph on the page, click **Insert > Manual Break**. On the Insert Break dialog box (Figure 340), select **Page break** and the page style for the second page (*Copyright page* in our example), and leave the **Change page number** checkbox deselected. Click **OK**.

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<sup>1</sup> See “Problem solving” on page 336 for one example.

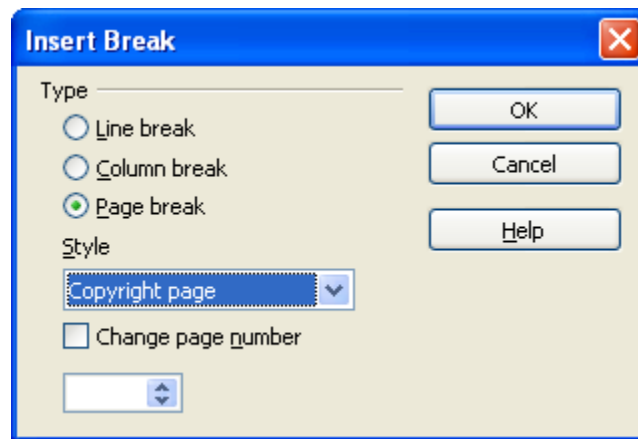


Figure 340. Inserting a page break between the title page and the copyright page

- 3) Type the contents of the copyright page (or leave placeholders). Insert another manual page break, this time setting the page style to *Front matter first page*. Select the **Change page number** checkbox and choose 1 in the box below that, as shown in Figure 341. This number 1 will show in your document as i, because the page style is defined to use Roman numerals.

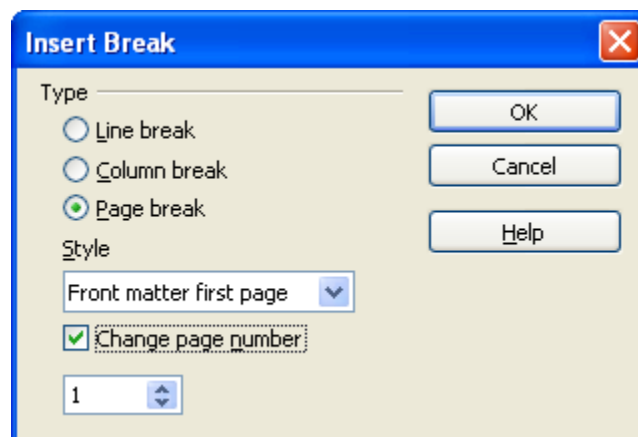


Figure 341. Inserting a page break before the first page of the front matter

- 4) Let's assume the third page is for the Table of Contents. Leave a blank paragraph or two on this page and insert another page break, with the next page again set to the *Front matter first page* style, which we want to use for the first page of the Preface. Because we want the page numbering for the Preface to continue from the page numbers of the Table of Contents, do **not** select the **Change page number** checkbox this time. Notice that the Navigator shows one item, labeled **Text**.


## Step 5. Insert the subdocuments into the master document

At last we are ready to add the subdocuments.

---

**TIP** Subdocuments are inserted into a master document *before* whatever item is highlighted in the Navigator. If you insert the *last* subdocument first, and then insert the other subdocuments before the last one, they will end up in the correct sequence without the necessity of moving them up or down in the list.

---

- 1) Display the Navigator (click **Edit > Navigator**, or press *F5*, or click the **Navigator** icon ).
- 2) On the Navigator, select **Text**, then long-click on the **Insert** icon and click **File**.

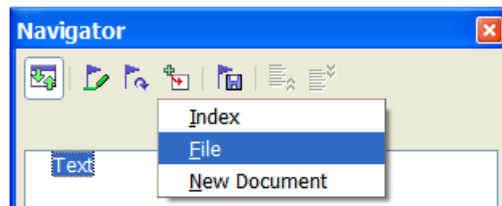


Figure 342. Inserting a subdocument into a master document using the Navigator

A standard File Open dialog box appears. Select the required file (which you created in Step 3) and click **OK**. This example uses six chapters and a preface; we will load Chapter 6 first, as suggested in the Tip above.

The inserted file is listed in the Navigator *before* the Text item, as shown in Figure 343.

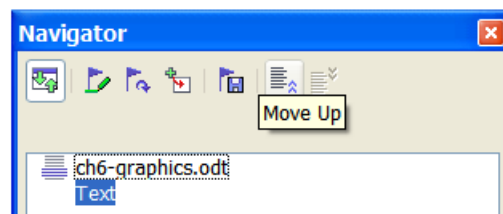


Figure 343. Navigator after inserting one subdocument

- 3) Because the *Text* section contains the title page and other material you have already inserted, highlight it and click the **Move Up** icon to move it to the top of the list.
- 4) Highlight the subdocument you just inserted (Chapter 6), then long-click on the **Insert** icon and click **File** to insert the *first* subdocument; in this example, Preface. Chapter 6 remains highlighted. Repeat with Chapter 1, Chapter 2, and so on until all the subdocuments have been added to the list. The Navigator will now look something like Figure 344.

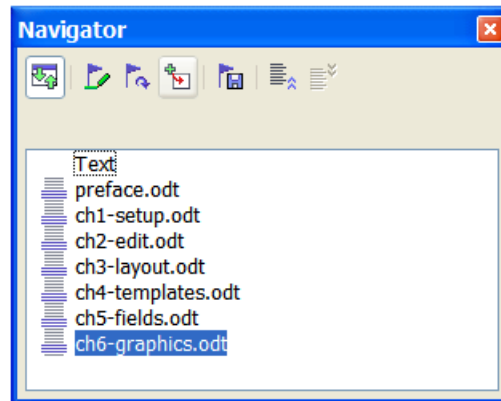


Figure 344. The Navigator showing a series of files in a master document

- 5) Save the master document again. Now highlight each chapter in turn and insert a Text section before it. When you are done, the Navigator should look like Figure 345.

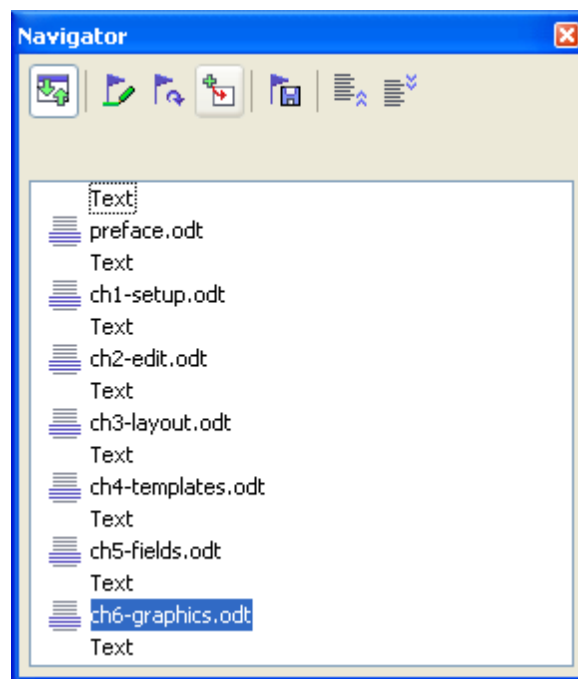


Figure 345. The Navigator showing a series of files and text sections

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**TIP** You can define your *Heading 1* paragraph style to start on a new page, and thus avoid inserting manual page breaks between chapters, but this causes a page numbering problem if you want to restart page numbering at the beginning of Chapter 1.

To restart page numbering, you must insert a manual page break; but because the *Heading 1* style on the first page of Chapter 1 forces yet another page break, you end up with one or more unwanted blank pages before the first page of Chapter 1. The technique described in this chapter avoids this problem.

---

- 6) Check whether the first page of the master document has the correct page style. If not, change it to the correct style (*Title page* in this example).

Scroll to the place where the first subdocument begins. Check whether its page style is correct, and change it if necessary (*Front matter first page* in this example).

The first subdocument (Figure 346) has a blank paragraph at the top of the page; this was inserted as part of the manual page break. Set this paragraph to the PageBreak style you created in Step 2.

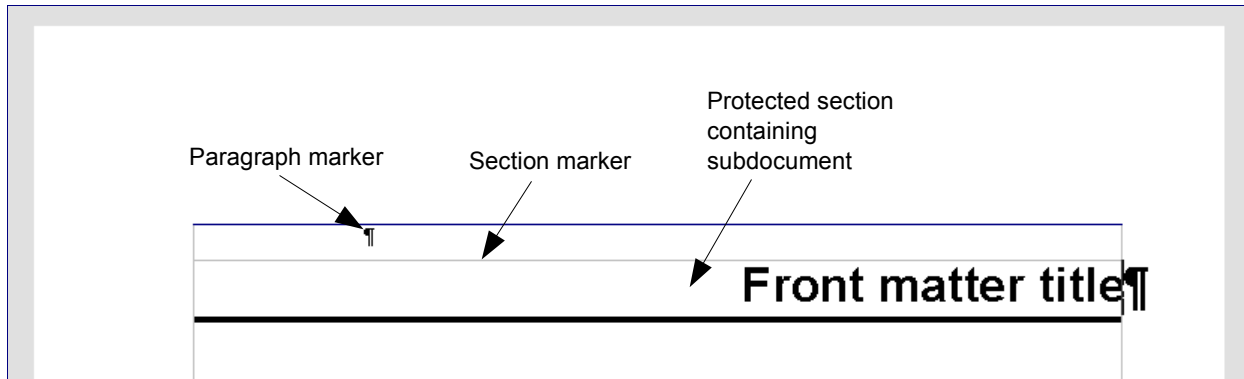


Figure 346. Page break before subdocument, which is in a protected section

- 7) Notice that the document is in a protected section. That means you cannot change any of the contents of this subdocument from within the master document. (If you remove the section, the contents become part of the master document itself; they are no longer in a subdocument. If you make changes in either the master document or the subdocument, those changes are not made in the other document. For more about sections, refer to the online help or to Chapter 4, “Formatting Pages”.)

Scroll down until you find the beginning of Chapter 1. You will find that it is on the same page as the end of the Preface, and there is a blank paragraph in the text area between the two sections (the Preface and Chapter 1), as shown in Figure 347.

Click on this blank paragraph and insert a page break, specifying the *First Page* style and the page number to start at 1. Click **OK**.

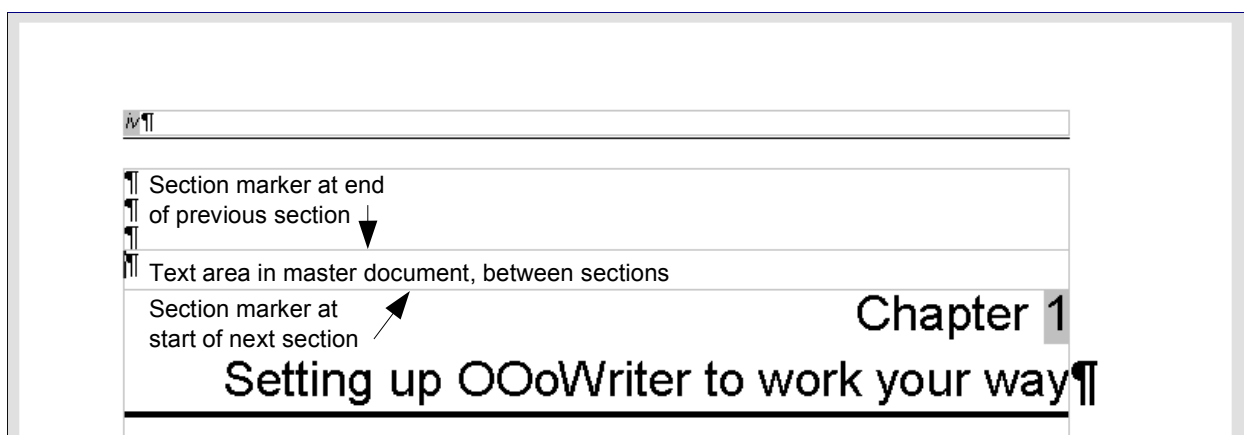


Figure 347. A text area between two sections of a master document

- 8) Scroll to the first page of Chapter 2. You'll find that it is on the same page as the end of Chapter 1, and there is a blank paragraph in the text area between the two chapters.

Click on this blank paragraph and insert a page break, specifying the *First Page* style, but do *not* select the **Change page number** checkbox.

Repeat for all of the chapters, so that each chapter starts on a new first page.

- 9) Save the master document again.

### **Step 6. Add a table of contents, bibliography, or index**

You can generate a table of contents, bibliography, or index for the book, using the master document. You must insert these items into a text section in the master document. For more about these document elements, see Chapter 12, “Creating Tables of Contents, Indexes, and Bibliographies”.

Put the insertion point on the page in the first text section where the table of contents is to go and create the table of contents.

If you do not have a Text section at the end of the master document, insert one before the last subdocument, then move it down so it is after the last subdocument. Now, if you have included bibliographic entries in your subdocuments, you can put the insertion point on the page in this last text section where the bibliography is to go and create the bibliography.

If you have included index entries in your subdocuments, put the insertion point on the page in the last text section where the index is to go and create the index.

## **Editing a master document**

---

After creating a master document, you may want to change its appearance or contents.

### **Changing the appearance of the document**

You can change the styles in the template as your project develops. Do not make changes to styles in the master document or in any of the subdocuments—make those changes in the template.

To update the master document (and all of the subdocuments) with changes to the template, just open the master document. You will get two messages: first, to ask if you want to update all links; and second, if you want to apply the changed styles. Answer *Yes* to both of these messages.

### **Editing subdocuments**

You cannot save edits made to a subdocument from within the master document. Instead, you must open the subdocument, either by double-clicking on it in the master document's Navigator, or by opening it from outside the master document. Then you can edit it just as you would edit any other document. Just one rule: if you make any changes to the styles while editing a subdocument, you must copy those changed styles to the template so they are available to all of the subdocuments and to the master document.

If you change the contents of any subdocument, you need to manually update the table of contents, bibliography, and index from within the master document.

## Cross-referencing between subdocuments

The methods described earlier in this chapter are all most writers will need when using master documents. However, you might need to automatically update cross-references between subdocuments. This section describes how to do this.

The process to create cross-references between subdocuments is tedious, but it works. (An alternative is to use Ian Laurenson's OutlineCrossRef3 macro, available from <http://homepages.paradise.net.nz/hillview/OOo/OutlineCrossRef3-fr-3.odt>.)

- 1) First set references in each subdocument, just as you would when you are cross-referencing within a single document. When you do this, select the entire text you want to use as the reference, such as a heading or figure number. Keep a list of what you have named the reference fields, and be sure every name is unique. One way to keep track of this information is by putting it in a separate text file or a spreadsheet.

The field names are case-sensitive. You can check the field name by holding the cursor over the referenced item. In our example (Figure 348), the heading has the field name *word count*.

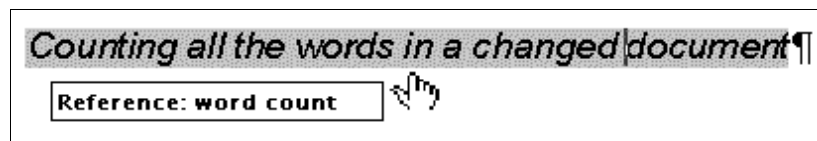


Figure 348. Finding the field name for a heading

- 2) Open the master document. In the Navigator (Figure 349), select a subdocument and click the **Edit** icon (or right-click and choose **Edit** from the pop-up menu). The subdocument opens for editing.
- 3) In the subdocument, place the cursor where you want the cross-reference to appear. Click **Insert > Cross Reference**.
- 4) In the Fields dialog box, on the *References* page, select **Insert Reference** in the *Type* list on the left hand side (Figure 350). The *Selection* list in the middle column shows only the reference field names for the subdocument you are using, so ignore that list and check the list you created manually in step 1.

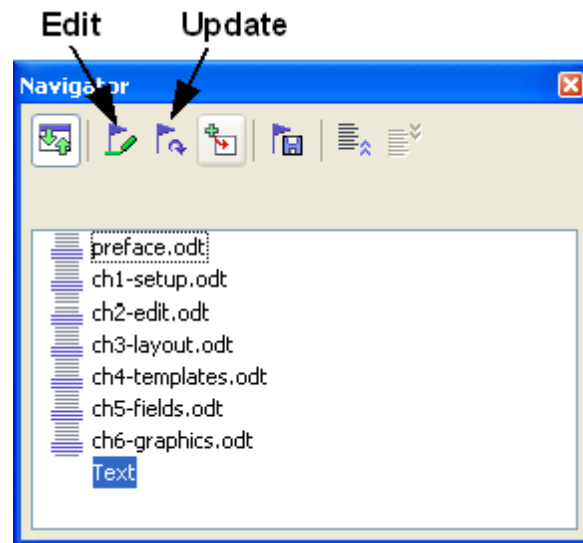


Figure 349. Selecting a subdocument in the Navigator

- 5) In the **Name** field in the lower right hand column, type the name of the reference you set in the subdocument you are referring to. In our example, the reference is in Chapter 3, and its name is *word count*.

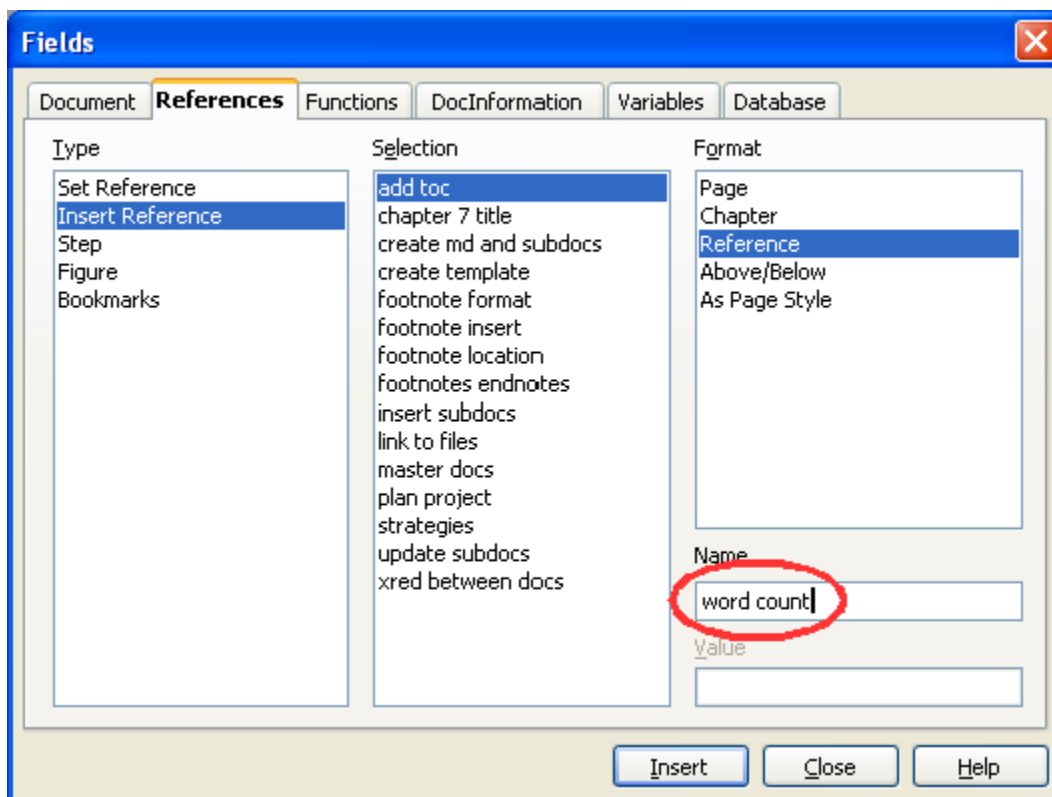


Figure 350. Fields dialog box showing manual entry of field name



- 6) Click **Insert**, type any text you want to appear between the reference and page number (such as “on page”), and then insert another reference with the **Page** format. Nothing will appear in the subdocument except tiny gray bars indicating the fields. If you hover the mouse pointer over one of these fields, you should see the field name (Figure 351).



Figure 351. Viewing the field name

(You can turn on the display of field codes by clicking **View > Field Names**. The two fields shown as gray lines in Figure 351 now look like Figure 352.)

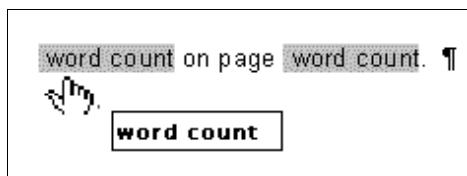


Figure 352. Displaying field codes

- 7) After you have inserted all the cross-references required in the subdocument, save and close it and return to the master document window.

Within the master document, navigate to the page of the subdocument on which you inserted the cross-reference field. You should now see the text of the cross-reference appear in the spot where you inserted it (Figure 353), because within the master document, the subdocument can find the target of that field reference.

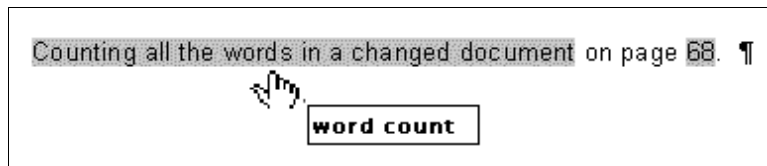


Figure 353. Field contents showing where inserted in file

This technique also works if you open a subdocument directly in step 2 (that is, not from within the master document) and insert a cross-reference field.

## Problem solving

---

Some combinations of choices do not work together. This section describes some problems and what to do about them.

### Including a chapter reference in the header of the first page

#### The problem

If you use the method described in “Step 5. Insert the subdocuments into the master document” beginning on page 329 (putting a page break paragraph into the master document between the subdocuments), **and** you put a cross-reference to the chapter name and number in the header of the **first** page of each chapter, then the cross-reference field on the first page will pick up the chapter name and number from the previous chapter. This happens because with this method the first (blank) paragraph on those pages is actually the **last** paragraph of the previous chapter. The example did not include a cross-reference to the chapter name and number in the header of the first page, so it did not have this problem.

First page **footers** do not have this problem; they correctly pick up the current chapter’s name and number.

#### The solution

The cure for this problem is as follows:

- 1) Use **File > Templates > Edit** to open the template used for the master document and its subdocuments.
- 2) Modify the style for the chapter title (usually *Heading 1*) to enable a page break before, using the page style you want for the first page of each chapter. Save and close the template.
- 3) When you reopen the master document, it should ask two questions: “Update all links?” and “Your styles don’t match the template. Do you want to update your files?” Be sure to answer *Yes* to both questions.
- 4) Modify the chapter title style (*Heading 1*) in the master document file as you did in the template file in step 2. Save the master document.
- 5) Open the Navigator in Master Document view and delete the Text sections between the chapters. Update all links.

The headers on the first page of each chapter will now display the correct chapter name and number.

### The problem with the solution—and a workaround

This solution creates another problem, **if** you want to restart page numbering at 1 on the first page of the first chapter **and** have pages numbered sequentially through all the chapters.

Normally you would restart numbering by specifying the starting page number when you modify the *Heading 1* style to start on a new page. However, if you do that, then each chapter restarts page numbering at 1. (Sometimes this is what you want, but often it is not.)

In this case, you will have to include an “offset” in the page number field—that is, you tell OOoWriter how many pages to subtract to make the first page of the first chapter to be page number 1. Of course, to make this work, you need to know how many pages are in the front matter, and you may not know that until after you have finished the entire book. If you add or delete some pages (for example, if the table of contents grows from 4 pages to 5), you will need to adjust the offset accordingly. Therefore, this adjustment is best made at the end of the project.

Here is how to do it.

- 1) In the master document itself—not in the subdocument—place the cursor just in front of the Page field on the first page of the first chapter. Right-click and choose **Fields** from the pop-up menu.
- 2) In the Edit Fields dialog box (Figure 354), type a negative even number (–2, –4, etc.) in the *Offset* box. Click **OK** to save this change.

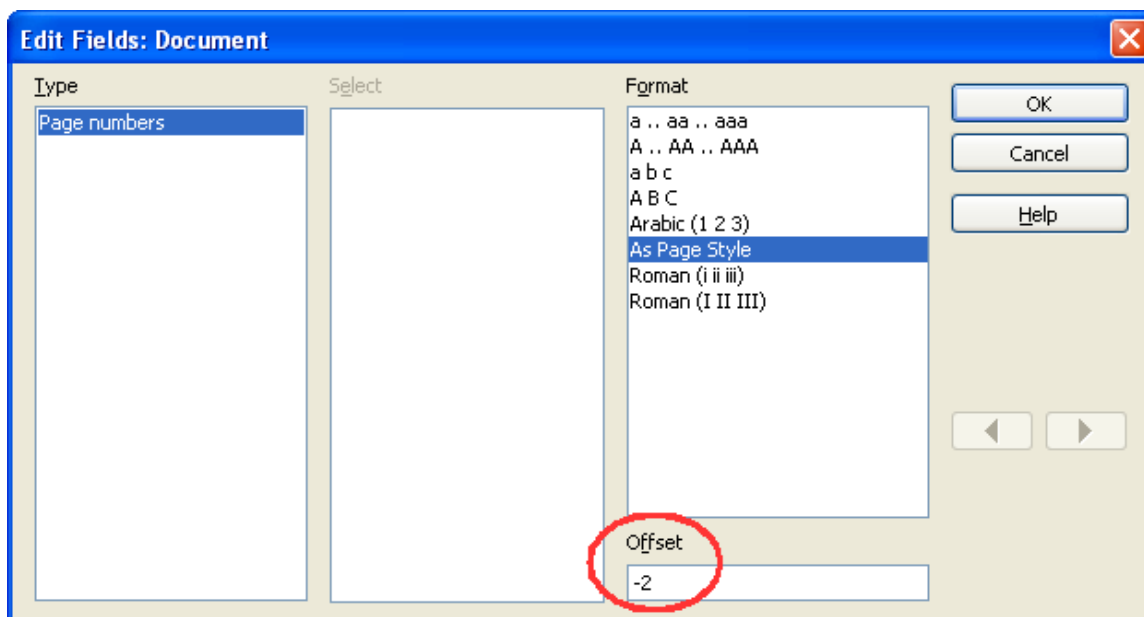


Figure 354. Using an offset to start at a different page number

- 3) You might need to make the same change on the second page of the first chapter.

## Including landscape pages in a portrait-oriented master document

### The problem

Master documents ignore manual page breaks in subdocuments **if** the manual break specifies the following page style. Landscape pages are inserted into portrait-oriented documents by inserting a manual page and specifying a landscape page style (and then changing back to portrait orientation by inserting another manual break and specifying the following page style). This technique works fine until the document becomes a subdocument within a master document. At that point the landscape pages become portrait pages and the page break itself is ignored.

### The solution

- 1) Remove the landscape pages from the subdocument and put them in a separate document. Note that if the landscape pages are in the middle of the original subdocument, you will end up with at least three documents: (a) the portion of the subdocument before the landscape pages, (b) the landscape pages themselves, and (c) the portion of the subdocument after the landscape pages.
  - 2) Insert documents (a) and (c) individually into the master document.
  - 3) Then do one of the following:
    - Insert a text section into the master document itself between documents (a) and (b). In the text section, insert a manual page break (specifying the landscape page style), and then paste the contents of document (b)—the landscape pages—into the master document. If necessary, insert another manual page break (specifying one of the relevant portrait page styles) before document (b).
- or
- Insert document (b) into the master document as a subdocument, using the method described on page 329 to include a manual page break in a text section before and after the landscape document.

When deciding which method to use, you need to consider the placement of headers and footers (if any) that appear in your document. If you want portrait headers and footers on the landscape pages, use the technique described in Chapter 4, “Formatting Pages”.

## Anchoring pictures to a page

### The problem

A picture (graphic) anchored “to page” in a subdocument is not displayed in the master document although it always appears correctly in the subdocument.

Because the master document reorganizes the page flow, page numbers, and cross-references when it collates all the subdocuments together, the absolute reference to a page X in a subdocument is lost in the master document. The picture loses its anchor reference and simply disappears.

### The solution

To avoid this problem but keep pictures positioned precisely on a particular page, anchor the pictures as follows:

- 1) Right-click on the picture and choose **Picture** from the pop-up menu.
- 2) On the *Type* tab of the Picture dialog box (Figure 355), set the anchor to *To character* or *To paragraph*.

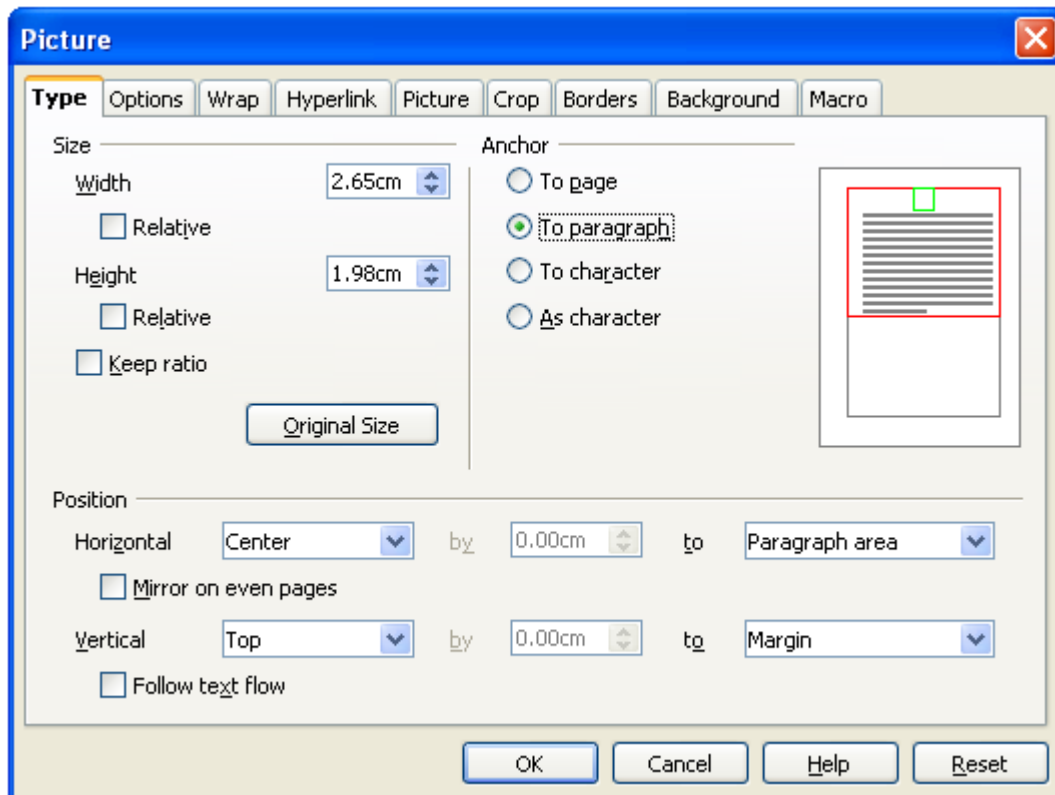


Figure 355. Anchoring a graphic and setting its position on a page

- 3) Under *Position*, choose suitable horizontal and vertical references to the page.



*Chapter 14*  
*Working with Fields*

## Introduction to fields

---

Fields are extremely useful features of Writer. They are used for data that changes in a document, such as the current date or the total number of pages. This chapter describes how to use a few of them.

**TIP** Fields have a gray background when viewed on screen, unless you have deselected the **Field shadings** checkbox or changed the color of field shadings on the *Appearance* page of the Options – OpenOffice.org dialog box. This gray background will not show when you print the file to hardcopy or PDF.

To turn field shadings on or off quickly, choose **View > Field Shadings** or press *Control+F8*.

---

## Quick and easy field entry

---

You can quickly insert common fields into your document by choosing **Insert > Fields** from the menu bar and selecting the required field from the list, as shown in Figure 356.

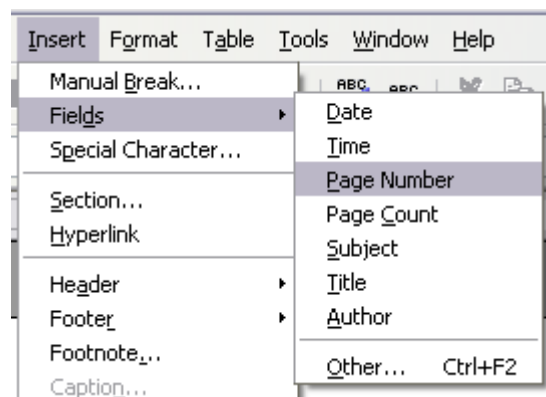


Figure 356: Inserting common fields

## Using document properties to hold information that changes

---

The Properties dialog box for any document contains locations on the *Description* tab (Figure 357) and the *User Defined* tab (Figure 358) for information that you might want to include in your document, especially if it is information that might change during the course of the project. To display this dialog box, click **File > Properties**.

Later in this chapter, we will see how to use this information in fields. You can return to this dialog box at any time and change the information you entered. When you do so, all of the references to that information will change wherever they appear in the document. For example, you might need to change the contents of the *Title* field from the draft title to the production title.

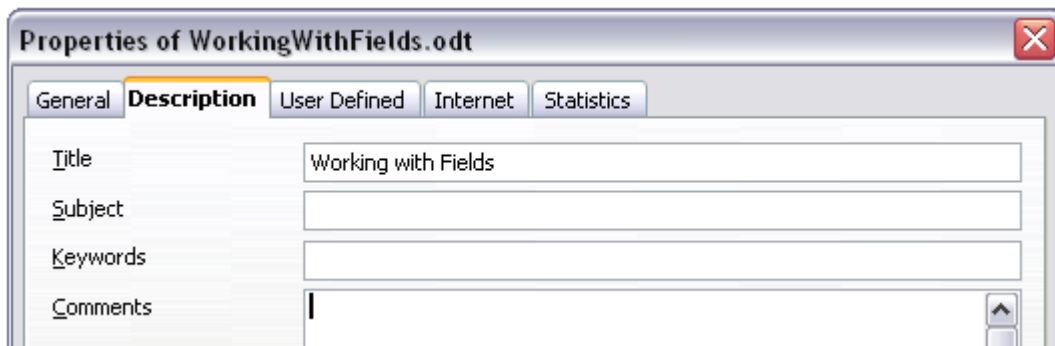


Figure 357: The Description tab of the document's Properties dialog box

The *User Defined* tab provides four fields for you to use, as required. You can change the default names for these fields to more meaningful names. The example in Figure 358 shows that three of the defaults have been changed: *Info 1* to *Chapter subtitle*, *Info 2* to *Chapter number*, and *Info 3* to *Name of guide*.

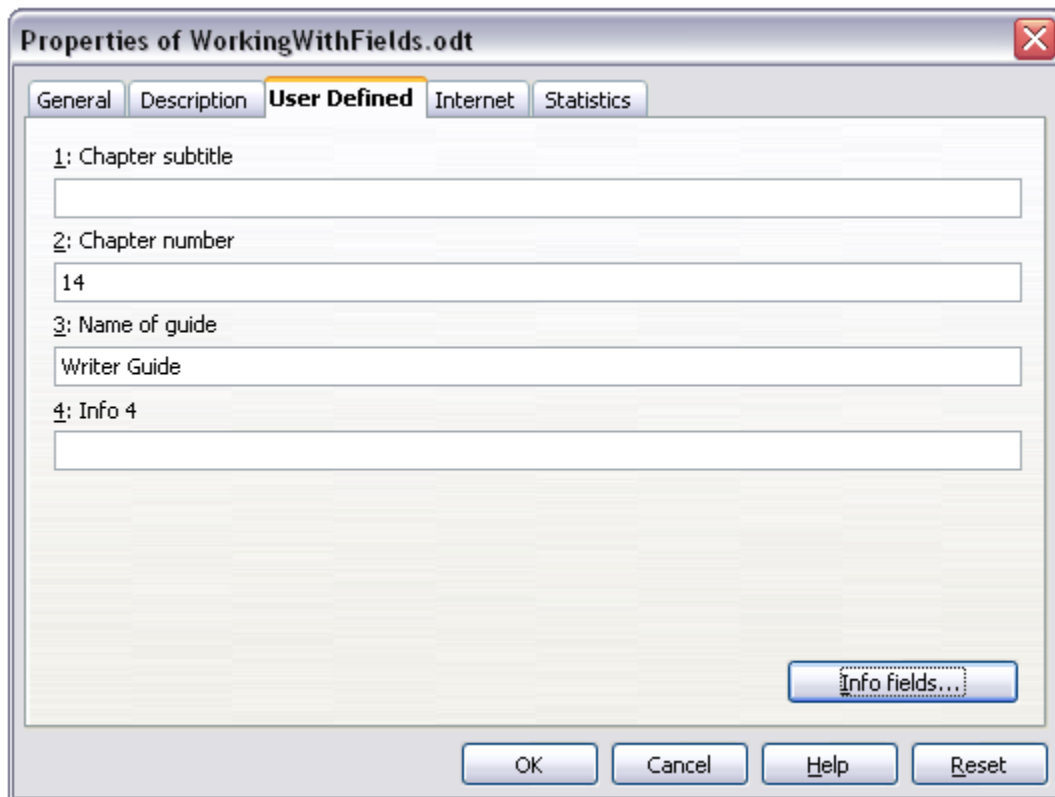


Figure 358: The User Defined tab of the document's Properties dialog box

To change these field names, click the **Info fields** button near the bottom of the dialog box. In the small pop-up dialog box (Edit Field Names, not shown here), type the field names you want and then click **OK**.



## Using other fields to hold information that changes

One way that people use fields is to hold information that is likely to change during the course of a project. For example, the name of a manager, a product, or even your entire company may change just before the document is due to be printed. If you have inserted the changeable information as fields, you can change the information in one place, and it will automatically change in all the places where that field occurs.

Writer provides several places where you can store the information referred to by a field. We will look at some of them here.

Seven document properties (Time, Date, Title, Subject, Author, Page Number, and Page Count) are on the **Insert > Fields** menu (Figure 356). To insert one of these fields, click on it in the menu.

Other document properties are on the *DocInformation* and *Document* tabs of the Fields dialog box (Figure 359 and Figure 360), reached by clicking **Insert > Fields > Other**.

To insert one of these fields, select it in the *Type* list and then select from the *Select* and *Format* lists if choices appear. Finally, click **Insert**.

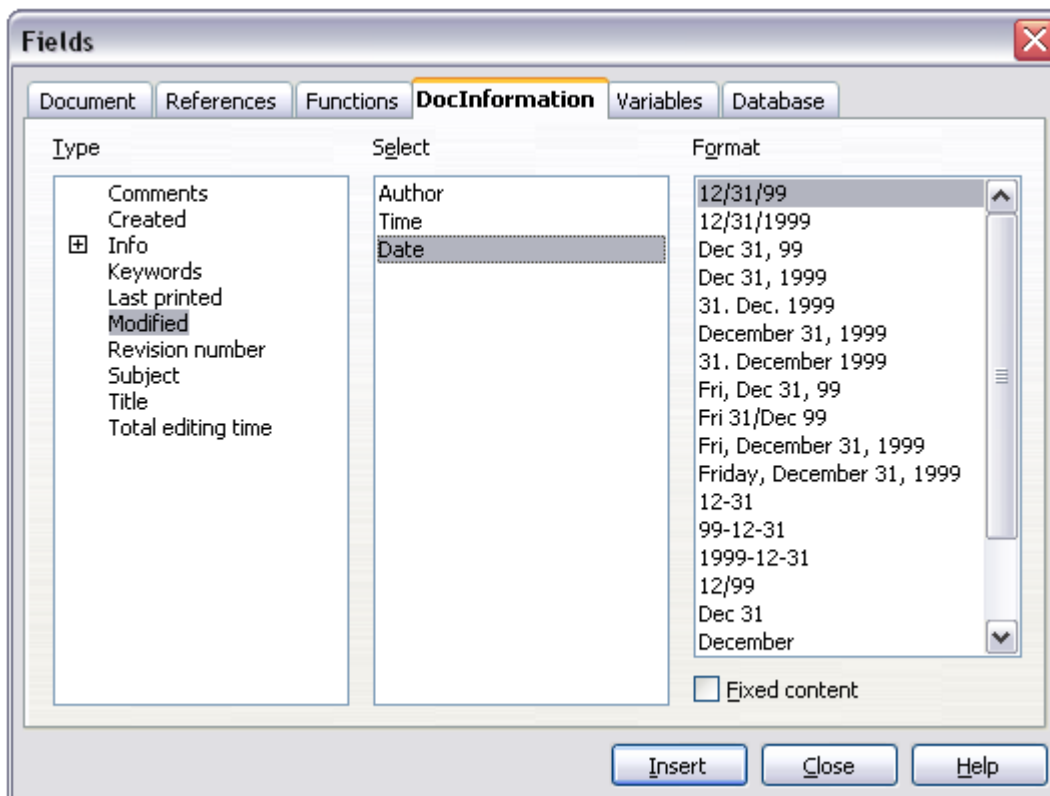


Figure 359: Inserting a Date Modified field using the DocInformation tab of the Fields dialog box

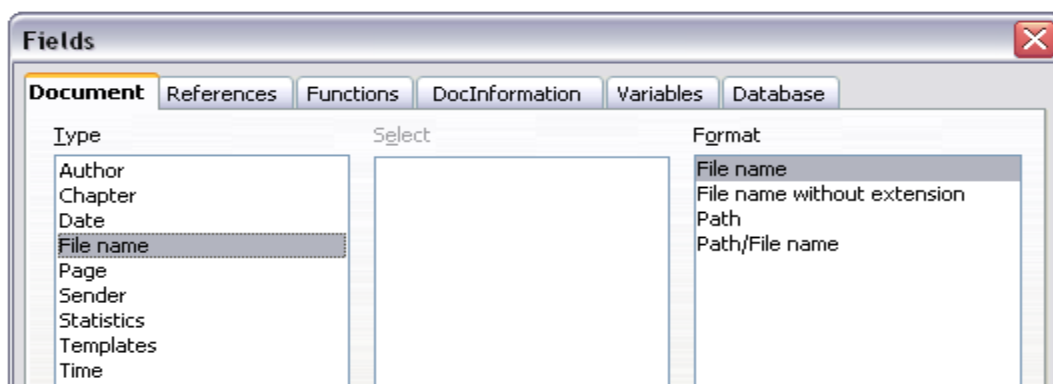


Figure 360: Inserting a File name field using the Document tab of the Fields dialog box

Some of these items are picked up from the *User Data* page of the Options dialog box, so make sure the information on that page is correct.

---

**TIP** Although these fields are often used to hold information that changes, you can make the content unchangeable by selecting the **Fixed content** checkbox (visible in Figure 359) when inserting the field. If necessary, you can come back to this dialog box later and deselect this checkbox to make the field variable again.

---

## Using AutoText to insert often-used fields

---

If you use the same fields often, you will want a quick and easy way to insert them. Use AutoText for this purpose. To define an AutoText entry for a field:

- 1) Insert a field into your document, as described previously.
- 2) Select the field, and then click **Edit > AutoText** (or press *Ctrl+F3*).
- 3) On the AutoText dialog box (Figure 361), choose the group where this new entry will be stored (in this example, it is going into *My AutoText*), type a name for the entry, and change the suggested shortcut if you wish.
- 4) Click the **AutoText** button and click **New** to have the entry inserted as a field. Do not choose **New (text only)** because the AutoText entry will be plain text, not a field. Click **Close** to close the AutoText dialog box.
- 5) Now whenever you want to insert this field at the cursor position, type the shortcut, and then press *F3*.

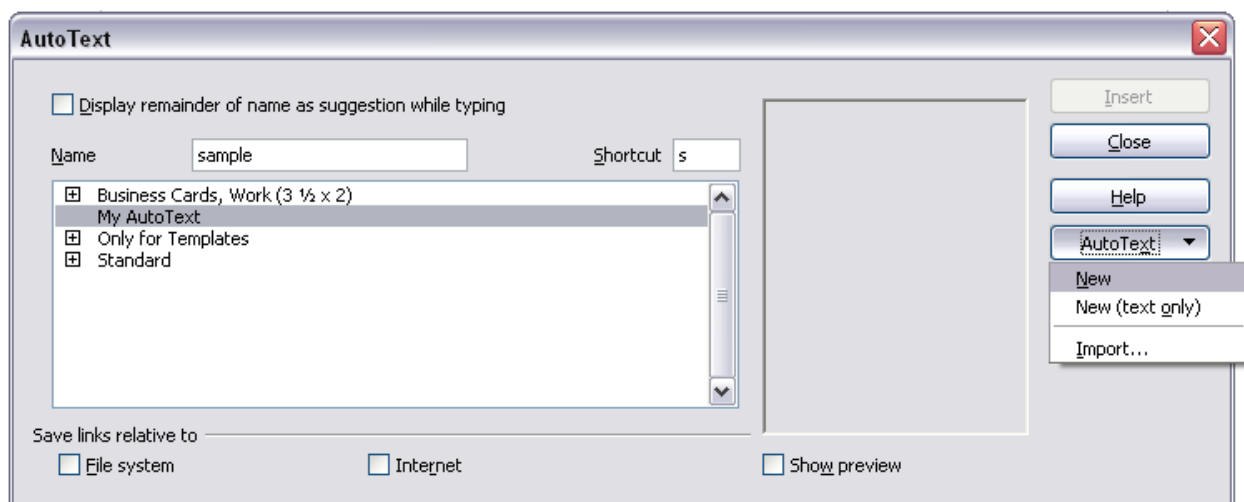


Figure 361: Creating a new AutoText entry

## Defining your own numbering sequences

You may want to define your own numbering sequences to use in situations where you do not always want the number at the start of the paragraph or where you want more control than the built-in numbering choices give you.

This topic describes how to create and use a numbering sequence, using a “number range variable” field.

### Create a number range variable

To create a number range variable using Arabic (1, 2, 3) numbers:

- 1) Place the insertion point in a blank paragraph in your document.
- 2) Click **Insert > Fields > Other** and select the *Variables* tab (Figure 362).
- 3) In the *Type* list, select **Number range**. In the *Format* list, select **Arabic (1 2 3)**. Type whatever you want in the *Name* field. (I have used **Step** in this example.)
- 4) Click **Insert**. The name of the variable (**Step**) now appears in the *Selection* list, and a number field (showing **1**) appears at the insertion point in your document. The Fields dialog box remains open, so you may need to move it out of the way to see the field in the document.
- 5) Hover the mouse pointer over this number field and you will see the field code of **Step = Step+1**. If you click several more times on the **Insert** button in the Fields dialog box, the numbers **2, 3, 4**, and so on will appear in the document.
- 6) Now you may want to create another field to restart the Step sequence at 1, so you can use the same sequence name more than once in your document (for example, to begin each set of instructions).

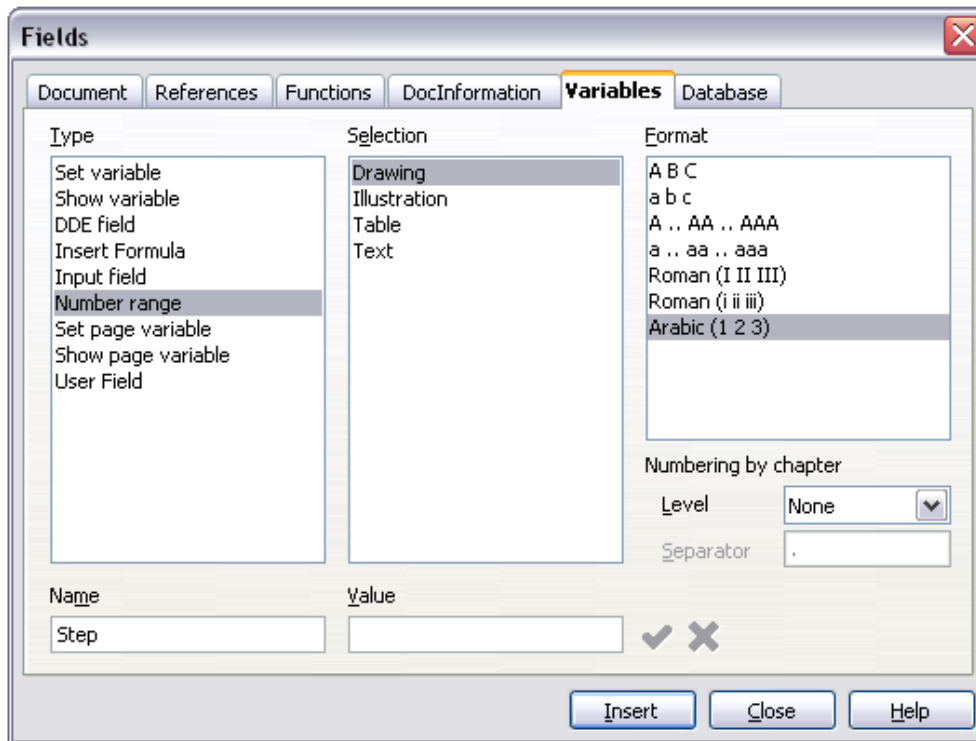


Figure 362: Defining a number range variable

- 7) To create this new field, open the Fields dialog box to the *Variables* tab. Make sure the variable name *Step* appears in the *Name* box. In the *Value* box, type **Step=1**, as shown in Figure 363. Click **Insert**. Now hover the mouse pointer over the new field in your document and you will see the field code of **Step = Step=1**.

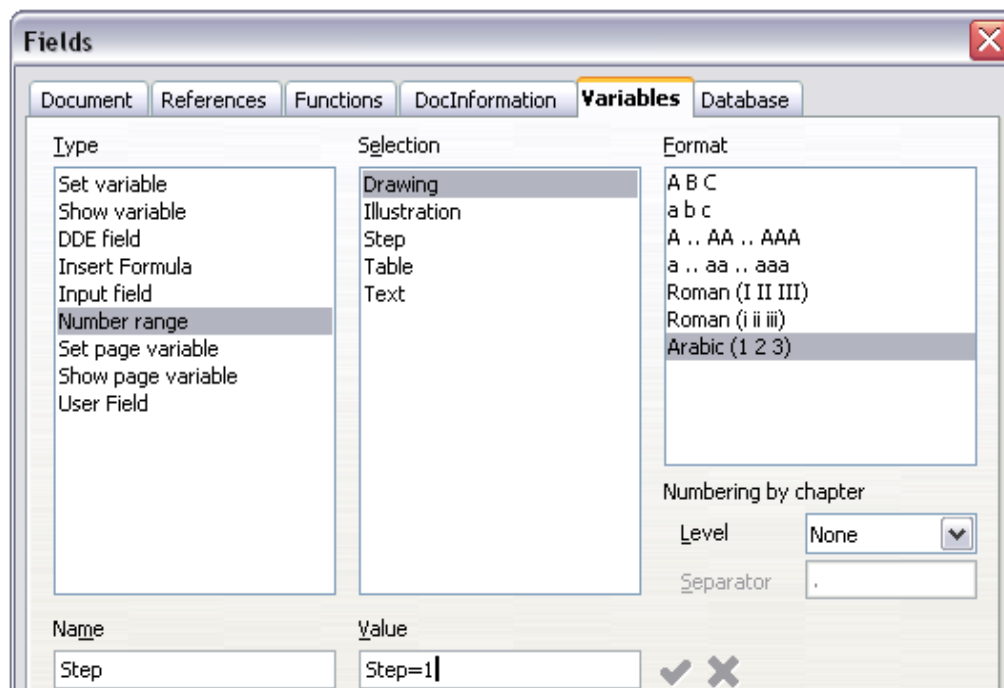



Figure 363: Defining a field to restart a number range variable

## Use AutoText to insert a number range field

You certainly do not want to go through all of that every time you want to put in a step number. Instead, create two AutoText entries, one for the  $Step = Step=1$  field (call it **Step1**, for example) and one for the  $Step = Step+1$  field (**StepNext**). See “Using AutoText to insert often-used fields” on page 344.

You can create similar fields for substeps or other sequences that you want to be numbered with letters (a, b, c), Roman numerals (i, ii, iii), or some other sequence. In the Fields dialog box, choose the required format in the *Format* list when creating the field codes.

### TIP

If a user-defined variable is not in use in the document, the  icon next to the *Value* box is active. You can delete the variable by clicking this icon. To remove a variable that is used in the current document, first delete from the document all fields using that variable, and then remove the variable from the list.

## Using automatic cross-references

If you type in references to other parts of the document, those references can easily get out of date if you reword a heading, add or remove figures, or reorganize topics. Replace any typed cross-references with automatic ones and, when you update fields, all the references will update automatically to show the current wording or page numbers. The *References* tab of the Fields dialog box (Figure 364) lists some items, such as bookmarks, figures, tables, and user-defined number range variables. Other items that you might expect to be listed, such as headings, are not shown.

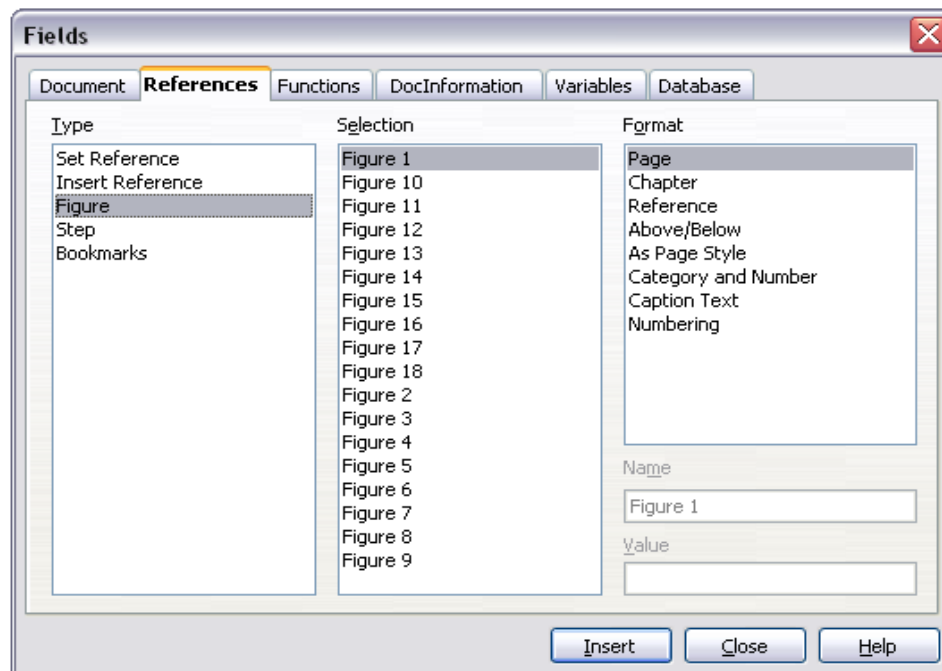


Figure 364: The References tab of the Fields dialog box

## Prepare items as targets for cross-referencing

Before you can insert a cross-reference to anything that is not automatically shown on the *References* tab, such as a heading, you must prepare or “set” that heading as an item to be referenced. To do this, you can either use bookmarks or set references.

### Using bookmarks

Bookmarks are listed in the Navigator and can be accessed directly from there with a single mouse click. In HTML documents, bookmarks are converted to anchors that you can jump to via hyperlink.

- 1) Select the text you want to bookmark. Click **Insert > Bookmark**.
- 2) On the Insert Bookmark dialog box (Figure 365), the larger box lists any previously defined bookmarks. Type a name for this bookmark in the top box. Click **OK**.

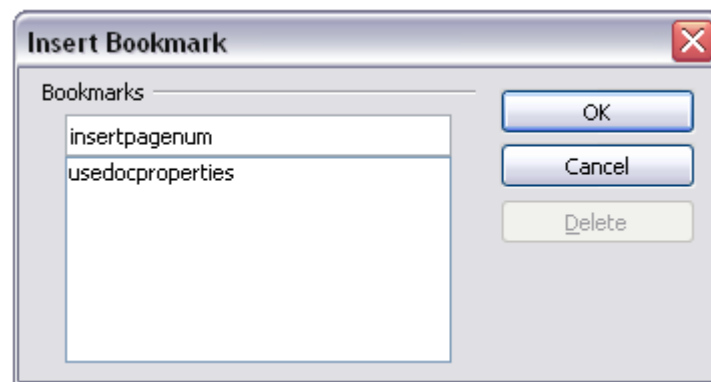


Figure 365: Inserting a bookmark

### Setting references

- 1) Click **Insert > Cross reference**.
- 2) On the *References* tab of the Fields dialog box (Figure 366), click **Set Reference** in the *Type* list. The *Selection* list shows any references that have been defined.  
You can leave this page open while you set many headings as references.
- 3) Click in the document and highlight the text of the first heading to be used as a target for a cross-reference. Click on the Fields dialog box. The text of the heading will appear in the *Value* box in the lower right of the dialog box. In the *Name* box, type some text by which you can identify this heading.
- 4) Click **Insert**. The text you typed in the *Name* box now appears in the *Selection* list.
- 5) Repeat steps 3 and 4 as often as required.

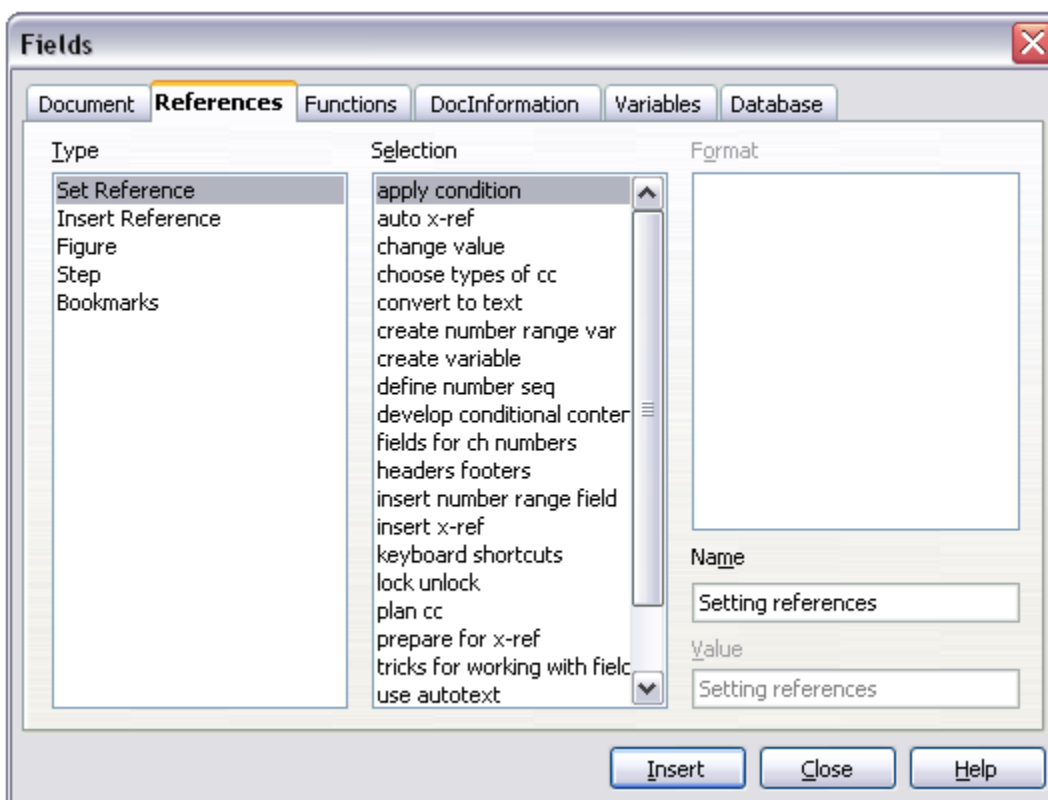


Figure 366: Setting text to be used as a target for a cross-reference

## Insert cross-references

To insert a cross-reference to a heading or other text:

- 1) In your document, place the cursor where you want the cross-reference to appear.
- 2) If the Fields dialog box is not open, click **Insert > Cross Reference**. On the *References* tab of the Fields dialog box (Figure 367), in the *Type* list, click **Insert Reference** or **Bookmarks** (depending on how you set your references).

You can leave this page open while you insert many cross-references.

- 3) Click on the required item in the *Selection* list, which shows the bookmarks or references that have been defined. In the *Format* list, choose the type of reference required. Usually this will be **Reference** (to insert the full text of the reference or bookmark) or **Page** (to insert the number of the page the referenced or bookmarked text is on). Click **Insert**.

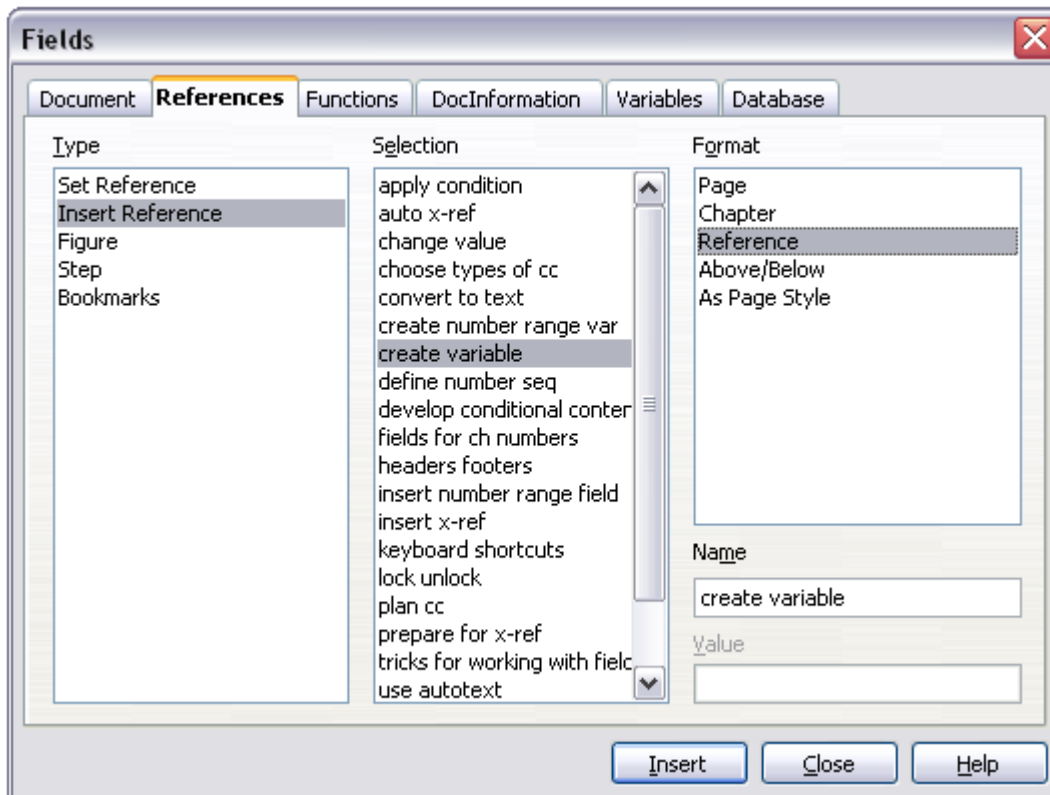


Figure 367: Inserting a cross-reference to a heading

To insert a cross-reference to an item (such as a figure caption) that you have previously inserted into the document as a numbering-sequence field:

- 1) In your document, place the cursor where you want the cross-reference to appear. If the Fields dialog box is not already open, click **Insert > Cross-reference**.
- 2) On the *References* tab of the Fields dialog box (Figure 364), select **Figure** in the *Type* list.
- 3) Click on the required item in the *Selection* list, which shows the list of figures that have previously been inserted into the document. The *Format* list shows different choices from those given for headings. Choose the type of reference required. Usually this will be **Category and Number** (to insert the word “Figure” and its number), **Reference** (to insert the word “Figure” with its number and the full text of the caption), or **Page** (to insert the number of the page the figure is on).
- 4) Click **Insert**.



## Using fields in headers and footers

You can insert fields into headers or footers, using techniques described earlier in this chapter:

- To insert a page number, document title, author, creation date and time, current date and time, or total page count field, use document properties (see page 341).
- You can insert a cross-reference to a bookmark or a set reference.
- If you have used *Heading 1* for your chapter titles, you can use a document field to insert the current chapter title, so it changes from one chapter to the next. See Figure 368, which calls chapter titles “names”. If you have used outline numbering on your *Heading 1*, you can choose whether to include these numbers in the field.
- You can insert cross-references to other heading levels by specifying a value in the *Layer* box in the lower right of the *Document* tab of the Fields dialog box (Figure 368). That is, Layer 1 = Heading 1, Layer 2 = Heading 2, and so on.

A cross-reference field in the header of a page picks up the *first* heading of that level on the page, and a field in the footer picks up the *last* heading of that level.

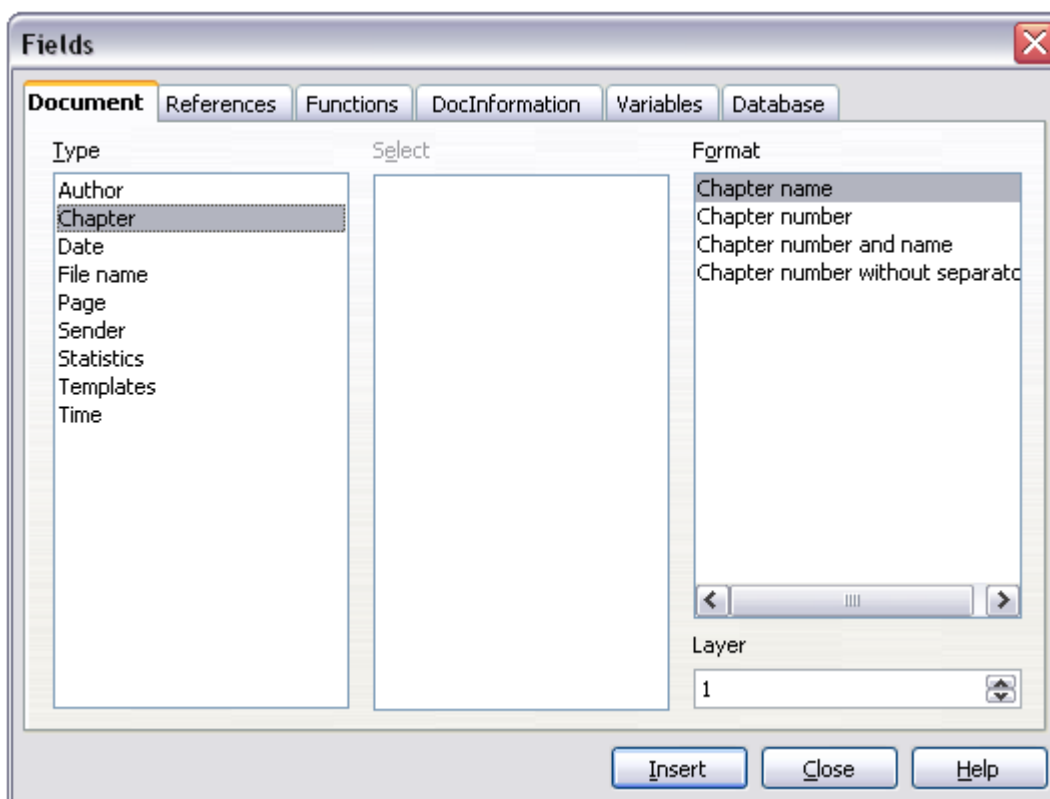


Figure 368: Inserting the current chapter name and number into your document

- To include the chapter number with the page number, position the cursor just before the *Page* field you inserted. Click **Insert > Fields > Other**. On the *Document* tab of the Fields dialog box, select **Chapter** in the *Type* column and **Chapter number without separator** in the *Format* column. Click **Insert**.

Go to the header or footer where you inserted this field, type the character you want to appear between the chapter number and the page number—for example, a period or a dash.

The table of contents will not automatically pick up these chapter numbers, so you will need to make a change on the **Indexes and Tables** menu item, as described in Chapter 12, “Creating Tables of Contents, Indexes, and Bibliographies”.

- You can add a page count to the footer—for example “Page 9 of 12”. Type the word “Page” and a space in front of the *Page* field. Type a space, the word “of”, and a space after the *Page* field. Then click **Insert > Fields > Page Count**.

## Using fields instead of outline numbering for chapter numbers

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The technique in “Using fields in headers and footers” on page 351, combined with outline-numbered chapter headings (described in Chapter 7, “Working with Styles”), works well when you want the field to show information for the current chapter. But what if you want to use a cross-reference to refer to a different chapter? You cannot bookmark or set a reference to the chapter number part of a heading created using outline numbering.

---

**TIP** If you use this technique, some other features will not work because Writer does not recognize the field as chapter numbers. For example, you will not be able to include chapter numbers with the page numbers in headers or footers, or the table of contents, using the technique described in “Using fields in headers and footers” on page 351.

---

To have chapter numbers that update automatically and can be used in cross-referencing, use a number range field.

- 1) Define your number range variable, as described in “Defining your own numbering sequences” on page 345. I have called this variable **Chapter**.
- 2) To insert the field into your *Heading 1*, type **Chapter<space>**. Click **Insert > Fields > Other**. On the *Variables* tab, pick **Number range, Chapter, Arabic (1 2 3)**. Click **Insert**. You will need to do this manually for each *Heading 1*.
- 3) Select the entire text of the first *Heading 1*, including the word “**Chapter**” and the chapter number, and set a reference to it.
- 4) You can now insert a cross-reference to this heading anywhere in your document.

---

**Tip** You can also use this technique for easier management of appendix numbering. Keep your appendix headings in the *Heading 1* style, define a separate number range sequence for appendix numbers (choosing “**A,B,C**” for the number format), and type **Appendix<space><insert appendix number field>** in the *Heading 1* paragraph. You can then use the same page styles for chapters and appendixes, and the same field in the header or footer of chapters and appendixes.

---

## Tricks for working with fields

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### Keyboard shortcuts for fields

Here are some handy keyboard shortcuts to use when working with fields:

*Ctrl+F2*    Open the Fields dialog box.

*Ctrl+F8*    Field shadings on/off.

*Ctrl+F9*    Show/hide field names.

*F9*            Update fields.

### Fixing the contents of fields

You can specify **Fixed content** for many items on the *Document* and *DocInformation* tabs so the field contents do not update. For example, you might use a field to insert the creation date of a document, and you would not want that date to change. In another place you might use a date field to show the current date, which you do want to change; in that case, deselect **Fixed content** when you insert the field.

### Converting fields into text

Writer does not provide any easy way to convert field contents into text. To do this, you need to copy the field contents and paste them back as unformatted text. This is not a very good solution if you have hundreds of fields that you want to change, but you could use a macro to automate the process.

## Developing conditional content

---

Conditional content is text and graphics that are included or excluded depending on a condition you specify.

A simple example is a reminder letter for an overdue account. The first and second reminders might have a subject line of “Reminder Notice”, but the third reminder letter might have the subject “Final Notice” and a different final paragraph.

A more complex example is a software manual for a product that comes in two versions, Pro and Lite. Both product versions have much in common, but the Pro version includes some features that are not in the Lite version. If you use conditional content, you can maintain one file containing information for both versions and print (or create online help) customized for each version. You do not have to maintain two sets of the information that is the same for both versions, so you will not forget to update both versions when something changes.

## Choose the types of conditional content to use

This section describes several Writer features that can help you design and maintain conditional content. You can use one or any combination of these features in the same document.

### Conditional text

With conditional text, you can have two alternative texts (a word, phrase, or sentence). One text will be displayed and printed if the condition you specify is met, and the other will be displayed and printed if the condition is not met. You cannot include graphics or edit the text except in the field dialog (not in the body of the document). You also cannot format part of the text (for example, bolding one word but not the others), but you can format the field to affect all of the field contents (for example, bolding all of the words). You cannot include a cross-reference or other field in the text.

### Hidden text

With hidden text (a word, phrase, or sentence), you have only two choices: show or hide. If the condition you specify is met, the text is hidden; if the condition is not met, the text is displayed. The disadvantages are the same as for conditional text: you cannot include graphics, edit the text in the body of the document, format part of the text, or include a field.

### Hidden paragraphs

Hidden paragraphs are like any other paragraphs, but you can specify a condition under which the paragraph is not displayed or printed. A blank paragraph can also be hidden—for example, if a database field has no content for the current record. This is very useful when merging an address into a letter: if you allow two lines for the street address and the database record uses only one line, you can prevent the blank line from appearing in your document. You can include graphics, edit the text in the body of the document, format any part of the text, and include fields.

### Hidden sections

Hidden sections are like hidden paragraphs, but they can include more than one paragraph—for example, a heading plus one or more paragraphs. However, a section cannot contain less than a paragraph, so you cannot use this method for single words or phrases. The contents of a hidden section behave just like the contents of any other part of the document, but you can specify a condition under which the section is not displayed or printed. In addition, you can password protect a section.

## Plan your conditional content

Conditions are what programmers call *logical expressions*. You must formulate a logical expression for each condition because a condition is always either true (met) or false (not met). You can use the same condition in many places in your document, for different types of conditional content.

To make conditional content work, you need to:

- 1) Choose or define a variable.
- 2) Define a logical expression (condition) involving the selected variable.

### **Choose or define a variable**

You can use the following variables in your condition:

- User-defined variables
- Predefined OpenOffice.org variables, which use statistical values from the document properties
- User data
- Database field contents—for example from your address book

You cannot use internal variables (for example, page number or chapter name) to formulate conditions.

The examples in this chapter use user-defined variables.

### **Define a logical expression (condition) involving the selected variable**

The condition compares a specified fixed value with the contents of a variable or database field.

To formulate a condition, use the same elements as you would to create a formula: operators, mathematical and statistical functions, number formats, variables, and constants. The possible operators are given in the online help; look in the index under “operators: in formulas”. You can define quite complex expressions, but in most cases a simple condition will do the job.

## **Create the variable**

To create your variable, click **Insert > Fields > Other**. You can use choices found on the *DocInformation*, *Variables*, and *Database* tabs.

### **DocInformation fields**

“Using document properties to hold information that changes” on page 341 described how to set up a user-defined document property. You can use that document property as the variable in your condition statement, or you can create another document property field specifically for conditions.

### **User-defined variable field**

To set up a variable or user field:

- 1) Place the cursor where you want the field to be inserted.
- 2) On the Fields dialog box, select the *Variables* tab (Figure 369).

- 3) Select **Set variable** in the *Type* list and **Text** in the *Format* list. Type a name for the variable in the *Name* box, and a value in the *Value* box. I have chosen “**ProLite**” for the name (to remind me that this variable is related to the two product versions), and I set the value as “**Lite**” because I can remember “If it is the Lite version, then this text should be hidden.”
- 4) Select **Invisible** so the field does not show in the document. Click **Insert**, then click **Close**.

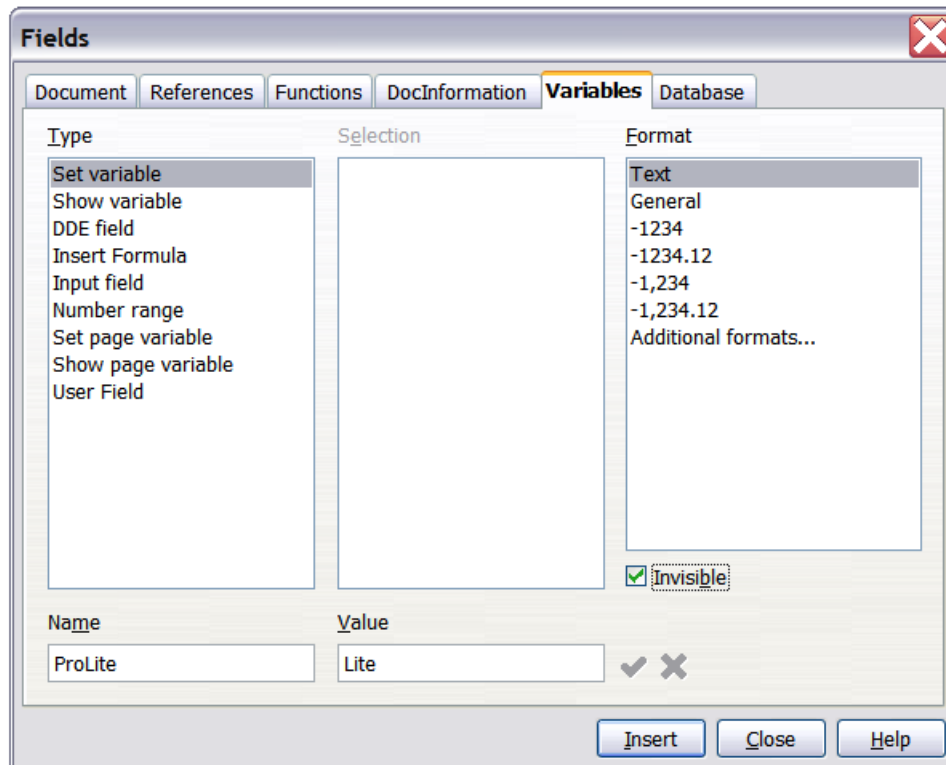


Figure 369: Defining a variable to use with conditional content

- 5) A small gray mark should be visible where you inserted the field. Hover the mouse pointer over this mark and you will see the field formula  $ProLite = Lite$ . We will come back to this field later.

---

**TIPS** Because the gray mark is so small, you may have trouble finding it again, especially if you have other fields in the document. You may prefer to leave the variable field visible while you work, and change it to invisible just before you create final copy.

At any time, you can place the insertion point just before the field and click **Edit > Fields** or right-click the field, and then click **Fields** on the pop-up menu. On the Edit Fields dialog box (Figure 373), select or deselect the **Invisible** checkbox.

---

## Apply the condition to the content

Now that you have defined the variable, you can use it in a condition statement. This topic describes some of the possibilities.

### Conditional text

First, let us set up some conditional text that will insert the words “**Great Product Lite**” into the Lite version and “**Great Product Pro**” into the Pro version of the manual. You would use this field whenever you want to mention the name of the product.

- 1) Place the cursor where you want one of these phrases to appear. (You can move or delete it later, if you wish.)
- 2) Open the Fields dialog box by clicking **Insert > Fields > Other**, select the *Functions* tab, and select **Conditional text** in the *Type* list.
- 3) As shown in Figure 370, type **ProLite EQ "Lite"** in the *Condition* box, **Great Product Lite** in the *Then* box, and **Great Product Pro** in the *Else* box.

---

**Note** These fields are case-sensitive, and quotation marks are required around a text value such as **Lite**.

---

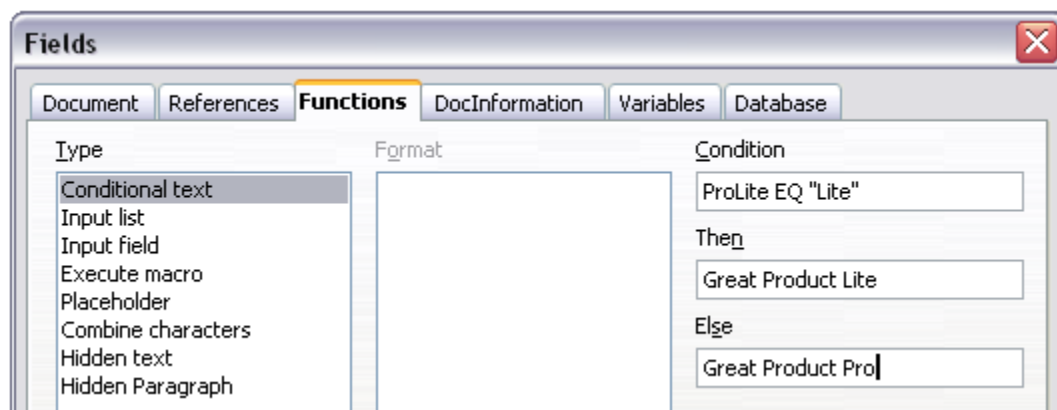


Figure 370: Inserting conditional text

- 4) Click **Insert** to insert the field, then click **Close**. You should see **Great Product Lite** in your text.

---

**Tip** If you want to insert this field into your text in many places (as you probably would for a product name), create an AutoText entry for it. See “Using AutoText to insert often-used fields” on page 344 for instructions.

---

## Hidden text

You might use hidden text for words or short phrases that describe features of Great Product Pro that are not found in the Lite version. You can reuse the same field in several places in your document—for example, by copying and pasting it.

To create a hidden text field:

- 1) Click **Insert > Fields > Other** and select the *Functions* tab.
- 2) Select **Hidden text** in the *Type* list, as shown in Figure 371.
- 3) Type **ProLite EQ "Lite"** in the *Condition* box and type the required text in the *Hidden text* box. Remember, this is the text that is *hidden* if the condition is true.
- 4) Click **Insert** to create and insert the field.

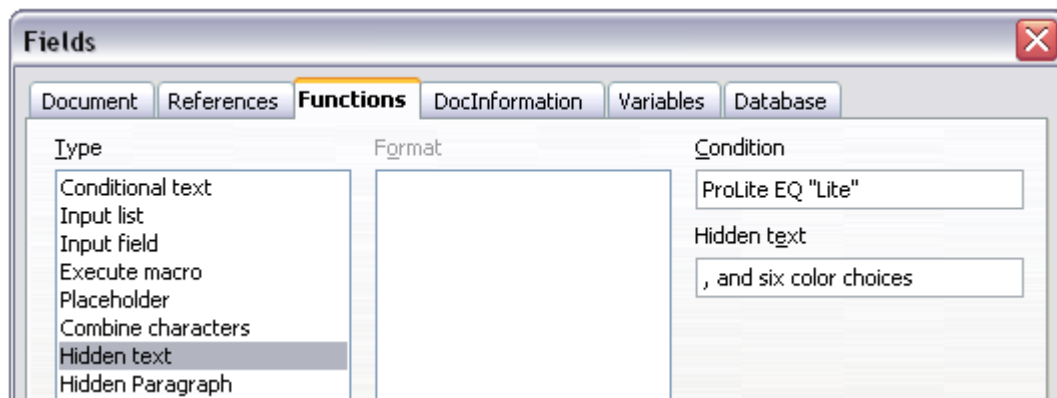


Figure 371: Creating a condition for hidden text

## Hidden paragraphs

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**Tip** To enable hidden paragraphs, remove the check mark from **View > Hidden Paragraphs**. When this option is selected, you cannot hide any paragraph.

---

A paragraph is hidden if the condition is true. To hide a paragraph:

- 1) Click in the paragraph to be hidden.
- 2) Click **Insert > Fields > Other** and select the *Functions* tab (Figure 371).
- 3) Select **Hidden paragraph** in the *Type* list.
- 4) For this example, type **ProLite EQ "Lite"** in the *Condition* box.
- 5) Click **Insert** to create and insert the field. If an extra paragraph mark appears, delete it.



## Hidden sections

A conditional section is hidden if the condition is true. To create a conditional section:

- 1) Select the text that you want to be included in the conditional section. (You can edit this text later, just as you can edit any other text.)
- 2) Click **Insert > Section**. On the Insert Section dialog box (Figure 372), select the **Hide** checkbox and enter the condition in the *with Condition* box. You can also give the section a name, if you wish. Click **Insert** to insert the section into your document.

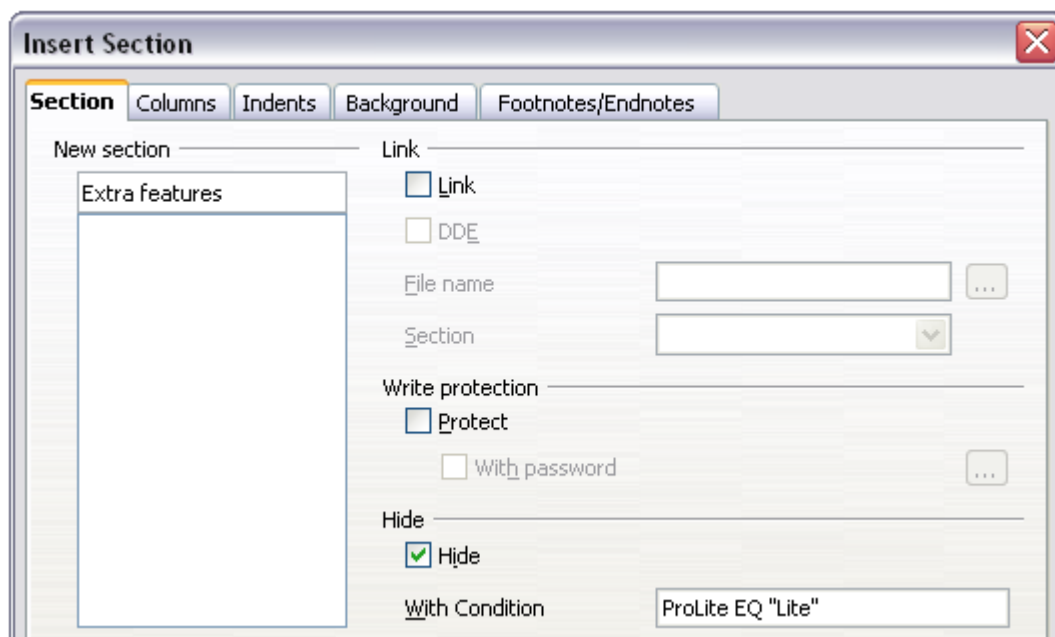


Figure 372: Creating a section to be hidden when a specified condition is met

To show the hidden section so you can edit it:

- 1) Click **Format > Sections**.
- 2) On the Edit Sections dialog box, select the section from the list.
- 3) Deselect the **Hide** checkbox, and then click **OK**. You can now edit the contents of the section. Afterwards, you can click **Format > Sections** again and select the **Hide** checkbox to hide the section again.

To make the hidden section a normal part of the document (that is, to remove the section markers, but not the contents of the section):

- 1) Show the hidden section, as described above.
- 2) On the Edit Sections dialog box, select the section from the list.
- 3) Click **Remove**. The contents of the section are now a normal part of the document.

## Change the value of the variable

- 1) Find the variable field you created in “Create the variable” on page 355.
- 2) Click once just in front of this field, then right-click and click **Fields** on the pop-up menu.
- 3) On the Edit Fields: Variables dialog box (Figure 373), change the value of the variable to **Pro**.
- 4) If you have set fields to update automatically, all of the conditional and hidden text that uses this variable as a condition will change.

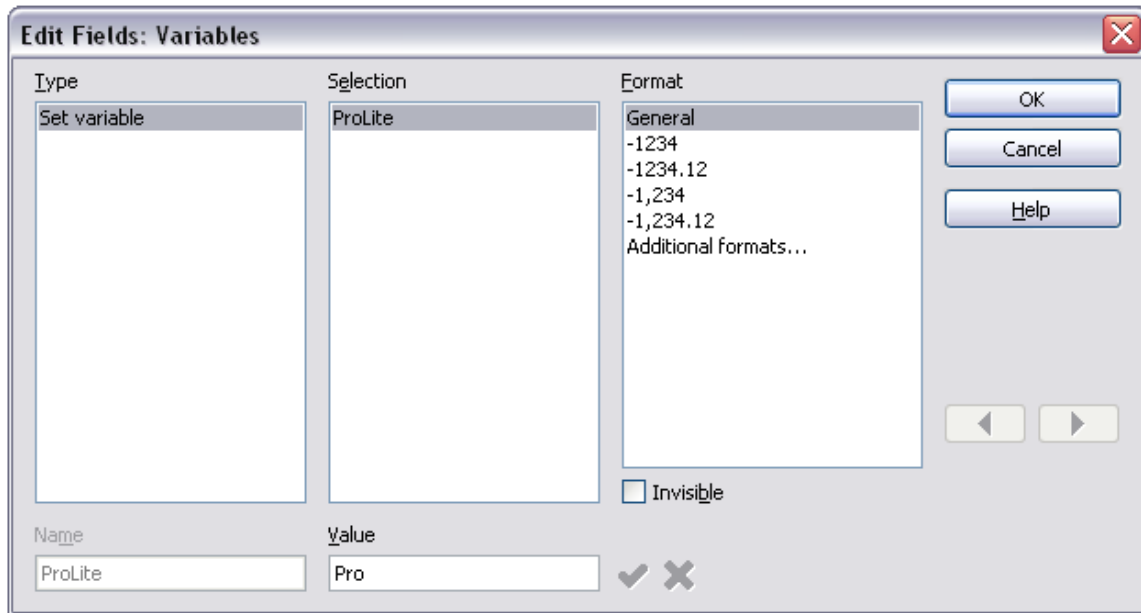


Figure 373: Changing the value of the variable

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**Tip** To turn on automatic updating of fields, click **Tools > Options > OpenOffice.org Writer > General**, and select **Fields** under **Update: Automatically**.

---

## Editing hidden paragraphs and sections

To show all the hidden paragraphs and sections so you can edit their contents, change the value of the variable to something that the conditions will not recognize. In our example, you could change the value to **1**.

The technique does not affect the display of hidden and conditional text, which can only be edited in the Edit Fields dialog.

## Using placeholder fields

A placeholder field prompts you to enter something (text, a table, a frame, a graphic, or an object).

To insert a placeholder field into a document:

- 1) On the *Functions* tab of the Fields dialog box, select **Placeholder** in the *Type* column and select what the placeholder is for in the *Format* column.
- 2) In the *Placeholder* box, type the text that you want to appear in the placeholder field.
- 3) In the *Reference* box, type the text that you want to display as a help tip when you rest the mouse pointer over the field.

Figure 374 shows the results of inserting a placeholder field for a graphic.

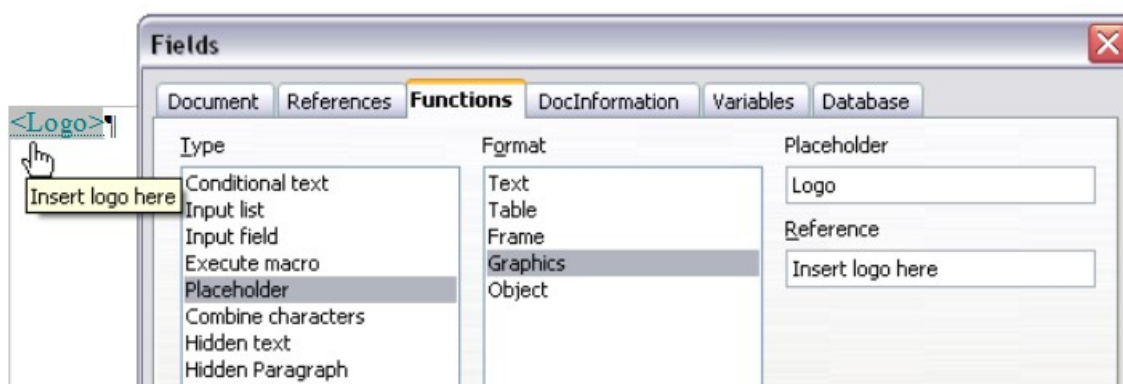


Figure 374: Inserting a placeholder field

Because the `<Logo>` field is a graphics placeholder, when you click on the field in the document, the Insert picture dialog box opens, prompting you to select a graphic (picture). When you select a picture and click **Open**, the picture replaces the field in the document.

Similarly, clicking on a table placeholder field opens the Insert Table dialog box, clicking on a frame placeholder field opens the Frame dialog box, and clicking on an object placeholder field opens the Insert OLE Object dialog box. The text placeholder field is different: you simply click on it and type some text in the *Placeholder* box, which replaces the field.



*Chapter 15*  
*Using Forms in Writer*

## Introduction

---

This chapter covers the use of forms within Writer documents. Most of the information here also applies to forms in other OpenOffice.org components, but there are some differences.

The chapter presents information on using forms in four main sections: setting up a basic form, an example for creating a form, linking a form to a data source and finally some advanced techniques.

OpenOffice.org forms cover a lot of ground and not everything is included here. Notable omissions are using forms in HTML documents and writing macros to link to form controls.

## When to use forms

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A standard text document displays information: a letter, report or brochure, for example. Typically the reader may edit everything or nothing in any way. A form has sections that are not to be edited, and other sections that are designed for the reader to make changes. For example, a questionnaire has an introduction and questions (which do not change) and spaces for the reader to enter answers.

OpenOffice.org offers several ways to fill information into a form, including checkboxes, option buttons, text boxes, pull-down lists and spinners.

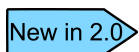
Forms are used in three ways:

- To create a simple document for the recipient to complete, such as a questionnaire sent out to a group of people who fill it in and return it.
- To link into a database or data source and allow the user to enter information. Someone taking orders might enter the information for each order into a database using a form.
- To view information held in a database or data source. A librarian might call up information about books.

Using forms to access a database offers a fast and easy way to build up complex graphical front ends. Your form can include not only the fields that link up to the data source but also text, graphics, tables, drawings and other elements.

## Alternatives to using forms in Writer

In OpenOffice.org version 1.x, forms were the only way to access a data source. In version 2.0 the Base component provides an alternative way of achieving this. There are a lot of similarities between forms in Base and Writer, but it may be that one is better for a particular task than the other. Base is appropriate only if the form accesses a data source; you would not use it for simple forms.



OOo2.0 now includes Base—the database component. You can create databases and forms in Base.

---

Most other OpenOffice.org components—Calc, Impress and Draw—also support forms in almost exactly the same way as Writer does.

## Creating a simple form

This section explains how to create a simple form without any links to a data source or database and without advanced customization.

### Create a document

There is nothing special to be done when creating a document to use as a form. Create a new Writer document with **File > New > Text document**.

### Form toolbars

Two toolbars control form creation: Form Controls and Form Design. Select **View > Toolbars > Form Controls** and **View > Toolbars > Form Design** to show them both. See “Form controls reference” on page 367 for a summary of the tools on these toolbars.

**Tips** The Form Design toolbar can also be launched from the Form Controls toolbar. Some of the less commonly used controls are on a third toolbar—More Controls—also launched from the Form Controls toolbar.

You can dock these toolbars in different places on the Writer window, or leave them floating.

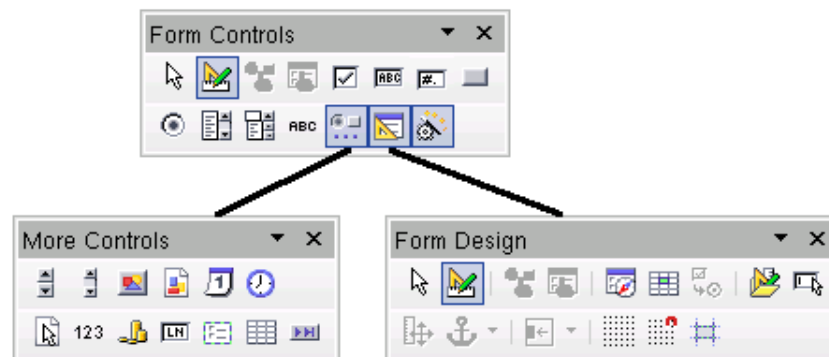


Figure 375: The three form design toolbars

The Form Controls toolbar has a button for each of the most commonly used types of control.

**Note** In OpenOffice.org form controls are the text boxes, list boxes, option buttons, push buttons and other items that can be placed in forms.

## Design Mode

When creating a form, you will want to check that all the parts of the form work correctly. If design mode is off, the form behaves as it would for the end user. Buttons can be pressed, checkboxes checked and list items selected. If design mode is on, clicking on a control item selects it for editing.


Click the **Design Mode On/Off** button  on the Form Controls toolbar to turn design mode on and off.


---

**TIP** If the Design Mode button is not available, click on the Select button. This activates most of the tools on the three toolbars.

---

## Insert form controls


- 1) To insert a form control into the document, click the control's icon to select it. The mouse pointer changes to look like this: 
- 2) Click in the document where you want the control to appear. (You can move it later.)
- 3) Holding the left mouse button down, drag the control to size it.
- 4) The control button remains active, so you can insert several controls of the same type without needing to go back to the toolbar.
- 5) To change to another tool, click its icon on the toolbar.

To stop inserting controls, click on the Select button  on the Form Controls toolbar, or click on any of the controls you have just inserted. The mouse pointer changes back to its normal appearance.

---

**TIP** Holding down *Shift* when creating a form control makes the control square. If you press *Shift* when resizing an existing control, its proportions are kept the same.

---

**Note** When you insert a group box, list box or combo box, a wizard is launched to guide you through the setup. If you prefer not to run the wizard, click the **Wizards On/Off** button  on the Form Controls toolbar.

---

## Configure controls

Having inserted the controls, you need to configure them to look and behave as you want. Right-click on a form control within your document and select **Control** from the pop-up menu.

The Form Control dialog box (Figure 376) has three tabs: General, Data and Events. For simple forms, only the General tab is of any interest. On this tab you can set the look and feel of the control.

Some controls have other useful options:

- Some controls have visible labels, such as Push Button and Option Button. The label text can be set.
- The List Box contains a list of options to choose from. Set these in the List entries box.

---

**TIP** Double-clicking on a control also brings up the Control Properties dialog box.

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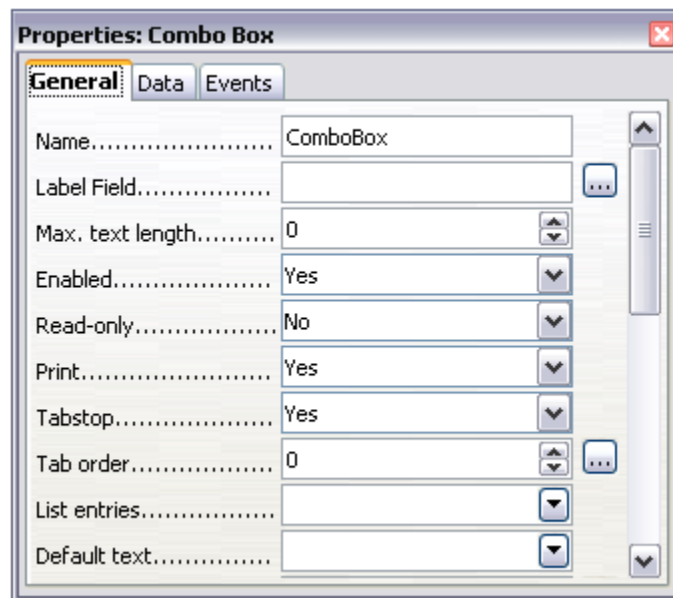


Figure 376: Control Properties dialog box

## Using the form

To use the form, leave design mode by clicking the **Design Mode On/Off** button .

A typical way to use a form is:

- 1) You design the form, then save it when you are happy with it.
- 2) You send the form to others (for example, by email).
- 3) They fill in the form, save it and send it back to you.
- 4) You open the form and see what their answers are.













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**TIP** By using a data source, or setting a form to update over the web, you can automatically gather data. However, both of those are more complex and you might prefer to keep things simple.










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## Form controls reference











<b>Form Control toolbar</b>	
 Select	Select a form control to perform some other action on it.
 Design mode on/off	Toggle between design mode on (to edit forms) and design mode off (to use forms).
 Control	Launch form control properties dialog box. This dialog box can be kept open as different controls are selected.
 Form	Launch form properties dialog box, controlling properties for the form as a whole, such as which data source it connects to.
 Check Box	A box that can be selected or deselected on the form. You can label the box.
 Text Box	Control to create a box into which the form user can type any text.
 Formatted Field	Control allowing numeric formatting options. For example, you can set maximum and minimum values for the number entered, or the number type (decimal places, scientific, currency).
 Push Button	Creates a button that can be linked to a macro. The label is the name that appears on the button.
 Option Button	Creates an option or radio button. When multiple buttons are grouped together, only one can be selected at a time. The easiest way to group multiple buttons is to use the Group Box button on the More Controls toolbar, with wizards enabled.
 List Box	Creates a list of options, as a pull-down menu, that the user can choose from. If wizards are on, creating a list box launches the List Box Wizard. This wizard is only useful if your form is linked to a data source.  If not linked to a data source, turn wizards off and create an empty list box. Then click the Control button and, in the List Entries option on the General tab, enter the options you want to appear on the list.
 Combo Box	As with a List Box, you set up a list of choices. In addition a panel at the top either displays the choice made or allows the form user to type in something else. Otherwise this works the same as the List Box.
 Label Field	A text label. The difference between this and just typing on the page is that, as a control, you can link a label field to macros so, for example, something happens when the mouse passes over it or clicks on it.

<b>Form Control toolbar</b>	
 More Controls	Launch the More Controls toolbar.
 Form Design	Launch the Form Design toolbar (which can also be opened with <b>View &gt; Toolbars &gt; Form Design</b> ).
 Wizards On/Off	Some form controls (List Box and Combo Box) have optional wizards. If you do not want the wizard to launch when you create one of these controls, use the Wizards On/Off button to switch wizards off.

<b>More Controls toolbar</b>	
 Spin Button	<p>A spin button allows form users to choose a number by cycling through the numbers. Specify maximum, minimum, default and the step between numbers.</p> <p>This control is not commonly used in Writer, as the number is not displayed. In Calc, however, a Data tab appears on the Control Properties dialog box, allowing you to link the spin button to a cell.</p>
 Scrollbar	<p>Creates a scrollbar, with a number of options to define the exact appearance.</p> <p>This control is not commonly used in Writer. In Calc, a Data tab appears on the Control Properties dialog box, allowing you to link the scroll bar to a cell.</p>
 Image Button	Behaves exactly like a push button, but displays as an image. Choose the image in the Graphics option on the General tab in the Control Properties dialog box.
 Image Control	Only useful when the form is connected to a data source and a field in the data source exists that can hold images. You can add new images to the database or retrieve and display images from it.
 Date Field	Holds a date. Configure the earliest and latest dates the field will accept, the default date and the date format. You can add a spinner.
 Time Field	Works like a date field, specifying a time.
 File Selection	Allows a user to select a file, either by typing the path and name directly or by clicking on a Browse button and choosing the file from a dialog box.
 Numeric Field	Displays a number. Specify formatting, maximum, minimum and default values. You can add a spinner.
 Currency Field	Works like a numeric field; additionally you can add a currency symbol.

<b>More Controls toolbar</b>	
 Pattern Field	<p>Pattern fields are useful when the form links into a data source. Specify an Edit Mask to restrict what a user can enter into the field. Specify a Literal Mask to restrict which data is displayed from the data source.</p>
 Group Box	<p>The group box control has two different uses depending on whether wizards are on or off.</p> <p>If wizards are on, creating a group box launches the Group Element wizard. This creates a group of option buttons (in which only one may be selected at a time). In most cases, using a group box is the best way to create a set of option buttons.</p> <p>If wizards are off, a group box is simply a visual box to group together different controls. It has no effect on the way the controls operate.</p>
 Table Control	<p>Table Control is only useful with a data source. If no data source is specified, you will be prompted to choose one in the Table Element Wizard.</p> <p>You then pick the fields to display and, when design mode is off, the data appears in the table. The table also includes controls to step through the records.</p> <p>Records can be added, deleted and modified in the table.</p>
 Navigation Bar	<p>A navigation bar is the same as the Form Navigation toolbar (<b>View &gt; Toolbars &gt; Form Navigation</b>), but can be placed anywhere in the document and be resized.</p>

<b>Form Design toolbar</b>	
 Select	<p>Select a form control to perform an action on it.</p>
 Design mode on/off	<p>Toggle between design mode on (to edit forms) and design mode off (to use forms).</p>
 Control	<p>Launch form control properties dialog box. This dialog box can be kept open as different controls are selected.</p>
 Form	<p>Launch form properties dialog box, controlling properties for the form as a whole, such as which data source it connects to.</p>
 Form Navigator	<p>The Form Navigator is a nice utility, displaying all the forms and controls in the current document, allowing you to edit and delete them easily.</p> <p>If you use the Form Navigator, it's a good idea to give your controls names (in the properties dialog box). The name appears in the navigator so, for example, if you have ten text boxes, you can tell which is which.</p>

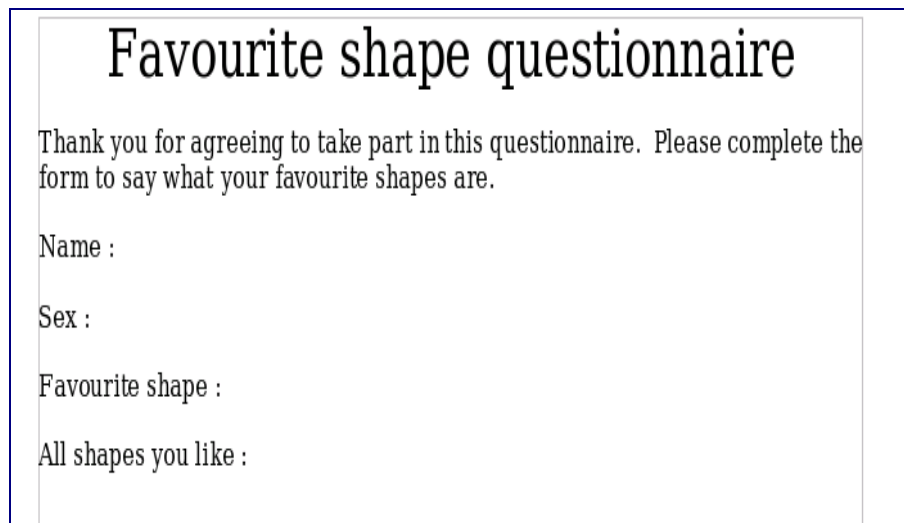
<b>Form Design toolbar</b>	
 Add Field	<p>Add Field is only useful if you have specified a data source for the form. If no data source is specified, an empty box opens.</p> <p>If you have specified a data source, Add Field opens a list of all the fields in the specified table, which you can then drag and drop onto the page. The fields are placed on the page with the name of the field before them.</p> <p>This is a quick and easy way to create a form from a data source.</p>
 Activation Order	<p>Allows you to specify the order in which focus shifts between controls. You can test the order by leaving design mode and using <i>Tab</i> to switch between the controls.</p>
 Open in Design Mode	<p>Open the current form in design mode (to edit the form rather than entering data into it).</p>
 Automatic Control Focus	<p>If activated, focus is set to the first form control.</p>
 Position and Size	<p>Launches the Position and Size dialog box, allowing you to specify both by typing in precise values, rather than dragging the control. You can also lock the size or position, so they do not get changed accidentally. For some controls, you can rotate and set the slant and corner radius.</p>
 Change Anchor	<p>Just as with a frame, any form control can be anchored to page, paragraph or character and also anchored as a character (meaning that it behaves like any other character on the page).</p>
 Alignment	<p>The Alignment button is disabled unless the control is anchored as a character. You can align a control in different ways, for example so the top of the control lines up with the top of the text or the bottom lines up with the bottom of the text.</p>
 Display Grid	<p>Display a grid of dots on the page, to help you line up controls.</p>
 Snap to Grid	<p>When a control is brought close to a grid point or line, it will snap to the grid. This makes it easier to line up controls.</p>
 Guides when Moving	<p>When a control is being moved, lines extend from the control horizontally and vertically to help you position it accurately.</p>

## Example: a simple form

---

### Create the document

Open a new document (**File > New > Text Document**). It is a good idea to write down the outline of the document, without form controls, though of course it can easily be changed later.



The image shows a document window with a title bar. The title is "Favourite shape questionnaire". The main content area contains the following text:

Thank you for agreeing to take part in this questionnaire. Please complete the form to say what your favourite shapes are.

Name :

Sex :

Favourite shape :

All shapes you like :


Figure 377: Initial document without form controls







### Add form controls

The next step is to add the form controls to the document. We will have four controls:

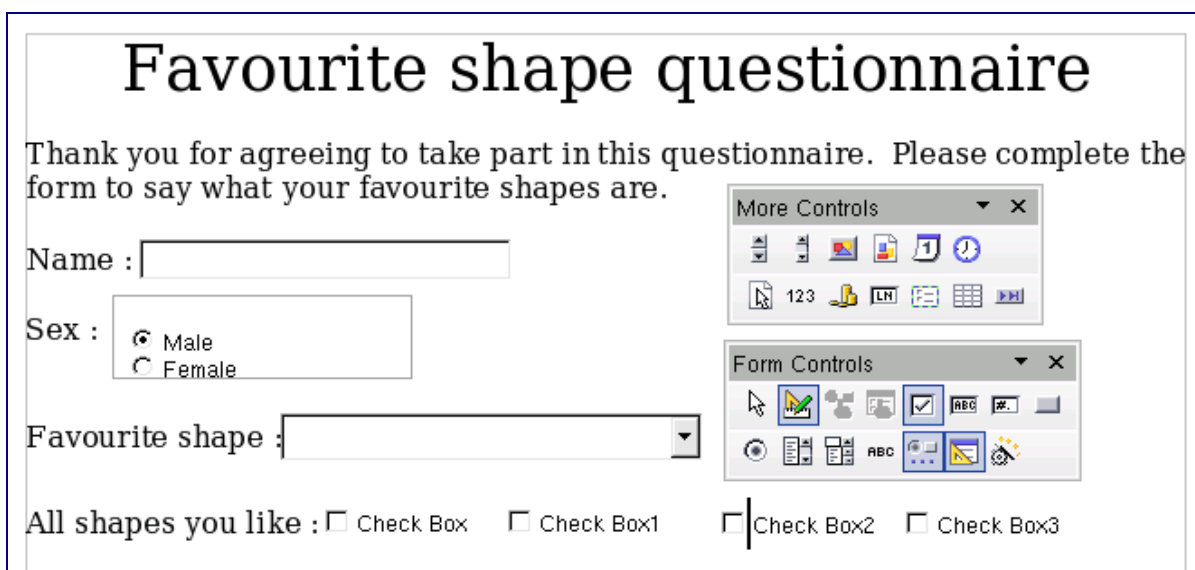
- **Name** is a text box
- **Sex** is two option buttons, male or female.
- **Favourite shape** is a list of options.
- **All shapes you like** is a series of check boxes.

To add these controls:

- 1) Select **View > Toolbars > Form Controls** to open the Form Control toolbar.
- 2) If the tools are not active, click the **Form Navigator** button (on the Form Control toolbar) to activate them. If necessary, also click the **Design Mode On/Off** button.
- 3) Click the Text Box button , then click in the document and, with the left mouse button held down, drag the shape of the Name text box to approximately the size you want.

- 4) Make sure the **Wizards On/Off** button  is on (shaded with a border). Click the More Controls button  to launch the More Controls toolbar.
- 5) On the More Controls toolbar, click the Group Box button . Draw a group box by the Sex: entry to launch the Group Element Wizard.
- 6) On the first page of the wizard, enter two names for the options fields: Male and Female. Click **Next>>** three times, delete the caption and click **Finish**.
- 7) Now create the list box. On the Form Controls toolbar, click the **Wizards On/Off** button  to turn wizards off. Click the **List Box** button  and draw a list box by Favourite Shape: in the document. This will just be an empty pane for now.
- 8) Finally create four check boxes by All the shapes you like. Click on the **Check Box** button  and then draw out four check boxes, side by side across the page.

You should now have a document looking something like this:



**Favourite shape questionnaire**

Thank you for agreeing to take part in this questionnaire. Please complete the form to say what your favourite shapes are.

Name :

Sex :  Male  
 Female

Favourite shape :



All shapes you like :  Check Box  Check Box1  Check Box2  Check Box3

Figure 378: Document with form controls

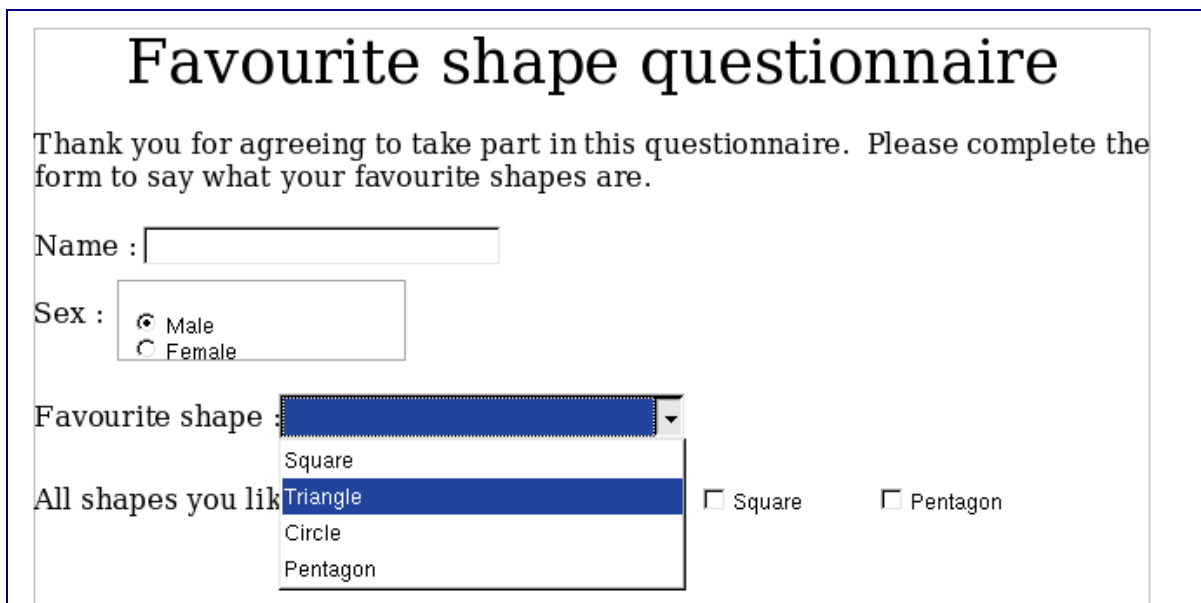
## Configure form controls

No further configuration is required to the Name and Sex fields (though, of course, there is configuration that could be done if you wanted, such as giving a name to each control and changing the appearance of the controls).

The list box must be configured to add the list of options. The check boxes must be configured to add in the names (instead of Check Box, Check Box1...)

- 1) Click on the List Box control within the document and then the Control button  on the Form Design toolbar to launch the control properties dialog box. Select the General tab.
- 2) In the List Entries box, enter the names of the shapes: Circle, Triangle, Square and Pentagon. Type in one shape and press *Enter*. Then position the cursor at the end of the line to type in the next shape. You should end up with a line saying “Circle”;”Triangle”;”Square”;”Pentagon”.
- 3) Click on the first Check Box. The Properties dialog box stays open but changes to show the properties for the check box.
- 4) Change the Label to Circle and press *Enter*. The label on the check box will change immediately.
- 5) Click on each of the other three check boxes in turn. Change the Label in the Properties dialog box to Triangle, Square and Pentagon in turn.
- 6) Close the Properties dialog box.
- 7) Turn Design Mode off  and close the two Controls toolbars.

You have now completed the form and your form hopefully looks something like this:



The screenshot shows a form titled "Favourite shape questionnaire". Below the title is a paragraph: "Thank you for agreeing to take part in this questionnaire. Please complete the form to say what your favourite shapes are." The form contains the following fields:

- A text input field labeled "Name :".
- A radio button group labeled "Sex :" with options "Male" (selected) and "Female".
- A dropdown menu labeled "Favourite shape :" with a list of options: "Square", "Triangle" (highlighted), "Circle", and "Pentagon".
- Two checkboxes labeled "Square" and "Pentagon".

Figure 379: Completed form

## Finishing touches

The form is complete, but you are free to make further changes to the document. If you were sending this out to other people to complete, you would probably want to make the document read-only. The effect would be that users would be able to fill in the form, but not to make any other changes to the document.

To make the document read-only, select **Tools > Options > OpenOffice.org > Security > Open this document in read-only mode.**

---

**Note** If the document is read-only, anyone filling in the form will need to use **File > Save as** to save the document.

---

## Accessing data sources

The most common use for a form is as the front end of a database. You can provide a form that allows users to enter information into a contacts database and, because it is part of a Writer document, the form can contain all the graphics, formatting, tables and other elements to make it look just the way you want. Even better, modifying the form is as simple as editing a document.

OpenOffice.org can access numerous data sources. These include ODBC, MySQL, Oracle JDBC, spreadsheets and text files. As a general rule, databases can be accessed for read and write; other data sources (such as spreadsheets) are read-only.

---

**TIP** To see the full list of supported data source types, select **File > New > Database.** Click Connect to an existing database and then click the triangle next to the list box.

---

## Creating a database

The chapter titled “Getting Started with Base” in the *Getting Started* guide covers in more detail how to create a database. We will give a short guide here to creating a very simple database with OOo Base.

- 1) Select **File > New > Database** to start the Database Wizard (Figure 380).
- 2) Select **Create a new database** and click **Next**.
- 3) On the next page, select **Yes, register the database for me** and **Open the database for editing**. Registering the database just means that it can be accessed from other OOo components such as Writer and Calc. You need to do this if you want to link your forms into it.
- 4) Click **Finish** and save your new database, giving it a name. Unlike creating other documents in OOo, databases have to be saved when you first create them.

After saving the database, you should see the main Base window (Figure 381), which contains three panels. The left-hand panel is Database, with icons for Tables, Queries, Forms and Reports.





Figure 380: Database Wizard

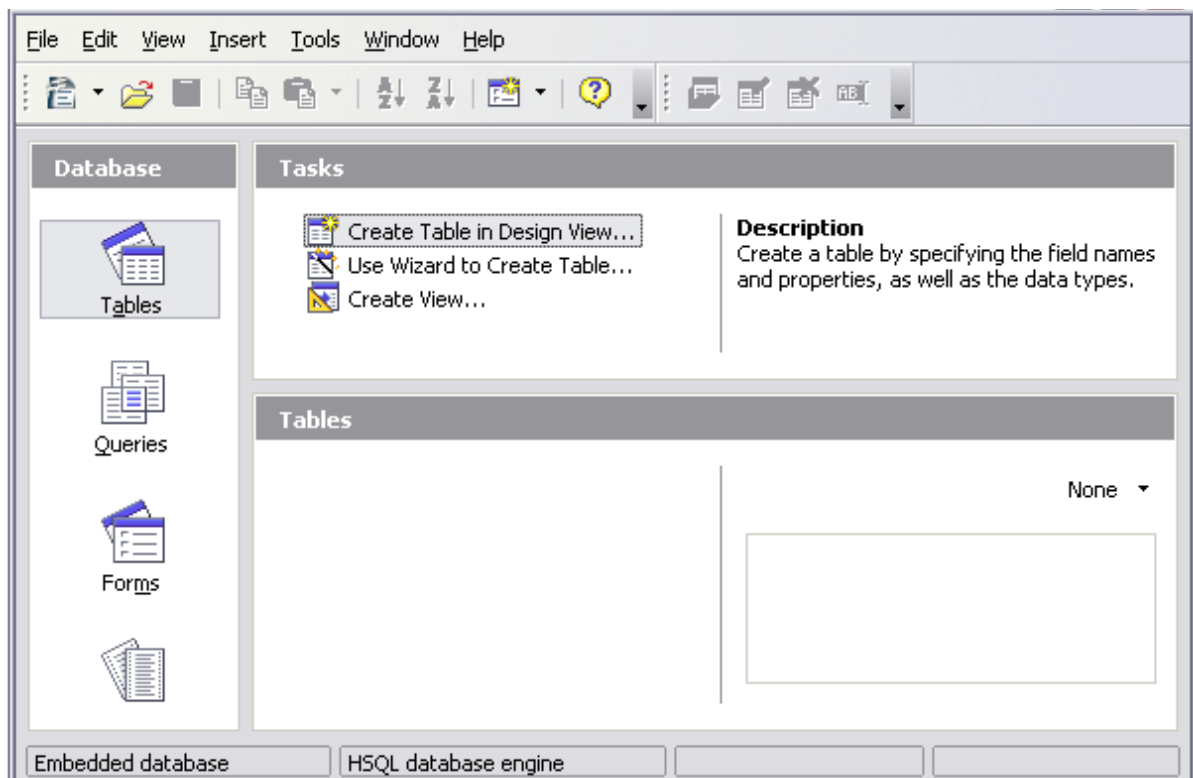


Figure 381: Main Base window

The next step is to create a table. Again, this is covered in more detail in the “Getting Started with Base” chapter in the *Getting Started* guide. Here we are going to create a small table as an example.

- 1) Choose **Tables** in the left-hand column, then choose **Create Table in Design View** under Tasks.

Use the Table Design window (Figure 382) to tell Base which fields to create. We will have just three fields: Name, Address and Telephone.

- 2) On the first line, enter under Field Name *ID* and set the Field Type to *Integer [INTEGER]*. In the gray box at the left of the line, right-click and select **Primary Key**, bringing up a key icon in the box. In the **Field Properties** at the bottom of the window is an **Auto Value** option; change this to *Yes*.

---

**TIP** Setting up the Primary Key field with Auto Value set to Yes is an important step. If this is not done, the form you create later will be much trickier to use and may generate errors for the user. Make sure you get this step right!

---

- 3) On three lines, enter under Field Name *Name*, *Address* and *Telephone*. Accept the default Field Type of Text [VARCHAR] and leave Description blank.
- 4) Save the table (**File > Save**). You will be prompted to name it (the name can be anything you like).
- 5) Finally, save the whole database from the main Base window (**File > Save**).

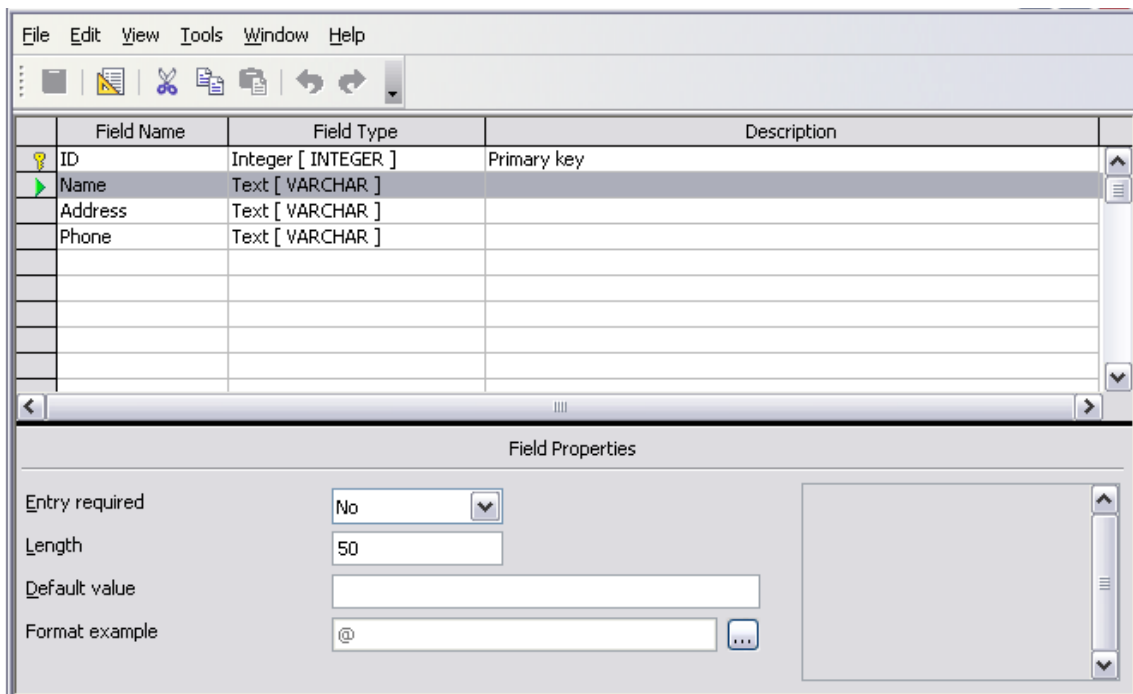


Figure 382: Database table design

## Accessing an existing data source

If you have an existing data source, such as a spreadsheet or database, you simply need to tell OpenOffice.org about it. This is called registering a data source.

To register an existing data source:

- 1) Select **File > New > Database** to launch the Database Wizard (Figure 383).
- 2) Select **Connect to an existing database** and choose the type from the drop-down list.

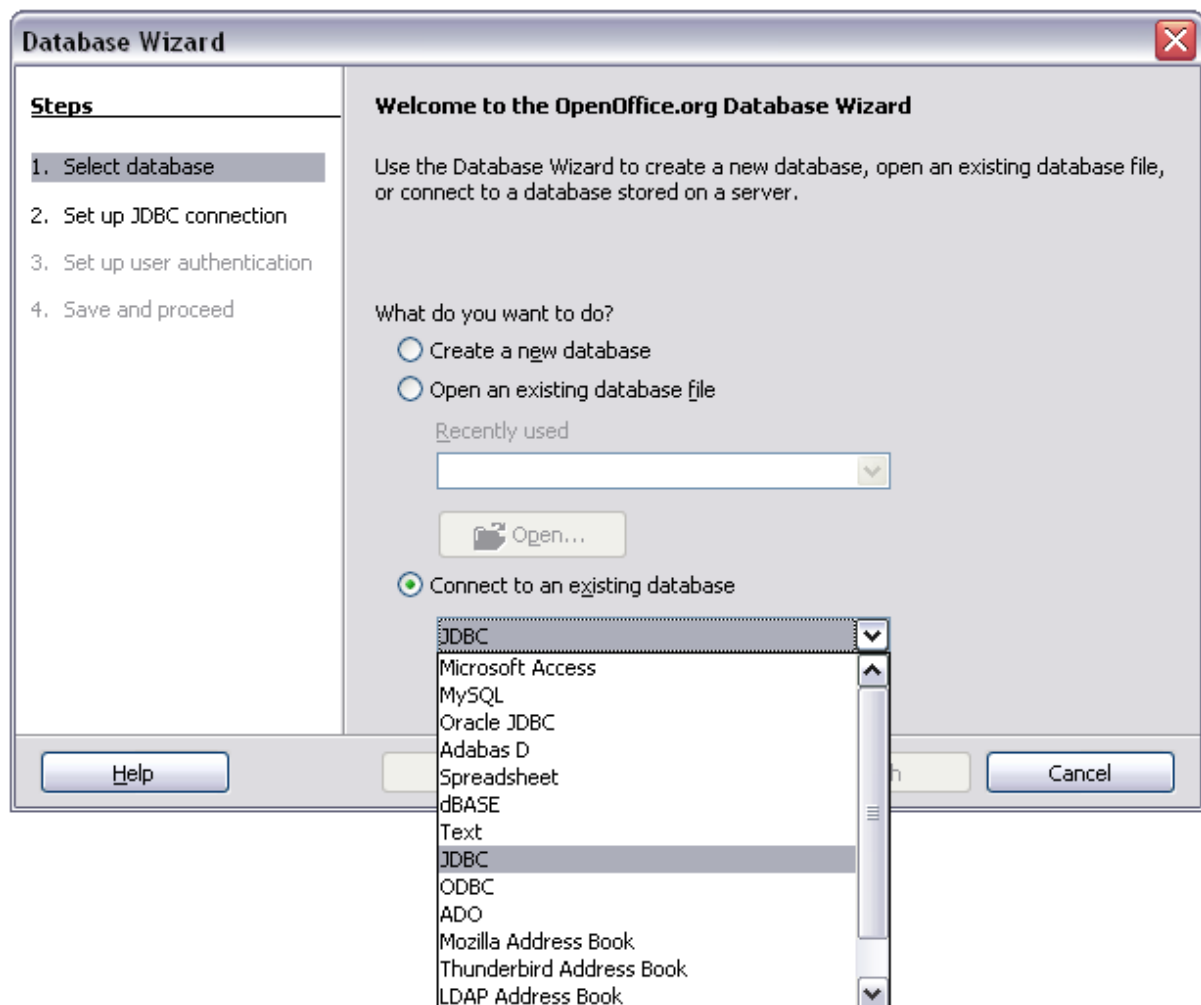





Figure 383: Using the Database Wizard to connect to an existing database



- 3) Click **Next** and follow the instructions to select the database to register (the exact process varies between different types of data source).
- 4) In Step 3: Save and proceed, check that **Yes, register the database for me** is selected. Deselect **Open the database for editing** – you just need to register it, not edit it through Base.

## Creating a form for data entry

Whether you created a new database, or already had a data source, it must be registered with OpenOffice.org (see above). Once it is registered, linking your form to the data source is simple. Follow these steps to create a new form and link it to a registered data source.

- 1) Create a new document in Writer (**File > New > Text Document**).
- 2) Design your form, without putting in the actual fields (you can always change it later).
- 3) Show the Form Controls toolbar (**View > Toolbars > Form Controls**).
- 4) Click the **Design Mode On/Off** button  to put the document into design mode, if necessary. With design mode off, most of the toolbar buttons are greyed out. If the Design Mode button is also greyed out, click on the **Select** button to activate it.
- 5) Click the **Text Box** button . Click in the document and, holding down the left mouse button, drag the mouse to create a text box for the first form field (for example, Name, if you are linking to the database created above).
- 6) Click the **Text Box** button  again and drag the mouse to draw another field. Additional fields, of any type, can be added in the same way (click and drag).

So far you have followed the same steps you used before when you created your first form. Now you link your form with the data source you registered.

- 1) Launch the **Form Properties** dialog box. You can do this by clicking on the **Form** button  in the **Form Controls** toolbar or by right-clicking on any of the fields you inserted and selecting **Form**. The form button is greyed out unless you have one of the form elements selected. As soon as you select a form element in your document, the Form button becomes clickable.
- 2) In the **Form Properties** dialog box, click on the **Data** tab (Figure 384).
  - Set **Data Source** to be the data source you registered.
  - Set **Content Type** to be Table.
  - Set **Content** to be the name of the table you want to access.
  - Close the dialog box.
- 3) For each form control in turn, launch the **Properties** dialog box. Click on the control to select it (so small green boxes appear around it). Then either right-click and select **Control** or click on the **Control** button  on the **Form Controls** toolbar.

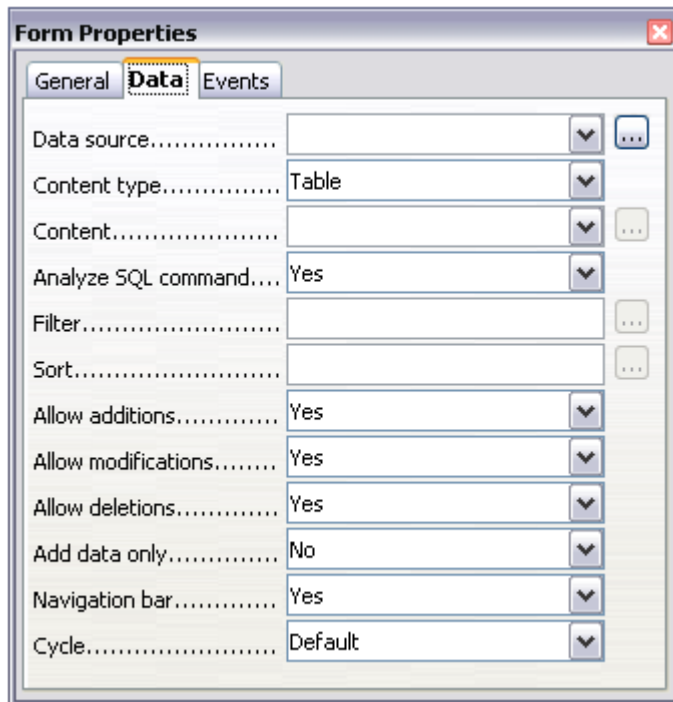


Figure 384: Form properties, connecting to a data source

- 4) In the **Properties** dialog box, click on the **Data** tab (Figure 385). If you set up the form correctly, the **Data Field** option will contain a list of the different fields in the data source (for example, Name, Address and Telephone). Select the field you want.

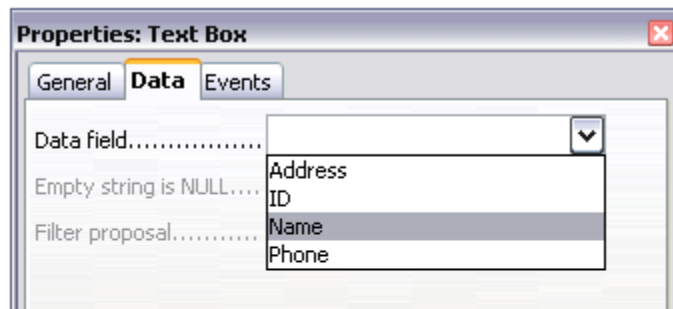


Figure 385: Form control properties, Data tab

- 5) Repeat for each control in turn until every control that should be has been assigned to a field.

---

**TIP** If you created a database in OOO Base and your Primary Key field had **Auto Value** set to *Yes*, that field does not need to be part of the form. If **Auto Value** was set to *No*, you will have to include it and have your users enter an unique value into that field whenever they make a new entry – not something you want.

---

## Entering data into a form

Once you have created a form and tied it to a database, you want to use it to enter data into your data source, or modify data already there.


- 1) Make sure that the form is not in design mode. In the **Form Controls** toolbar, click on the **Design Mode On/Off** button . If design mode is off, most of the buttons on the toolbar will be grayed out.
- 2) Make sure that the Form Navigation toolbar is on (**View > Toolbars > Form Navigation**). The form navigation toolbar normally appears at the bottom of the window.



Figure 386: Form Navigation toolbar

- 3) If there is existing data in the data source, use the control buttons on the Form Navigation toolbar to look at different records. You can amend data in a record by editing the values in the form. To submit the changes, press the *Enter* key with the cursor in the last field. The record is saved and the next record is displayed.
- 4) If there is no data in the form, you can enter it. To submit the new record, press the *Enter* key with the cursor in the last field.
- 5) Other functions can be performed from the Form Navigation toolbar, including deleting a record and adding a new record.

## Advanced form customization

---

### Linking a macro to a form control

You can set any form control (for example, text box or button) to perform an action when triggered by some event. To see the full list of events, right-click on the form control when the design mode is on, select **Control** and click on the **Events** tab (Figure 387).

To assign a macro to an event:

- 1) Create the macro. (See the chapter titled “Getting Started with Macros” in the *Getting Started* guide.)
- 2) Right-click on the form control, select **Control** and click on the **Events** tab.
- 3) Click the **...** button to the right of the event to bring up the **Assign action** dialog box (Figure 388).
- 4) Click **Assign** and select the macro.

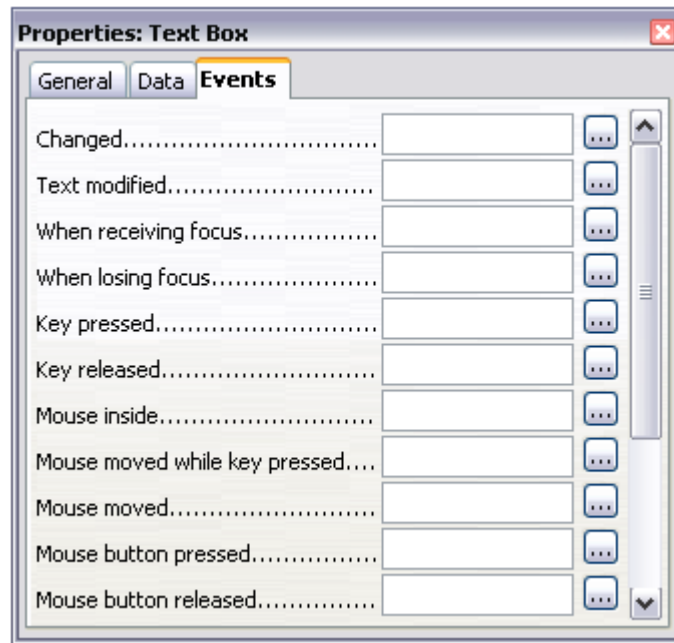


Figure 387: Control properties events tab

Macros can also be assigned to events relating to the form as a whole. To assign these, right-click on a form control in the document, select **Form** and click on the **Events** tab.

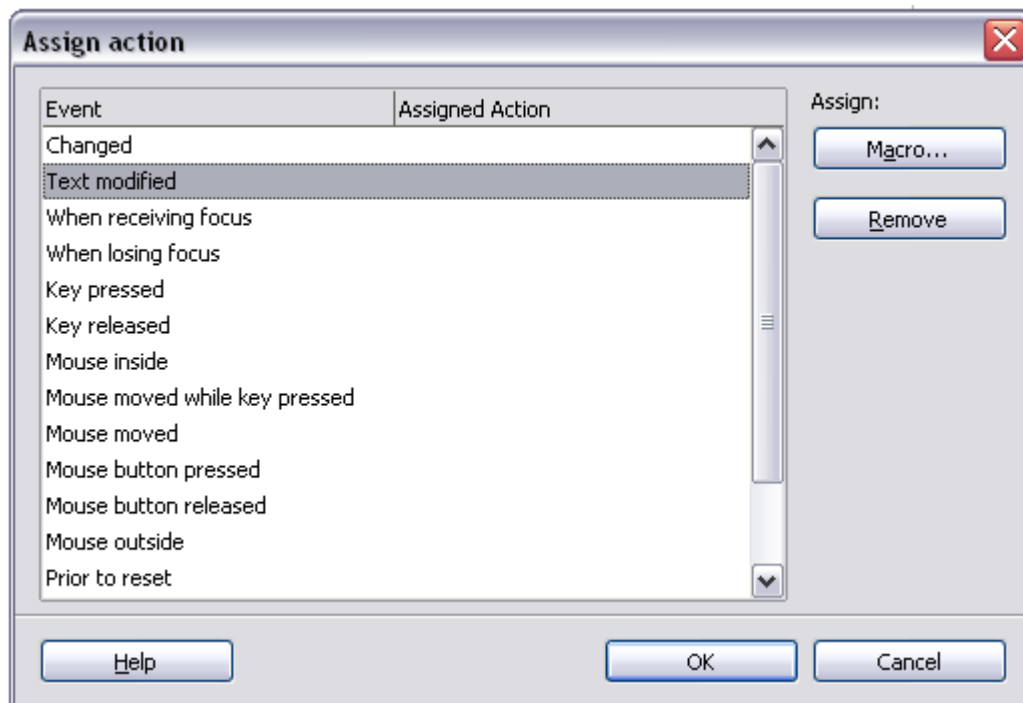


Figure 388: Assign action dialog box

## Read-only documents

Having created your form, you want whoever is using it to be able to access the information stored in the database, or complete the form, without changing the layout. There is an easy way to do this: make the document read-only.

Select **Tools > Options > OpenOffice.org > Security > Open this document in read only mode**.

## Fine-tuning database access permissions

By default, when a database is accessed from a form, any changes can be made to it: records can be added, deleted and amended. You may not want that behaviour. For example, you may want users to be able only to add new records or to be prohibited from deleting existing records.

In design mode, right-click on a form control and select **Form** from the pop-up menu. On the **Data** tab of the **Form Properties** dialog box are a number of options: Allow additions, Allow deletions, Allow modifications and Add data only. Set each of these to *Yes* or *No* to control the access users have to the data source.

Individual fields can also be protected. This might be useful if you wanted a user to be able to modify some parts of a record but only view others, such as a stock list where item descriptions are fixed and quantities can be modified.

To make an individual field read-only, in design mode, right-click on the form control within the document and select **Control** from the pop-up menu. Select the **General** tab and set **Read-only** to *Yes*.

## Form control formatting options

You can customize the way form controls look and behave in a number of ways. These are all accessed in Design mode. Right-click on the form control, select **Control** from the pop-up menu and select the **General** tab in the **Properties** dialog box.

- Set a label for the control in the Label field. Some form controls, such as push buttons and option buttons, have visible labels that can be set. Others, such as text boxes, do not.
- Set whether the form control will print out if the document is printed with the Print option.
- Use the Font setting to set the font, typeface and size for a field.
- For a text box, you can set the maximum text length. This is very useful when adding records into a database. Every database text field has a maximum length and, if the data entered is too long, OOo displays an error message. By setting the maximum text length of the form control to be the same as that of the database field, this error can be avoided.

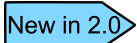


- You can set the default option for a form control. By default, a control is blank, or has every option unselected. You can set the control to start with a particular option or list item selected.
- For controls where a password is being entered, setting the Password character (for example to \*) displays only that character, but saves what the user really types.
- You can add additional information and help text for a form control.
- Other formatting controls such as background color, 3-D look, text formatting, scroll bars and borders allow you to further define how the control appears.

## XForms

---

XForms are a new type of web form, developed by the World Wide Web Consortium (W3C). OpenOffice.org 2.0 supports the XForms 1.0 open standard for creating web forms with XML.



OOo2.0 supports the XForms standard.

---

In OpenOffice.org, an XForms document is a special type of Writer document. XForms use the same controls as the ordinary forms described in this chapter.

After you create and save an XForms document, you can open the document, fill out the form, and submit the changes to a server.

A detailed discussion of XForms is beyond the scope of this chapter.



# *Chapter 16*

## *Math Objects*

*The OpenOffice.org Equation Editor*

## Introduction

OpenOffice.org (OOo) has a component for mathematical equations. It is most commonly used as an equation editor for text documents, but it can also be used with other types of documents or stand-alone. When used inside Writer, the equation is treated as an object inside the text document.

**Note** The equation editor is for writing equations in symbolic form (as in equation 1). If you want to evaluate a numeric value, see the Calc Guide.

$$\frac{df(x)}{dx} = \ln(x) + \tan^{-1}(x^2) \quad (1)$$

## Getting started

To insert an equation, go to **Insert > Object > Formula**.

The equation editor opens at the bottom of the screen, and the floating Selection window appears. You will also see a small box (with a gray border) in your document, where the formula will be displayed.

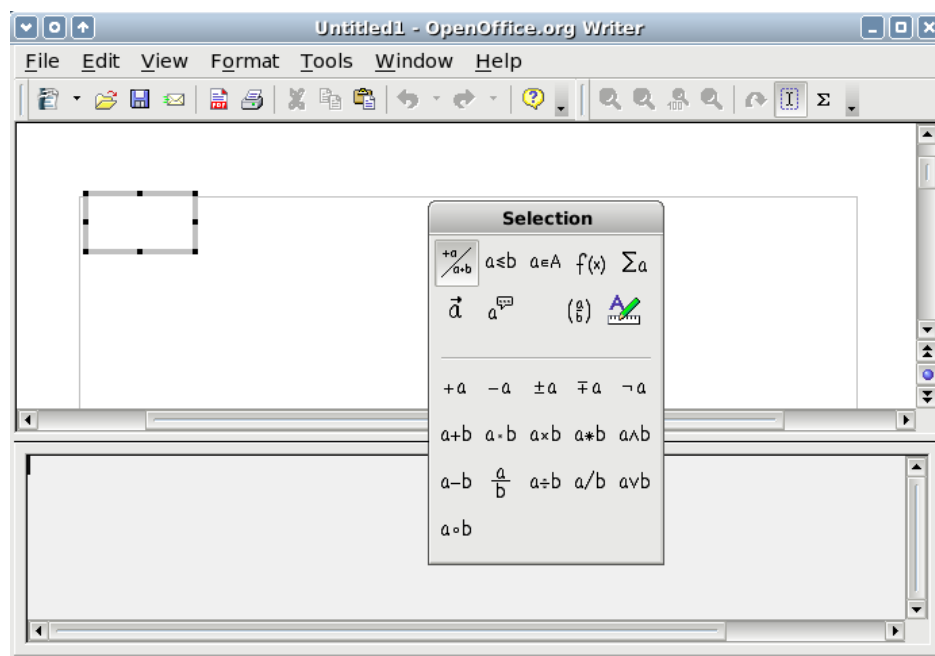


Figure 389. Equation Editor, Selection window, and location of resulting equation.

The equation editor uses a markup language to represent formulas. For example, `%beta` creates the Greek character beta ( $\beta$ ). This markup is designed to read similar to English whenever possible. For example, `a over b` produces a fraction:  $\frac{a}{b}$ .

## Entering a formula

There are three ways to enter a formula:

- Select a symbol from the Selection window.
- Right-click on the equation editor and select the symbol from the context menu.
- Type markup in the equation editor.

The context menu and the Selection window insert the markup corresponding to a symbol. Incidentally, this provides a convenient way to learn the OoMath markup.

---

**Note** Click on the document body to exit the formula editor.  
Double-click on a formula to enter the formula editor again.

---

### The Selection window

The simplest method for entering a formula is the Selection window, shown in Figure 390.

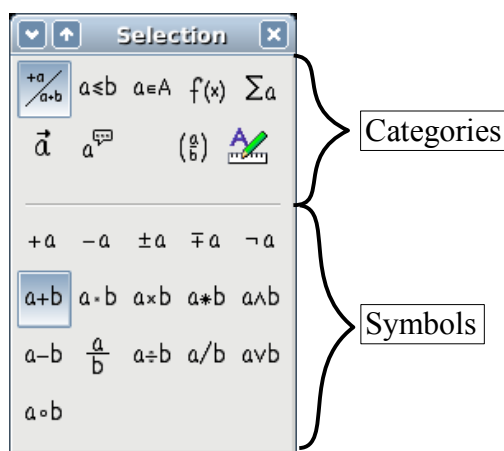


Figure 390. Symbols are divided into categories

The Selection window is divided into two main portions.

- **The top** shows the symbol categories. Click on these to change the list of symbols.
- **The bottom** shows the symbols available in the current category.

---

**TIP** You can hide (or unhide) the Selection window with **View > Selection**.

---

## Example 1: $5 \times 4$

For this example we will enter a simple formula:  $5 \times 4$  On the Selection window:

- 1) Select the top-left button of the categories (top) section (Figure 391).
- 2) Click on the multiplication symbol (shown in Figure 391).

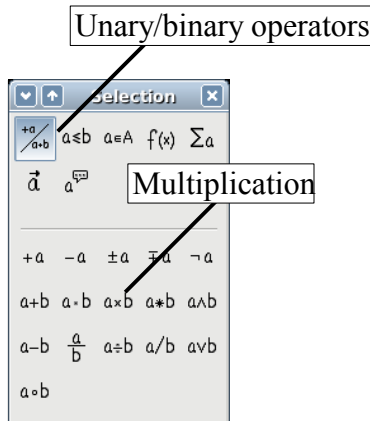


Figure 391. Unary/binary operators

When you select the multiplication symbol on the Selection window, two things happen:

- The equation editor shows the markup:  $\langle ? \rangle \text{ times } \langle ? \rangle$
- The body of the document shows a gray box with the figure:  $\square \times \square$

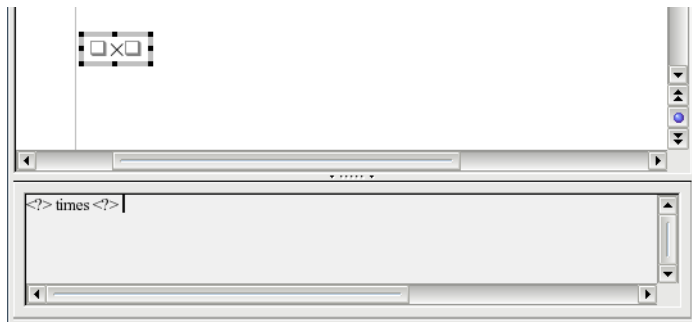


Figure 392. The multiplication symbol

The “ $\langle ? \rangle$ ” symbols (Figure 392) are placeholders that you can replace by other text. The equation will update automatically, and the result should resemble Figure 393.

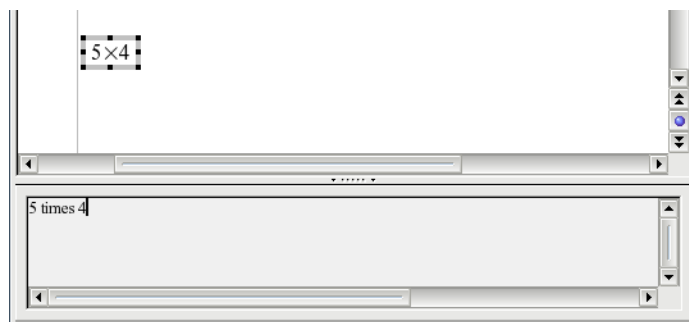


Figure 393. Result of entering "5" and "4" next to the "times" operator

---

**TIP** To keep the equation from updating automatically, select **View > AutoUpdate display**.

To update a formula manually, press *F9* or select **View > Update**.

---

## Right-click menu

Another way to access mathematical symbols is to right-click on the equation editor. This produces a menu as shown in Figure 394.

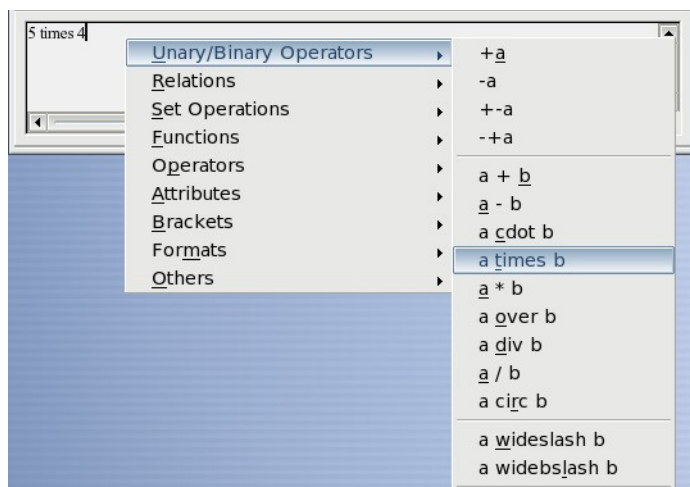


Figure 394. Right-click menu

---

**Note** The entries in this menu correspond exactly to those in the Selection window.

---

## Markup

You can type the markup directly on the equation editor. For example, you can type “5 times 4” to obtain  $5 \times 4$ . If you know the markup, this can be the fastest way to enter a formula.

---

**TIP** As a mnemonic, the formula markup resembles the way the formula reads in English.

---

Below is a short list of common equations and their corresponding markup.

<i>Display</i>	<i>Command</i>	<i>Display</i>	<i>Command</i>
$a = b$	a = b	$\sqrt{a}$	sqrt {a}
$a^2$	a^2	$a_n$	a_n
$\int f(x) dx$	int f(x) dx	$\sum a_n$	sum a_n
$a \leq b$	a <= b	$\infty$	infinity
$a \times b$	a times b	$x \cdot y$	x cdot y

## Greek characters

Greek characters ( $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\theta$ , etc) are common in mathematical formulas. *These characters are not available in the selection box or the right-click menu.* Fortunately, the markup for Greek characters is simple: Type a % sign followed the name of the character, in English.

- To type a *lowercase* character, write the name of the character in lowercase.
- To type an *uppercase* character, write the name of the character in uppercase.

See the table below for some examples:

<i>Lowercase</i>	<i>Uppercase</i>
%alpha → $\alpha$	%ALPHA → $A$
%beta → $\beta$	%BETA → $B$
%gamma → $\gamma$	%GAMMA → $\Gamma$
%psi → $\psi$	%PSI → $\Psi$
%phi → $\phi$	%PHI → $\Phi$
%theta → $\theta$	%THETA → $\Theta$

---

**Note** A complete table of Greek characters is included in page 407.

---

Another way to enter Greek characters is by using the catalog window. Go to **Tools > Catalog**. The catalog window is shown in Figure 395. Under “Symbol Set” select “Greek” and double-click on a Greek letter from the list.

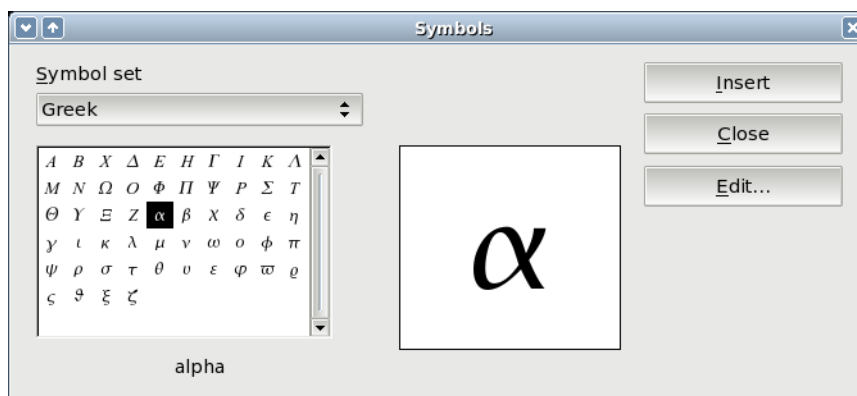


Figure 395. Catalog - used for entering Greek characters

### Example 2: $\pi \simeq 3.14159$

For this example we will suppose that:

- We want to enter the above formula (the value of pi rounded to 5 decimal places).
- We know the name of the Greek character (“pi”).
- But we do not know the markup associated with the  $\simeq$  symbol.

**Step 1:** Type “%” followed by the text “pi”. This displays the Greek character  $\pi$ .

**Step 2:** Open the Selection window (**View > Selection**).

**Step 3:** The  $\simeq$  symbol is a relation, so we click on the relations button  $a \leq b$ . If you hover the mouse over this button you see the tooltip “Relations” (Figure 396).

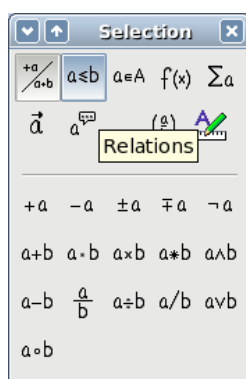


Figure 396. Tooltip indicates the “Relations” button.

**Step 4:** Delete the  $\langle ? \rangle$  text and add “3.14159” at the end of the equation. Hence we end up with the markup “%pi simeq 3.14159”. The result is shown in Figure 397.



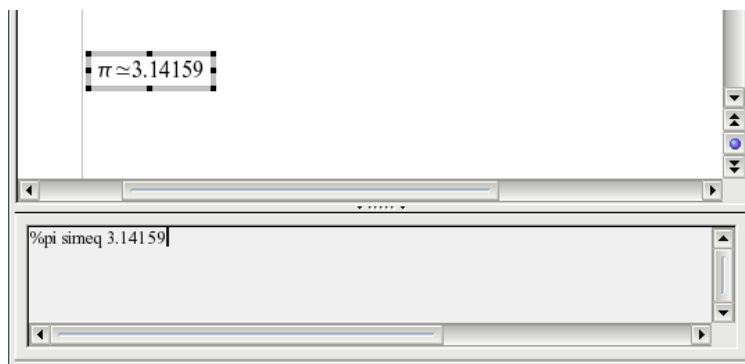


Figure 397. Final result

## Customizations

### Formula editor as a floating window

As seen in Figure 389, the formula editor can cover a large part of the Writer window. To turn the formula editor into a floating window, do this:

- 1) Hover the mouse over the editor frame, as shown in Figure 398.
- 2) Hold down the *Control* key and double-click.

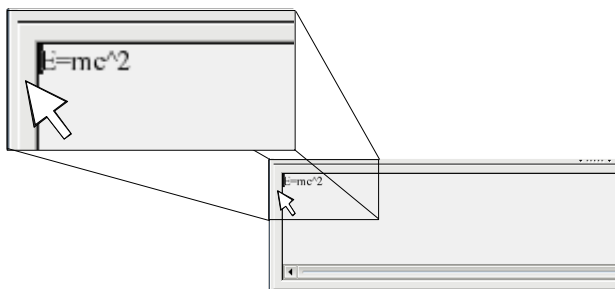


Figure 398. Hold down the *Control* key and double-click on the border of the math editor to turn it into a floating window.

Figure 399 shows the result. You can make the floating window back into an embedded frame, using the same steps. Hold down the *Control* key and double-click the window frame.

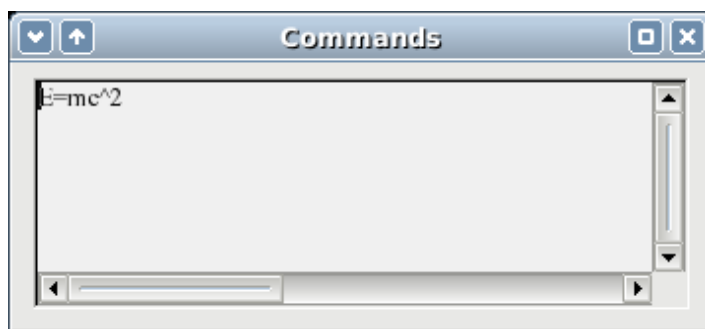


Figure 399. Equation editor as a floating window

## How can I make a formula bigger?

This is one of the most common questions people ask about OOoMath. The answer is simple, but not intuitive:

- 1) Start the formula editor and go to **Fonts > Font size**.

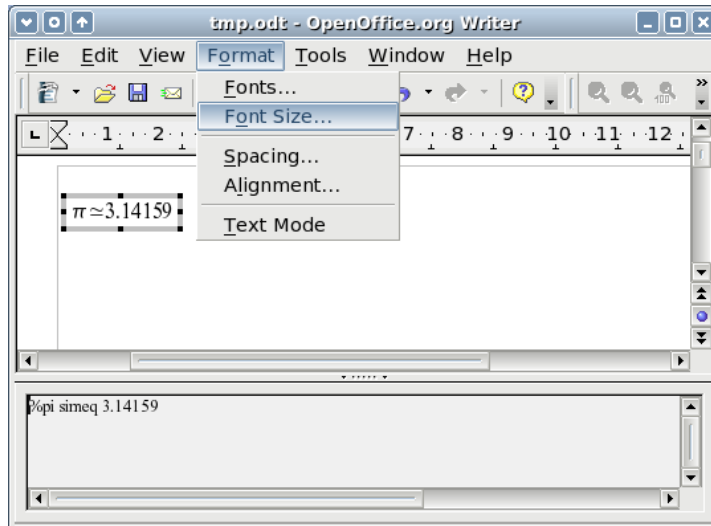


Figure 400. Changing the font size for a formula

- 2) Select a larger font size under “Base Size” (top-most entry), as shown in Figure 401.

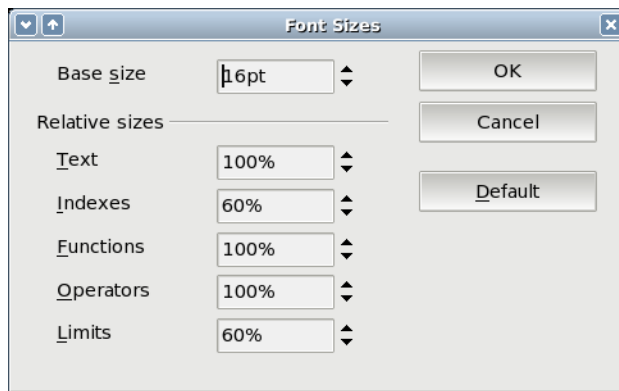


Figure 401. Edit “Base size” (top) to make a formula bigger.

The result of this change is illustrated in Figure 402.

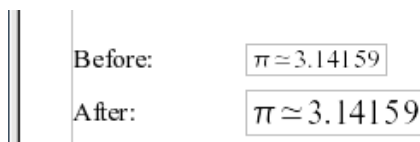


Figure 402. Result of changing the base font size.

## Formula layout

---

The most difficult part of using OOoMath comes when writing complicated equations. This section provides some advice about writing complex formulas.

### Brackets are your friends

OOoMath knows nothing about order of operation. You must use brackets to state order of operations explicitly. Consider the following example:

Markup	Result
<code>2 over x + 1</code>	$\frac{2}{x}+1$
<code>2 over {x + 1}</code>	$\frac{2}{x+1}$

### Equations over more than one line

Suppose you want to type an equation covering more than one line. For example:  $x=3$   
 $y=1$

Your first reaction would be to simply press the *Enter* key. However, if you press the *Enter* key, though the markup goes to a new line, the resulting equation does not. You must type the newline command explicitly. This is illustrated in the table below.

Markup	Result
<code>x = 3 y = 1</code>	$x=3 y=1$
<code>x = 3 newline y = 1</code>	$x=3y=1$

## Common problem areas

### How do I add limits to my sum/integral?

The “sum” and “int” commands can (optionally) take in the parameters “from” and “to”. These are used for lower and upper limits respectively. These parameters can be used singly or together.

Markup	Result
<code>sum from k = 1 to n a_k</code>	$\sum_{k=1}^n a_k$
<code>int from 0 to x f(t) dt</code>	$\int_0^x f(t) dt$
<code>int from Re f</code>	$\int_{\Re} f$
<code>sum to infinity 2^{-n}</code>	$\sum_{-\infty}^{\infty} 2^{-n}$

**Note** For more details on integrals and sums, see the table on page 401.

### Brackets with matrices look ugly!

For background, we start with an overview of the matrix command:

Markup	Result
<code>matrix { a # b ## c # d }</code>	$\begin{matrix} a & b \\ c & d \end{matrix}$

**Note** Rows are separated by two #'s and entries within each row are separated by one #.

The first problem people have with matrices is that brackets do not “scale” with the matrix:

Markup	Result
<code>( matrix { a # b ## c # d } )</code>	$\left( \begin{matrix} a & b \\ c & d \end{matrix} \right)$

OOoMath provides “scalable” brackets. That is, the brackets grow in size to match the size of their contents. Use the commands *left()* (and *right()*) to make scalable brackets.

Markup	Result
<code>left( matrix { a # b ## c # d } right)</code>	$\begin{pmatrix} a & b \\ c & d \end{pmatrix}$

---

**TIP** Use `left[` and `right]` to obtain square brackets.

---

## How do I make a derivative?

Making derivatives essentially comes down to one trick: *Tell OOo it's a fraction.*

In other words, you have to use the “over” command. Combine this with either the letter “d” (for a total derivative) or the “partial” command (for a partial derivative) to achieve the effect of a derivative.

Markup	Result
<code>{df} over {dx}</code>	$\frac{df}{dx}$
<code>{partial f} over {partial y}</code>	$\frac{\partial f}{\partial y}$
<code>{partial^2 f} over {partial t^2}</code>	$\frac{\partial^2 f}{\partial t^2}$

---

**Note** Notice that we had to use squiggly brackets to make the derivative.

---

## Numbering equations

Equation numbering is one of OOoMath’s best hidden features. The steps are simple, but obscure:

- 1) Start a new line.
- 2) Type “fn” and then press *F3*.

The “fn” is replaced by a numbered formula:

$$E = mc^2 \tag{2}$$

Now you can double-click on the formula to edit it. For example, here is the Riemann Zeta function:

$$\zeta(z) = \sum_{n=1}^{\infty} \frac{1}{n^z} \tag{3}$$

You can reference an equation (“as shown in Equation (2)”) with these steps:

- 1) **Insert** > **Cross-reference**..
- 2) Click on the *References* tab (Figure 403).
- 3) Under *Type*, select *Text*.
- 4) Under *Selection*, pick the equation number.
- 5) Under *Format*, choose *Reference*.
- 6) Click **Insert**.

Done! If you later add more equations to the paper before the referenced equation, all the equations will automatically renumber and the cross-references will update.

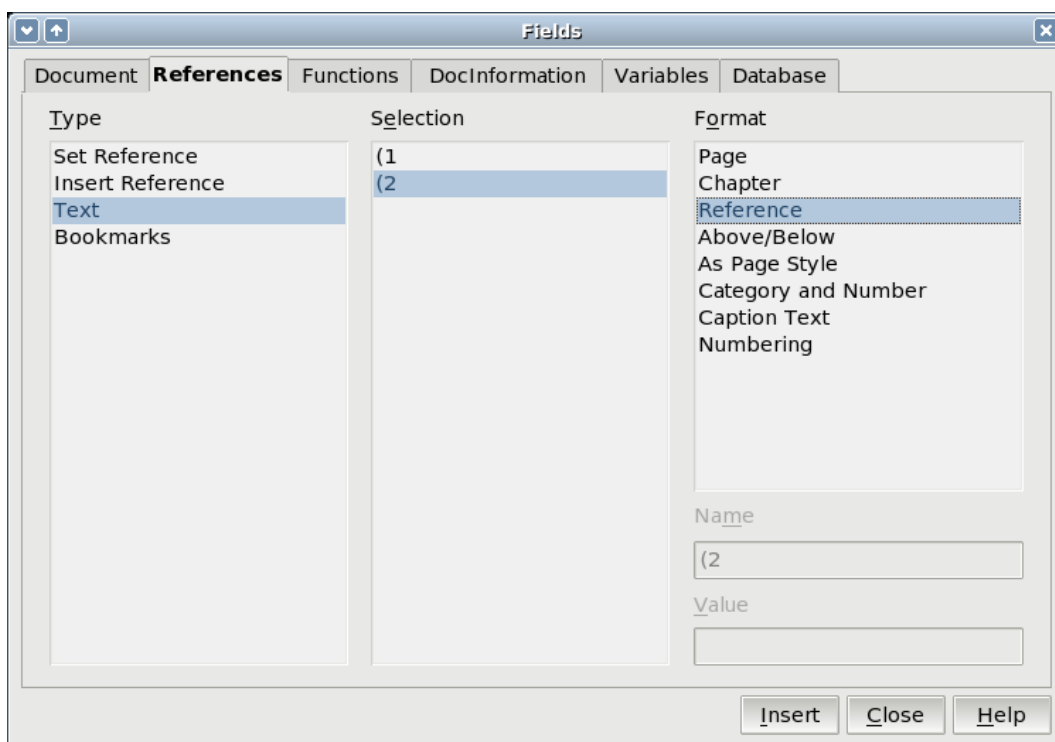


Figure 403. Inserting a cross-reference to an equation number.

---

**TIP** To insert the equation number without parenthesis around it, choose *Numbering* under *Format* instead of *Reference*.

---

## Math commands - Reference

---

### Unary / binary operators

<b>Operation</b>	<b>Command</b>	<b>Display</b>
+sign	+1	+1
-sign	-1	-1
+/- sign	+−1	$\pm 1$
-/+ sign	−+1	$\mp 1$
Boolean not	neg a	$\neg a$
Addition +	a + b	$a + b$
Multiplication dot	a cdot b	$a \cdot b$
Multiplication (X)	a times b	$a \times b$
Multiplication (*)	a * b	$a * b$
Boolean and	a and b	$a \wedge b$
Subtraction (-)	a - b	$a - b$
Division (fraction)	a over b	$\frac{a}{b}$
Division (operand)	a div b	$a \div b$
Division (slash)	a / b	$a / b$
Boolean or	a or b	$a \vee b$
Concatenate	a circ b	$a \circ b$

## Relational operators

<b>Operation</b>	<b>Command</b>	<b>Display</b>
Is equal	<code>a = b</code>	$a = b$
Is not equal	<code>a &lt;&gt; b</code>	$a \neq b$
Approximately	<code>a approx 2</code>	$a \approx 2$
Divides	<code>a divides b</code>	$a   b$
Does not divide	<code>a ndivides b</code>	$a \nmid b$
Less than	<code>a &lt; 2</code>	$a < 2$
Greater than	<code>a &gt; 2</code>	$a > 2$
Similar to or equal	<code>a simeq b</code>	$a \simeq b$
Parallel	<code>a parallel b</code>	$a \parallel b$
Orthogonal to	<code>a ortho b</code>	$a \perp b$
Less than or equal to	<code>a leslant b</code>	$a \leq b$
Greater than or equal to	<code>a geslant b</code>	$a \geq b$
Similar to	<code>a sim b</code>	$a \sim b$
Congruent	<code>a equiv b</code>	$a \equiv b$
Less than or equal to	<code>a &lt;= b</code>	$a \leq b$
Greater than or equal to	<code>a &gt;= b</code>	$a \geq b$
Proportional	<code>a prop b</code>	$a \propto b$
Toward	<code>a toward b</code>	$a \rightarrow b$
Arrow left	<code>a dlarrow b</code>	$a \leftarrow b$
Double arrow left and right	<code>a dlrarrow b</code>	$a \leftrightarrow b$
Arrow right	<code>a drarrow b</code>	$a \Rightarrow b$



## Set operations

<b>Operation</b>	<b>Command</b>	<b>Display</b>
Is in	a in B	$a \in B$
Is not in	a notin B	$a \notin B$
Owens	A owns b	$A \ni b$
Empty set	emptyset	$\emptyset$
Intersection	A intersection B	$A \cap B$
Union	A union B	$A \cup B$
Difference	A setminus B	$A \setminus B$
Quotient	A slash B	$A / B$
Aleph	aleph	$\aleph$
Subset	A subset B	$A \subset B$
Subset or equal to	A subseteq B	$A \subseteq B$
Superset	A supset B	$A \supset B$
Superset or equal to	A supseteq B	$A \supseteq B$
Not subset	A nsubset B	$A \not\subset B$
Not subset or equal	A nsubseteq B	$A \not\subseteq B$
Not superset	A nsupset B	$A \not\supset B$
Not superset or equal	A nsupseteq B	$A \not\supseteq B$
Set of natural numbers	setN	$\mathbb{N}$
Set of integers	setZ	$\mathbb{Z}$
Set of rational numbers	setQ	$\mathbb{Q}$
Set of real numbers	setR	$\mathbb{R}$
Set of complex numbers	setC	$\mathbb{C}$

## Functions

<b>Operation</b>	<b>Command</b>	<b>Display</b>
Exponential	func e <sup>{a}</sup>	$e^a$
Natural logarithm	ln(a)	$\ln(a)$
Exponential function	exp(a)	$\exp(a)$
Logarithm	log(a)	$\log(a)$
Power	a <sup>{b}</sup>	$a^b$
Sine	sin(a)	$\sin(a)$
Cosine	cos(a)	$\cos(a)$
Tangent	tan(a)	$\tan(a)$
Cotangent	cot(a)	$\cot(a)$
Square root	sqrt{a}	$\sqrt{a}$
Arcsine	arcsin(a)	$\arcsin(a)$
Arc cosine	arccos(a)	$\arccos(a)$
Arctangent	arctan(a)	$\arctan(a)$
Arc cotangent	arccot(a)	$\operatorname{arccot}(a)$
n <sup>th</sup> root	nroot{a}{b}	$\sqrt[n]{b}$
Hyperbolic sine	sinh(a)	$\sinh(a)$
Hyperbolic cosine	cosh(a)	$\cosh(a)$
Hyperbolic tangent	tanh(a)	$\tanh(a)$
Hyperbolic cotangent	coth(a)	$\operatorname{coth}(a)$
Absolute value	abs{a}	$ a $
Arc hyperbolic sine	arsinh(a)	$\operatorname{arsinh}(a)$
Arc hyperbolic cosine	arcosh(a)	$\operatorname{arcosh}(a)$
Arc hyperbolic tangent	artanh(a)	$\operatorname{artanh}(a)$
Arc hyperbolic cotangent	arcoth(a)	$\operatorname{arcoth}(a)$
Factorial	fact(a)	$a!$

## Operators

All operators can be used with the limit functions (“from” and “to”).

<b>Operation</b>	<b>Command</b>	<b>Display</b>
Limit	<code>lim(a)</code>	$\lim a$
Sum	<code>sum(a)</code>	$\sum a$
Product	<code>prod(a)</code>	$\prod a$
Coproduct	<code>coprod(a)</code>	$\coprod a$
Upper and lower bounds shown with integral	<code>int from {r_0} to {r_t} a</code>	$\int_{r_0}^{r_t} a$
Integral	<code>int{a}</code>	$\int a$
Double integral	<code>iiint{a}</code>	$\iint a$
Triple integral	<code>iiint{a}</code>	$\iiint a$
Lower bound shown with summation symbol	<code>sum from{3}b</code>	$\sum_3 b$
Curved integral	<code>lint a</code>	$\oint a$
Double curved integral	<code>llint a</code>	$\oiint a$
Tripple curved integral	<code>lllrint a</code>	$\oiiint a$
Upper bound shown with product symbol	<code>prod to{3} r</code>	$\prod^3 r$

## Attributes

<b>Operation</b>	<b>Command</b>	<b>Display</b>
Acute accent	acute a	$\acute{a}$
Grave accent	grave a	$\grave{a}$
Reverse circumflex	check a	$\check{a}$
Breve	breve a	$\breve{a}$
Circle	circle a	$\overset{\circ}{a}$
Vector arrow	vec a	$\vec{a}$
Tilde	tilde a	$\tilde{a}$
Circumflex	hat a	$\hat{a}$
Line above	bar a	$\bar{a}$
Dot	dot a	$\dot{a}$
Wide vector arrow	widevec abc	$\overrightarrow{abc}$
Wide tilde	widetilde abc	$\widetilde{abc}$
Wide circumflex	widehat abc	$\widehat{abc}$
Double dot	ddot a	$\ddot{a}$
Line over	overline abc	$\overline{abc}$
Line under	underline abc	$\underline{abc}$
Line through	overstrike abc	$\cancel{abc}$
Ripple dot	dddota	$\ddot{\ddot{a}}$
Transparent (useful to get a placeholder of a given size)	phantom a	
Bold font	bold a	<b><i>a</i></b>
Italic font <sup>1</sup>	ital “a”	<i>a</i>
Resize font	size 16 qv	<i>qv</i>
Following item in sans serif font <sup>2</sup>	font sans qv	<i>qv</i>
Following item in serif font	font serif qv	<i>qv</i>
Following item in fixed font	font fixed qv	<i>qv</i>

1 Unquoted text that isn’t a command is considered to be a variable. Variables are, by default, italicized.

2 There are three custom fonts: sans serif (without kicks), serifs (with kicks), and fixed (non-proportional). To change the actual fonts used for custom fonts and the fonts used for variables (unquoted text), numbers and functions, use **Format > Fonts**.

<b>Operation</b>	<b>Command</b>	<b>Display</b>
Make color of following text cyan <sup>3</sup>	color cyan qv	<i>qv</i>
Make color of following text yellow	color yellow qv	<i>qv</i>
Make color of following text green	color white qv	<i>qv</i>
Make color of following text white	color green qv	<i>qv</i>
Make color of following text blue	color blue qv	<i>qv</i>
Make color of following text red	color red qv	<i>qv</i>
Make color green returns to default color black	color green X qv	<i>X qv</i>
Brace items to change color of more than one item	color green {X qv}	<i>X qv</i>

---

3 For all coloring, the color will apply only to the text immediately following the command until the next space is encountered. In order to have the color apply to more characters, place the text you want in color in curly brackets.

## Miscellaneous

<b>Operation</b>	<b>Command</b>	<b>Display</b>
Infinity	infinity	$\infty$
Partial	partial	$\partial$
Nabla	nabla	$\nabla$
There exists	exists	$\exists$
For all	forall	$\forall$
H bar	hbar a	$\hbar a$
Lambda bar	lambdabar	$\bar{\lambda}$
Real part	re	$\Re$
Imaginary part	im	$\Im$
Weierstrss p	wp	$\wp$
Left arrow	leftarrow	$\leftarrow$
Right arrow	rightarrow	$\rightarrow$
Up arrow	uparrow	$\uparrow$
Down arrow	downarrow	$\downarrow$
Dots at bottom	dotslow	$\dots$
Dots at middle	dotsaxis	$\dots$
Dots vertical	dotsvert	$\vdots$
Dots diagonal upward	dotsup	$\ddots$
Dots diagonal downward	dotsdown	$\ddots$

## Brackets

Operation	Command	Display
Round Brackets	(a)	$(a)$
Square Brackets	[b]	$[b]$
Double Square Brackets	ldbracket c rdbarcket	$\llbracket c \rrbracket$
Single line	lline a rline	$ a $
Double line	ldline a rdline	$\ a\ $
Braces	lbrace w rbrace	$\{w\}$
Angle Brackets	langle d rangle	$\langle d \rangle$
Operator Brackets	langle a mline b rangle	$\langle a b \rangle$
Group brackets (used for program control)	{a}	$a$
Scalable round brackets (add the word “left before a left bracket and “right” before a right bracket)	left ( stack{a # b # z} right )	$\left( \begin{matrix} a \\ b \\ z \end{matrix} \right)$
Square brackets scalable (as above)	left [ stack{ x # y} right ]	$\left[ \begin{matrix} x \\ y \end{matrix} \right]$
Double square brackets scalable	left ldbracket c right rdbarcket	$\llbracket c \rrbracket$
Line scalable	left lline a right rline	$ a $
Double line scalable	left ldline d right rdline	$\ d\ $
Brace scalable	left lbrace e right rbrace	$\{e\}$
Angle bracket scalable	left langle f right rangle	$\langle f \rangle$
Operator brackets scalable	left langle g mline h right rangle	$\langle g h \rangle$
Over brace scalable	{The brace is above} overbrace a	$\overbrace{\textit{The brace is above}}^a$
Under brace scalable	{the brace is below} underbrace {f}	$\underbrace{\textit{the brace is below}}_f$

## Formats

<b>Operation</b>	<b>Command</b>	<b>Display</b>
Left superscript	<code>a lsup{b}</code>	${}^b a$
Center superscript	<code>a csup{b}</code>	$\overset{b}{a}$
Right superscript	<code>a^{b}</code>	$a^b$
Left subscript	<code>a lsub{b}</code>	${}_b a$
Center subscript	<code>a csub{b}</code>	$\underset{b}{a}$
Right subscript	<code>a_{b}</code>	$a_b$
Align character to left (text is aligned center by default)	<code>stack { Hello world # alignl (a) }</code>	$\begin{array}{c} \textit{Hello world} \\ (a) \end{array}$
Align character to center	<code>stack{Hello world # alignc(a)}</code>	$\begin{array}{c} \textit{Hello world} \\ (a) \end{array}$
Align character to right	<code>stack { Hello world # alignr(a)}</code>	$\begin{array}{c} \textit{Hello world} \\ (a) \end{array}$
Vertical stack of 2	<code>binom{a}{b}</code>	$\begin{array}{c} a \\ b \end{array}$
Vertical stack, more than 2	<code>stack{a # b # z}</code>	$\begin{array}{c} a \\ b \\ z \end{array}$
Matrix stack	<code>matrix{a # b ## c # d}</code>	$\begin{array}{cc} a & b \\ c & d \end{array}$
Common mathematical arrangement	<code>matrix{a # "="b ## {} # "="c}</code>	$\begin{array}{c} a = b \\ = c \end{array}$
New line	<code>asldkfjo newline sadkfj</code>	$\begin{array}{l} \textit{asldkfjo} \\ \textit{sadkfj} \end{array}$
Small gap (apostrophe)	<code>stuff `stuff</code>	$\textit{stuff } \textit{stuff}$
Large gap (tilde)	<code>stuff~stuff</code>	$\textit{stuff } \textit{stuff}$



## Characters – Greek

<code>%ALPHA</code>	$A$	<code>%BETA</code>	$B$	<code>%CHI</code>	$X$	<code>%DELTA</code>	$\Delta$	<code>%EPSILON</code>	$E$
<code>%ETA</code>	$H$	<code>%GAMMA</code>	$\Gamma$	<code>%IOTA</code>	$I$	<code>%KAPPA</code>	$K$	<code>%LAMBDA</code>	$\Lambda$
<code>%MU</code>	$M$	<code>%NU</code>	$N$	<code>%OMEGA</code>	$\Omega$	<code>%OMICRON</code> N	$O$	<code>%PHI</code>	$\Phi$
<code>%PI</code>	$\Pi$	<code>%PSI</code>	$\Psi$	<code>%RHO</code>	$P$	<code>%SIGMA</code>	$\Sigma$	<code>%THETA</code>	$\Theta$
<code>%UPSILON</code> N	$\Upsilon$	<code>%XI</code>	$\Xi$	<code>%ZETA</code>	$Z$				
<code>%alpha</code>	$\alpha$	<code>%beta</code>	$\beta$	<code>%chi</code>	$\chi$	<code>%delta</code>	$\delta$	<code>%epsilon</code>	$\epsilon$
<code>%eta</code>	$\eta$	<code>%gamma</code>	$\gamma$	<code>%iota</code>	$\iota$	<code>%kappa</code>	$\kappa$	<code>%lambda</code>	$\lambda$
<code>%mu</code>	$\mu$	<code>%nu</code>	$\nu$	<code>%omega</code>	$\omega$	<code>%omicron</code>	$o$	<code>%phi</code>	$\phi$
<code>%pi</code>	$\pi$	<code>%rho</code>	$\rho$	<code>%sigma</code>	$\sigma$	<code>%tau</code>	$\tau$	<code>%theta</code>	$\theta$
<code>%upsilon</code>	$\upsilon$	<code>%varepsilon</code> n	$\varepsilon$	<code>%varphi</code>	$\varphi$	<code>%varpi</code>	$\varpi$	<code>%varrho</code>	$\varrho$
<code>%varsigma</code>	$\varsigma$	<code>%vartheta</code>	$\vartheta$	<code>%xi</code>	$\xi$	<code>%zeta</code>	$\zeta$		

## Characters - Special

<code>%and</code>	$\wedge$	<code>%angle</code>	$\sphericalangle$	<code>%element</code>	$\in$	<code>%identical</code>	$\equiv$
<code>%infinite</code>	$\infty$	<code>%noelement</code>	$\notin$	<code>%notequal</code>	$\neq$	<code>%or</code>	$\vee$
<code>%perthousand</code>	$\text{‰}$	<code>%strictlygreaterthan</code>	$\gg$	<code>%strictlylessthan</code>	$\ll$	<code>%tendto</code>	$\rightarrow$