Chapter 6,
Formatting Pages: Advanced
Using columns, frames, tables, and sections
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Using LibreOffice on macOS

Some keystrokes and menu items are different on macOS from those used in Windows and Linux. The table below gives some common substitutions for the instructions in this document. For a detailed list, see the application Help.

<table>
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<th>macOS equivalent</th>
<th>Effect</th>
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<tr>
<td>Tools &gt; Options menu selection</td>
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<td>Access setup options</td>
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<tr>
<td>Right-click</td>
<td>Control+click or right-click depending on computer setup</td>
<td>Open a context menu</td>
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<td>Ctrl (Control)</td>
<td>⌘ (Command)</td>
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<tr>
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</tr>
<tr>
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<td>Open Styles deck in Sidebar</td>
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Documentation for LibreOffice is available at https://documentation.libreoffice.org/en/
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**Introduction**

Writer provides several ways to control page layouts. Chapter 5, Formatting Pages: Basics, described the use of page styles and some associated functions. This chapter covers the use of:

- Columns
- Frames
- Tables
- Sections
- Changing page orientation within a document
- Borders and backgrounds
- Using page line-spacing for printing

**Note**

All pages in a Writer document are based on page styles. The other layout methods described in this chapter build upon the underlying page style.

**Tip**

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

**Choosing a layout method**

The best layout method depends on what the final document should look like, what sort of information will be in the document, and whether the document will be published in a fixed format (print, PDF) or a variable format (HTML, ePub) or more than one format. Here are some examples. 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, where necessary.
- Use sections (with two or more 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. If the title of the document (on the first page) is full-page width, put it in a single-column section.
- 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, then place articles in linked frames. If necessary, anchor graphics to fixed positions on the page.

**Tip**

For a document to be published in HTML, EPUB, or another format that is not fixed, use minimal layout techniques. Some methods (columns, frames, wide tables) often do not export well to those formats.
Using columns to define the page layout

It is a good idea to define your basic page style (such as Default Page Style) with the most common layout to be used in your document, either single-column or multiple-column. You can then define extra page styles for pages with different numbers of columns.

**Note**

If you wish to combine different numbers of columns on a single page, you must use sections, as described in “Using sections for page layout” starting on page 14.

To define the number of columns for a page style:

1) Choose Format > Page Style on the Menu bar, or right-click on the page and choose Page Style in the context menu, or click the More Options button in the Format section of the Page deck on the Sidebar, to open the Page Style dialog. Go to the Columns tab (see Figure 1).

2) In the Settings section, choose the number of columns and specify any spacing between them 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 on the right shows how the column layout will look.

3) Click OK to save the changes.

![Figure 1: Defining the number of columns on a page](image)

**Formatting column width and spacing**

Select AutoWidth in the Width and Spacing section to create columns of equal or preset width. To customize the width and spacing of the columns:

1) In the Width and Spacing section, deselect the AutoWidth option.

2) In the Width selection boxes, enter a width for each column.

3) On the Spacing line, enter the amount of space between each pair of columns.

If you specify more than three columns, use the arrow buttons on the Column line to scroll among the columns.
Formatting separator lines

Usually white space is all that is needed between columns, but if you prefer separator lines:

1) Using the Style drop-down list, select the line style from the three styles available.
2) Using the Width control, select the width of line to use, settable from 0.25pt to 9.0pt.
   (1 point = 1/12 pica = 1/72 inch = 127/360 mm = 0.3527 mm.)
3) Using the Height control, select the height of line required, as a percentage of the column height. You can choose from the supplied values or type in measurements.
4) 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.
5) Select the line color from the Color drop-down list.

Distributing text across columns

As you add text to a column, the text flows from one column to the next. The last column may be shorter than the others.

To distribute text evenly, so that all the columns are approximately the same height, use a multi-column section instead; see “Formatting a section into columns” on page 17.

Tip

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

Using frames for page layout

Frames can be very useful when producing newsletters or other layout-intensive documents. Frames can contain text, tables, multiple columns, pictures, and other objects. Use frames 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 more distant than the next one, 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 LibreOffice does not allow you to define page styles with recurring frames (unless anchored in a header or footer), consider doing some quick sketches of the basic page layouts you need, indicating the approximate positions of different frames and their purposes. Keep the number of different page layouts as low as possible to avoid chaos in your design.

Pay special attention to the positioning of frames. A visually effective way to position a frame is to align its left margin with that of the paragraph above it. To do this, insert the frame in a blank paragraph of the same style as the paragraph above. Select Insert > Frame > Frame; in the Position section of the Type page of the Frame dialog (Figure 2 on page 8), select From Left in the Horizontal selection box to position the frame exactly where you want it.

Also, think about the type of wrap and the spacing between the frame and text. Instead of placing a frame close to the text, use the Wrap page to place some white space between them.

You can format frames individually or define and apply frame styles; see Chapter 9, Working with Styles.
Creating a frame

You can create a frame in several ways:

- Choose **Insert > Frame > Frame** to create an empty frame. The Frame dialog (Figure 2) opens. You can set the frame's characteristics at this stage or click **OK** and come back to customize it later.

- Select text and choose **Insert > Frame > Frame** to open the Frame dialog. Customize the frame (for example, to add space between the frame and the text) and click **OK**. The selected text is removed from the normal text flow and inserted into the frame.

- Choose **Insert > Frame > Frame Interactively** to quickly draw an empty frame. The mouse cursor changes shape. Click and drag the mouse to draw an empty frame. To customize the frame, right-click it and choose **Properties** in the context menu.

- Insert a formula or OLE object by selecting **Insert > Object > [type of object]**. The item is inserted and appears in a frame. To customize the frame, right-click it and choose **Properties** in the context menu.

To add content to a frame, first deselect the frame by clicking in an empty space somewhere else on the page. Then, click inside the frame to place the text cursor there. Now add content as you would on the main page. When you are done, deselect the frame.

**Note**

The menu item **Insert > Frame > Floating Frame** is for use with HTML documents.

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![Frame dialog](image)

**Figure 2: Frame dialog**

**Frame toolbar**

When you create or select a frame, the Frame toolbar (Figure 3) is displayed. By default, it replaces the Formatting toolbar. You can also display it by using **View > Toolbars > Frame**.

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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 manually formatting it when you add it to the document. Frame styles are discussed in Chapter 9, 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 (Figure 3). Using the mouse is faster but less accurate.

Tip

You might want to use the mouse for gross layout and the dialog for fine-tuning.

You can re-size the frame manually in these ways:

- Click on the green squares (sizing handles) and drag to the appropriate size.
- Add content to it (the frame will re-size automatically if, for example, you add a large picture to it).
- Go back to the Frame dialog 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 place the mouse pointer over an edge of the frame. The mouse pointer 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 sizing 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.

To open the Frame dialog, select the frame, right-click, and choose Properties in the context menu.

To add or remove a frame's border, click the relevant button on the Frame toolbar (Figure 3) to display some choices; or open the Frame dialog, go to the Borders page (Figure 4), and in the Line Arrangement section, select the first Preset (Set No Borders); or assign a borderless style to the frame; see Chapter 9, Working with Styles, for information on frame styles.

Note

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

To anchor a frame, click on it, then right-click and point to Anchor, or click the Anchor button on the Frame toolbar and select the type of anchor, or open the Frame dialog to the Type tab.

To Page (available only on Frame dialog, not the toolbar or context menu)

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, or to center text vertically on a page.

The To Page anchor is deprecated. You are advised to chose another type of anchor.

To Paragraph

The frame is associated with a paragraph and moves with the paragraph. It may be placed in the margin or another location. It is also used to center text on a page in documents which will be used in a master document (frames anchored to pages will disappear from the master document).

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 text as you add or delete text. This method is useful for adding a small icon in sequence in a sentence. It is also the best method for anchoring an image to an empty paragraph so it does not move around the page in unexpected ways.

Linking frames

You can link 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.
Text can only flow into a frame from one other frame, and flow on to one other frame. You can not link from a frame directly to more than one other frame.

To link one frame to another:
1) Select the frame to be linked from.
2) Click the Link Frames icon on the Frames toolbar.
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 faint connecting line (see Figure 5). To unlink frames, select the Unlink Frames icon on the Frames toolbar.

![Figure 5: Linked frames](image)

The height of a frame that is being linked from is fixed; you can change this height manually or by using the Position and Size tab on the Frame dialog, 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 tab of the Frame dialog (Figure 6) shows the names of the selected frame and any frames it is linked to or from. You can change this information here. On this tab, you can also select options to protect the contents, position, and size of the frame.

![Figure 6: Options tab of the Frame dialog](image)
The Wrap, Borders, Area, Columns, Transparency, and Macro pages of the Frame dialog are the same as those for frame styles. Refer to Chapter 9, 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. This topic describes how to achieve some common layouts by using tables. For information about using tables of data, see Chapter 13, Tables.

**Positioning information in headers or footers**

Instead of using tabs or frames, you can use a table in a header or footer to position different elements such as page number, document title, author, and so on. These elements are often inserted using fields, as described in Chapter 17, Fields.

**Creating sideheads using tables**

Sideheads and marginal notes are commonly used in documents such as resumes and 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 7.

![Example of a sidehead](Figure 7: Example of a sidehead)

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.

In other cases, you might put each paragraph in a separate row of the table and allow the table to break between pages.

**Note**

Sideheads can also be created by placing text in a frame using the Marginalia frame style, as described in Chapter 9, Working with Styles.

**Example**

To create a table for use with a sidehead:

1) Place the cursor where you want the table to appear and choose Table > Insert Table (Ctrl+F12).

2) In the Insert Table dialog (Figure 8), define a two-column, one-row table with no heading. Choose None under Styles so the table will have no border. Click Insert.

3) Right-click the table and choose Table Properties in the context menu. On the Columns tab of the Table Properties dialog (Figure 9), set the column widths.

4) On the Table tab of the Table Properties dialog (Figure 10), 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. In the Properties section, optionally give this table a name. Click OK to save your settings.
**Tip**

To check the top and bottom spacing for a paragraph: position the cursor in the paragraph and open the Properties deck on the Sidebar. In the Paragraph section, look under Spacing for the values.

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*Figure 8: Defining a two-column borderless table with no heading*

*Figure 9: Defining a two-column table to line up with text offset at 3.3cm*
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) Place the cursor in a table, and then select **Table > Number Format** on the Menu bar.
2) On the Format Number dialog (Figure 11), make sure the **Category** is set to **Text**.
3) Click **OK**.

If you use this table format often, you may want to save it as a table style, using **Table > AutoFormat Styles**. See Chapter 13, Tables.

### 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) On the Menu bar, choose Insert > Section. The Insert Section dialog (Figure 12) opens.

3) Choose settings for each page of the dialog as described below. Click Insert.

The Insert Section dialog has five tabs:

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

![Insert Section dialog](image)

Figure 12: Inserting a section using the Insert Section dialog

At any time before closing the dialog, you can reset a tabbed page other than the Section page to its default settings by clicking the Reset button. If you wish to undo changes to the Section page, you must do so manually.

Naming sections

Writer automatically enters a name for the section in the name box of the New Section list. To change the name, select it and type over it. The name is displayed in the Sections category of the Navigator window. Navigation is easier if you give your sections meaningful names.
**Linking sections**
You can insert the contents of another document into the section and then have Writer update it whenever the other document is updated.

**Note**
If you want to insert only a part of the other document, be sure that part exists as a section in the document.

To link the section to another document, follow these steps:
1) In the Link section of the dialog (Figure 13), select the Link option.
2) Click the Browse button to the right of the File name field. The Insert dialog opens.
3) Find and select the required document and click the Insert button. 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.

![Figure 13: Linking sections](image)

You can update links automatically or manually. See “Updating links” on page 20.

**Write-protecting sections**
To write-protect the section so that its contents cannot be edited, select Protect in the Write protection area (Figure 14).

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

![Figure 14: Write-protecting sections](image)

**Password-protecting sections**

**Caution**
Be very careful to remember or safely store the password, because it cannot be retrieved without advanced tools.

To prevent others from editing the section’s attributes or format, you can additionally protect the section with a password, as follows:
1) Select Protect and With password.
2) On the Enter Password dialog, type a password in the Password field and again in the Confirm field.
3) Click OK.
Anyone who tries to edit the section’s attributes or format will be prompted to enter the password.

**Hiding sections**
You can hide the 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. Hiding is very useful for creating a single source document containing students’ and teachers’ copies of a document such as a test.

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**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, select the **Hide** option in the **Hide** section of the dialog.

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 the Help and Chapter 17, Fields.

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

**Formatting a section into columns**
You can give some parts of a page one column and other parts of the page two or more columns. For example, you might have a page-width headline over a three-column news story.

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**Tip**

You cannot select text on a multi-column formatted page and change it to a single column using this method. Instead, you need to define a single-column page style and then select the text you want to be in a two-column section on that page.

Use the **Columns** tab of the Insert Section dialog (Figure 15) to format the section into columns.

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*Figure 15: Choosing evenly distributed columns*

As you add text to the section, the text flows from one column to the next. You can distribute text across the columns in one of two ways, as shown in Figure 16.

**Evenly distribute contents to all columns**

When this option is selected, Writer adjusts the length of the columns to the amount of text, so that all the columns are approximately the same length. As you add or delete text, the columns readjust.
When this option is not selected, Writer fills the columns newspaper-style: one column at a time, beginning with the first column. The last column may be shorter than the others.

**Figure 16**: (Left) Evenly distributed columns; (Right) Newspaper-style columns

**Indenting the section from margins**

Use the Indents tab (Figure 17), to set indents from the right and left margins of the section.

Enter the desired left-margin indent in the **Before section** box. Enter the desired right-margin indent in the **After section** box. The preview box on the right-hand side of the tab shows you how the section will look with the indents applied.

**Figure 17**: Indenting sections

**Changing the background of the section**

Use the Area tab to add color or an image to the background of the current section. This page is similar to the Area tabs for paragraphs, frames, tables, and other objects. For more information, refer to “Defining borders and backgrounds” on page 26 and the Draw Guide.

**Customizing footnotes and endnotes in a section**

Use the Footnotes/Endnotes page of the Insert Section dialog (Figure 18) to customize the current section's footnotes and endnotes.
Customizing footnotes
To number the section’s footnotes separately from the other footnotes in the document, and format the numbering, follow these steps:

1) In the Footnotes section of the page, make sure that Collect at end of text is selected.
2) Select Restart numbering.
3) To start the section’s footnotes at a number other than 1, enter the desired starting number in the Start at box.
4) Select the Custom format option. In the drop-down list, select a numbering format for the footnotes.

To add text to the selected numbering format, use the Before and After boxes. 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 boxes as shown in Figure 18.

Customizing endnotes
If you want the section’s endnotes to appear at the end of the section rather than at the end of the document, select the Collect at end of section option in the Endnotes area.

To number the current section’s endnotes separately from the other endnotes in the document, and format the numbering, apply the procedures described above to the Endnotes settings.

Editing and deleting sections
To edit a section, choose Format > Sections on the Menu bar. In the Edit Sections dialog (Figure 19), select the section you want to edit by clicking its name in the Section list.

Editing section attributes
To rename the selected section, type over its name in the Section name box.

On the Edit Sections dialog, you can also edit the selected section’s link, write-protect, and hide attributes. To learn how to edit these attributes, see “Linking sections” on page 16, “Write-protecting sections” on page 16, and “Hiding sections” on page 17.
Editing the format of a section
To edit the format of the selected section, click the Options button.

The Options dialog has four tabs: Columns, Indents, Background, and Footnotes/Endnotes. These tabs are the same as those in the Insert Section dialog described earlier; the Background tab on the Options dialog corresponds to the Area tab in the Insert Section dialog.

To reset a tab to the conditions in place when the dialog opened, click the Reset button. To save the Options settings, click OK. You are returned to the Edit Sections dialog.

Removing sections
To remove the selected section, click the Remove button. This does not delete the contents of the section; the contents become part of the main document. If the contents were linked, they are now embedded.

Updating links
You can set Writer to update linked sections automatically, and you can also update links manually.

Updating links automatically
To set Writer to update links without prompting you, or to turn off automatic updating, follow these steps:


2) In the Update links when loading section of the dialog, select one of the options:
   – Always if you want Writer to update links automatically, without prompting you, whenever you open a document that contains links.
   – On request if you want Writer to prompt you before updating links.
   – Never if you do not want Writer to update links.

3) Click OK to save your settings.
**Updating links manually**
A protected section must first be unprotected before it can be updated.

To update a link manually:

1) Open the document that contains the link.
2) Choose **Edit > Links to External Files**.
3) The list in the Edit Links dialog (Figure 20) displays the names of all the files that are linked to the current document. Select 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. To close the Edit Links dialog, click **Close**.

![Edit Links dialog](image)

**Figure 20: Edit Links dialog**

**Removing links**
To remove a link to a file and embed its contents, go to the Edit Links dialog, select the file that corresponds to the link you want to remove, and click the **Break Link** button. This action does not delete the text in the Section; it just breaks the link. If desired, the text must be removed manually.

**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 or end of a document, where the other pages are in portrait orientation. Here are the steps to achieve it.

**Setting up a landscape page style**

1) If you wish to keep the margins the same as on other pages, then note the margin settings of the current page style. (You can find the margin settings on the Page tab of the Page Style dialog.)
2) On the Styles deck of the Sidebar, right-click **Landscape** in the list of page styles and choose **Modify**.
3) On the Organizer tab of the Page Style dialog (Figure 21), make sure Next Style is set to Landscape (to allow for having more than one sequential landscape page).

![Figure 21: Set the next page style to Landscape](image)

4) On the Page tab of the Page Style dialog (Figure 22), make sure Orientation is set to Landscape. 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.

5) Click OK to save the changes.

![Figure 22: Set orientation and margins for a landscape page](image)

**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 > Paragraph or Table Properties, respectively, in the context menu.

2) On the Text Flow page of the Paragraph dialog (Figure 23) or the Table Properties dialog (Figure 24), select Insert (or Break for a table) and With Page Style. Set the Page Style property to Landscape. Click OK to apply the new page style.

3) Position the cursor in the paragraph or table where the page is to return to portrait orientation and change the paragraph properties or table properties so that With Page Style is the portrait page style that was used before the Landscape page style. Click OK to return to the portrait page style.
Portrait headers or footers on horizontal pages

When you define a header or footer on a landscape page, it is positioned on the long side of the page. If your landscape pages are inserted between portrait pages, you might want the headers and footers to be on the short sides of the landscape pages, so that turning the landscape pages 90 degrees (as in a printed book) presents the same layout as on the portrait pages.

You can set up portrait-oriented headers and footers on landscape pages by using frames. These are a bit tricky to set up, but once you have done so, they are part of the Landscape page style and appear on all landscape pages in the document.

In the example below, we want to insert a landscape page into a document so that it has the same header, footer, and margins as the portrait pages. In the example, the default page style is portrait, A4 size, with header and footer of 0.5 cm with 0.5 cm spacing.

To match the layout of the landscape page to that of the portrait pages:

- The landscape page should have the header enabled, but not the footer.
- The top margin of the landscape page will be one centimeter less than the left margin of the portrait page, since it will have an (empty) header where we will anchor both the vertical header and footer frames.
- The bottom margin of the landscape page will be equal to the right margin of the portrait page.
- The left and right margins of the landscape page must be one centimeter larger than the corresponding top and bottom of the portrait page so that the longitudinal size of both pages matches. That centimeter is the result of adding the size of the header or footer and the spacing to the main text (0.5 for the header or footer and 0.5 cm for the spacing).

To achieve these results, follow these steps:

1) Modify the margins of the Landscape page style so the size of the text space is the same on both page styles.
2) Insert a manual page break where you want a landscape page to appear (Insert > More Breaks > Manual Break) and choose Landscape for the page style.

3) Copy and paste all the content from the footer of the portrait page and paste it into a blank paragraph on the landscape page. Be sure this text has the Footer paragraph style so the font settings will match.

4) Select the full text (including the fields) you just pasted. Choose Format > Character. In the Character dialog, choose the Position tab and set Rotation / Scaling to 270 degrees (counterclockwise). Click OK.

5) With the text still selected, choose Insert > Frame > Frame. In the Frame dialog (Figure 27), select the Type tab and enter the width, height, and horizontal and vertical position for the footer. Deselect the automatic sizing options in Width and Height.

6) Select the entire frame and modify the width and height:
   – The width should be 0.5 cm (height of the vertical page style footer).
   – The height must be equal to the Din A4 page width (21 cm) minus the sum of the top and bottom margins of 2.8 cm and 1.8 cm, which results in 16.4 cm.

7) Cut the frame (Ctrl+X), move to the header of the landscape page and paste it into the header (Ctrl+V), so that, anchored in the empty header paragraph, it repeats every time you insert a landscape page.

8) Set the position of the frame relative to the entire page:
   – Vertical position 2.80 cm (same distance as the left margin vertically).
   – Horizontal position: 1.50 cm (same distance as the bottom margin vertically).
9) If the footer has a line above the text, on the Borders tab, select a right border and specify the line width and spacing to the frame's contents.

10) Click OK to save these settings. The footer will now appear in the required position and orientation on any page using the Landscape style.

11) Since rotated text does not allow tabs, click in the frame at the end of the text where the tab was, and type as many spaces as you need for the layout to match the portrait page.

**Figure 27: Defining the size and position of the footer frame**

**Figure 28: Footers in place for both page styles**
To set up a portrait header on the landscape page, repeat these steps (from step 3) but set the horizontal position to 27.70 cm (29.7 cm, minus 2 cm from the margin and header).

**Defining borders and backgrounds**

You can apply borders and backgrounds to many elements in Writer. Paragraphs, pages, frames, sections, page styles, paragraph styles, character styles, and frame styles can include both borders and backgrounds. The dialog pages for borders and backgrounds are similar in each case. To illustrate their use, we will define a border and background for a frame.

**Tip**

You can choose to have page backgrounds fill the entire page (sheet of paper) or only the area within the margins; see the section on page styles in Chapter 9, Working with Styles. Page borders surround only the area within the margins, including the header or footer (if any exist).

Tables, indexes, tables of contents, and bibliographies can also have borders and backgrounds, although the choices for background are limited to Color or Image.

**Adding a border**

To begin, select the frame, right-click, and choose *Properties* in the context menu. Select the *Borders* tab (Figure 29).

![Figure 29: Frame dialog: Borders page](image)

Borders have three components: where they go, what they look like, and how much space is left around them. Optionally they may also have a shadow property.

- **Line Arrangement** specifies where the borders go. Writer provides five default arrangements but you can click the line you want to customize in the User-defined area to get exactly what you want. Each line can be individually formatted.

- **Line** specifies what the border looks like: the style, width, and color. Each parameter has a number of attributes to choose from. The attributes selected will apply to those borders highlighted by a pair of black arrows in the *User-defined* thumbnail on the left side of the dialog.

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• **Padding** specifies how much space to leave between the border and the contents of the element. Spaces can be specified to the left, right, top, and bottom. Select **Synchronize** to have the same spacing for all four sides.

• **Shadow Style** properties always apply to the whole element. A shadow has three components: where it is (Position), how far from the element it is cast (Distance), and what color it is.

**Adding a color to the background area**

To begin, select the frame, right-click, and choose **Properties** in the context menu. On the Frame dialog, select the Area tab (Figure 30), then choose **Color**. Select from the color grid or create a new color to use for this frame, and then click **OK** to apply it to the background.

![Figure 30: Frame dialog: Area page showing color choices](image)

**Tip**

For selected words or other characters (right-click, **Character > Character**), the “background” is called **highlighting**. The only choices are **Color** or **None**.

**Adding an image to the background**

To add an image to the background, choose the **Area** tab, then choose **Image** (Figure 31).

You can choose one of the supplied images from the list on the left, or you can add your own.

To use an image, select it from the thumbnails on the left.

1) In the **Options** area, choose the placement for the image:
   - **Style** – custom position/size, tiled, or stretched.
   - **Size** – specify the width and height. Select Scale to stretch or shrink the image to fit the selected size.
   - **Position** – select where the image is to be displayed.

2) Click **OK** to apply the image to the background.
To add an image:

1) Click the **Add/Import** button. The Import dialog opens.
2) Find the file you want and then click **Open**. The selected image now appears in the list of thumbnails on the left and in the preview box on the right of the **Area** tab.

![Frame dialog: Area page showing image choices](image)

**Figure 31: Frame dialog: Area page showing image choices**

### Adding a gradient, pattern, or hatch to the background

To add a gradient, pattern, or hatch to the background, choose the **Area** tab, then choose the required background type. The dialog now displays the options for that type, with an example in the preview pane to the right. Select the required design from the list or create a new design to use for this frame. Click **OK** to apply it to the background. See the *Draw Guide* for more about defining gradients, patterns, and hatching.

### Deleting a color, gradient, image, or other background

To delete a background, select **None** near the top of the **Area** tab of the Frame dialog.

### Adjusting the transparency of the background

Transparency is useful for creating watermarks (a logo or text in the background of a page, typically showing the company name or a statement such as *Draft*) and making colors or images more pale (for more contrast with the text). Use the **Transparency** tab (Figure 32) to define the type of transparency. The choices are covered in detail in the *Draw Guide*.
Page line-spacing (also called Register-true) is particularly useful for printed documents that will have two pages set next to each other (for example, in a book or brochure), for multi-column layouts, and for documents intended for double-sided printing.

To use page line-spacing, you need to select options on the page styles and the paragraph styles or individual paragraphs to be included, because these options work together.

### To enable a page style for page line-spacing

Each page style to be included in page line-spacing must be enabled separately. To do so:

1. Open the Page Style dialog for the selected page style, using one of these methods:
   - Right-click on any page using that style and select **Page Style** in the context menu.
   - On any page using that style, go to **Format > Page Style** on the Menu bar.
   - On the Sidebar, go to the Styles deck, select the **Page Styles** icon at the top, then right-click on the required page style and select **Modify**.
2. On the **Page** tab, in the **Layout Settings** section, select the **Use page line-spacing** option, specify the Reference Style, and click **OK**.

**Note**

The Reference Style sets an invisible vertical (typographical) grid, using the line distance specified in the style. All paragraphs that have Page line-spacing activated will use that line distance, aligning the bottom of a text line to the next grid line, regardless of font size or presence of graphics. Each line is thus the same height. Writer will align the base lines of text printed on adjacent columns, opposite pages, and both sides of a sheet of paper to this invisible grid.

All paragraphs with the selected Reference Style (or that inherit the Reference Style) will be activated automatically for Page line-spacing.
To enable paragraph styles for page line-spacing

1) On the Styles deck of the Sidebar, right-click the Paragraph Style you want to enable, and choose Modify.

2) In the Paragraph Style dialog, go to the Indents & Spacing tab.

3) Select **Activate page line-spacing** to enable the paragraph style for page line-spacing. Deselect the option to exempt the paragraph style from page line-spacing.

The checkbox has no effect if *Page line-spacing* is disabled in the page style.

To enable paragraphs for page line-spacing

1) Select all the paragraphs you want to enable, then go to **Format > Paragraph** on the Menu bar.

2) On the Paragraph dialog, go to the Indents & Spacing tab.

3) Select **Activate page line-spacing** to enable the selected paragraphs for page line-spacing. Deselect the option to exempt the selected paragraphs from page line-spacing.

The checkbox has no effect if *Page line-spacing* is disabled in the page style.