



**LibreOffice**  
Community



## Calc Guide 7.5

# *Chapter 7*

## *Printing, Exporting, Emailing, and Signing*

## Copyright

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## Publication date and software version

Published February 2023. Based on LibreOffice 7.5 Community.  
Other versions of LibreOffice may differ in appearance and functionality.

## 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 more detailed list, see the application Help and Appendix A (Keyboard Shortcuts) to this guide.

<i>Windows or Linux</i>	<i>macOS equivalent</i>	<i>Effect</i>
<b>Tools &gt; Options</b> menu selection	<b>LibreOffice &gt; Preferences</b>	Access setup options
Right-click	<i>Control</i> +click and/or right-click depending on computer setup	Open a context menu
<i>Ctrl</i> (Control)	⌘ (Command)	Used with other keys
<i>F11</i>	⌘+T	Open the Styles deck in the Sidebar

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# Printing

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## Quick printing

To quickly print a spreadsheet, click on the **Print Directly** icon (not visible by default) on the Standard toolbar to send the entire spreadsheet to the default printer that is defined for your computer.

### Note

You can change the action of the **Print Directly** icon to send a document to the printer defined for the document instead of the default printer for the computer. Go to **Tools > Options > Load/Save > General** and select the **Load printer settings with the document** option.

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## Controlling printing

For more control over printing, select **File > Print** on the Menu bar, or click the **Print** icon on the Standard toolbar, or press *Ctrl+P*, to open the Print dialog (Figure 1).

### Note

The options selected on the Print dialog apply to this printing of this document only.

To specify default printing settings for LibreOffice, go to **Tools > Options > LibreOffice > Print** and **Tools > Options > LibreOffice Calc > Print**. For details, see Chapter 15, Setting up and Customizing.

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The Print dialog has multiple tabs where you can choose a range of options, as described in the following sections. Depending on your computer's operating system, the number of tabs and the layout of each tab may be different from the illustrations shown in this chapter.

The Print dialog includes a **Preview** checkbox which enables you to turn on/off a preview of how your data will appear on the printed page. The preview appears on the left hand side of the dialog. Adjacent controls allow you to navigate through multiple pages.

### General tab

On the *General* tab of the Print dialog (Figure 1), you can choose from the following options:

- **Printer**
  - Select the printer to use, from the list of those available.
  - Click the **Properties** button to change any required settings of the selected printer. The options available through this interaction will depend on your printer and system.
- **Range and Copies**
  - Select which sheets and pages to print; single or double sided printing; the number of copies to print; whether to collate multiple copies; and the page order for printing. (See “Selecting what to print” below.)
- **Page Layout**
  - Select page layout properties such as paper size, portrait, or landscape orientation; how many pages are printed per sheet of paper; the order in which the pages are printed on a sheet of paper; and whether a border is drawn around each page.

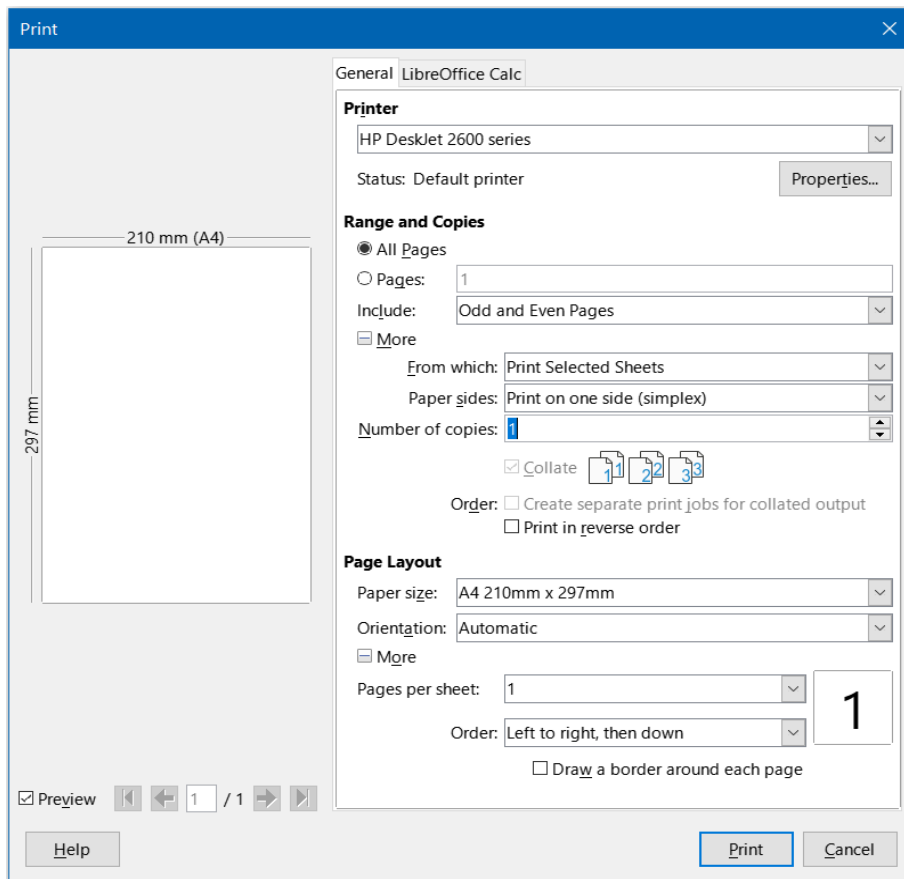


Figure 1: Print dialog – General tab

### LibreOffice Calc tab

On the *LibreOffice Calc* tab of the Print dialog (Figure 2), you can select whether to suppress the output of empty pages when you print the spreadsheet.

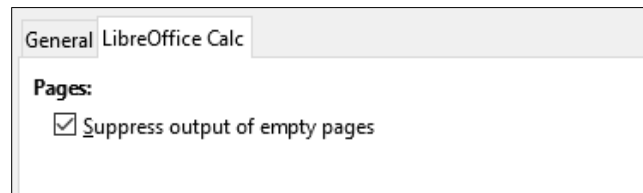


Figure 2: Print dialog – LibreOffice Calc tab

### Printing multiple pages on a single piece of paper

To print multiple pages of a spreadsheet on one piece of paper:

- 1) Use **File > Print** on the Menu bar, or click the **Print** icon on the Standard toolbar, or press **Ctrl+P**, to open the Print dialog.
- 2) In the *Page Layout* section of the *General* tab, select the number of spreadsheet pages to print per sheet of paper in the *Pages per sheet* drop-down list. The preview panel on the right shows how the pages will look in the printed document.
- 3) When printing more than one page per sheet, select the order in which the pages are printed on a sheet in the *Order* drop-down list (Figure 3).
- 4) To distinguish each page on a sheet, select the **Draw a border around each page** option.

5) Click **Print**.

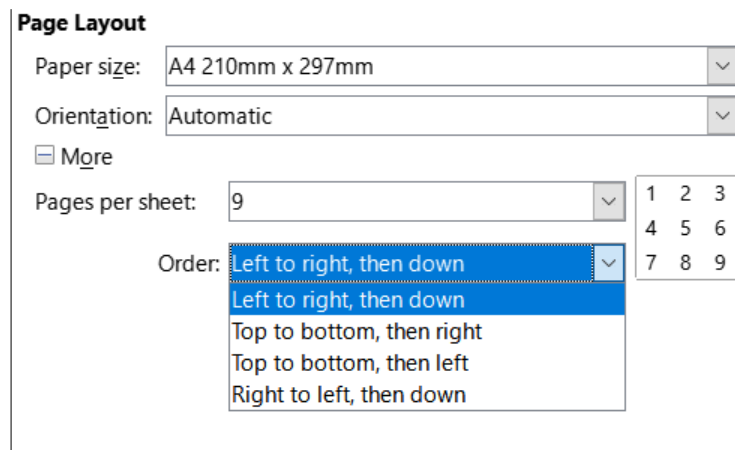


Figure 3: Printing more than one spreadsheet page per sheet of paper

### Tip

To access some of the options on the *General* tab of the Print dialog, you may need to click one of the **More** buttons. For simplicity, these clicks are deliberately omitted from the descriptions in this chapter.

## Selecting what to print

In the *Range and Copies* area of the *General* tab of the Print dialog, choose **Print All Sheets** in the *From which* drop-down to print all sheets in the document. In addition to printing a full spreadsheet document, you can choose single sheets, multiple sheets, and selections of cells for printing.

To print an individual sheet:

- 1) In the spreadsheet, click on the sheet tab to select the sheet you want to print.
- 2) Choose **File > Print** on the Menu bar, or click the **Print** icon on the Standard toolbar, or press *Ctrl+P*, to open the Print dialog.
- 3) In the *Range and Copies* area of the *General* tab of the Print dialog, choose **Print Selected Sheets** in the *From which* drop-down.
- 4) Click **Print**.

To print a range of sheets:

- 1) In the spreadsheet, select the sheets to print. For details on how to select multiple sheets, see Chapter 1, Introduction.
- 2) Choose **File > Print** on the Menu bar, or click the **Print** icon on the Standard toolbar, or press *Ctrl+P*, to open the Print dialog.
- 3) In the *Range and Copies* area of the *General* tab of the Print dialog, choose **Print Selected Sheets** in the *From which* drop-down.
- 4) Click **Print**.

To print a selection of cells:

- 1) In the spreadsheet, select the cells to print.

- 2) Choose **File > Print** on the Menu bar, or click the **Print** icon on the Standard toolbar, or press *Ctrl+P*, to open the Print dialog.
- 3) In the *Range and Copies* area of the *General* tab of the Print dialog, choose **Print Selected Cells** in the *From which* drop-down.
- 4) Click **Print**.

## Printing in grayscale on a color printer

You may wish to print a spreadsheet in grayscale on a color printer. You can do this in two ways.

### ✓ Note

Some color printers may print in color regardless of the settings you choose.

For an individual file, you can change the printer settings to print in black and white or grayscale:

- 1) Choose **File > Print** on the Menu bar, or click the **Print** icon on the Standard toolbar, or press *Ctrl+P*, to open the Print dialog.
- 2) Click **Properties** to open the Properties dialog for the printer. The available choices vary from one printer to another, but you should find options for the color settings. See your printer's help or user manual for more information.
- 3) The choices for color might include black and white, or grayscale. Choose grayscale.
- 4) Click **OK** to confirm your choice and return to the Print dialog.
- 5) Click **Print** to print the document.

You can change the LibreOffice settings to print all color text and graphics as grayscale:

- 1) Choose **Tools > Options > LibreOffice > Print**.
- 2) In the *Defaults* section, select **Convert colors to grayscale**. Click **OK** to save the change.

### ! Caution

This changes the print settings for all components of LibreOffice, not just Calc

## Previewing pages/sheets before printing

To preview the sheets in Calc before printing:

- 1) Choose **File > Print Preview** on the Menu bar, or click the **Toggle Print Preview** icon on the Standard toolbar, or press *Ctrl+Shift+0*.
- 2) The Calc window now displays the Print Preview toolbar instead of the Formatting toolbar.



Figure 4: Print Preview toolbar

- 3) To print the document from this view, select **File > Print** on the Menu bar, or click the **Print** icon on the Standard toolbar, or press *Ctrl+P*, to open the Print dialog.
- 4) Choose the print options and click the **Print** button.
- 5) Click the **Toggle Print Preview** icon again, or click the **Close Preview** icon on the right-hand side of the Print Preview toolbar, to return to the normal spreadsheet view.



## Using print ranges

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You can define which range of cells on a spreadsheet are to be printed or exported to a PDF. The cells on the sheet that are not part of the defined print range are not printed or exported. Also, any sheets without a defined print range are not printed or exported. Creating a user-defined print range will replace any existing defined print range.

### Defining and printing a print range

To set a user-defined print range:

- 1) Select the range of cells to be used in the print range.
- 2) Go to **Format > Print Ranges > Define** on the Menu bar. If **Tools > Options > LibreOffice Calc > View > Page breaks** is enabled, then automatic page break lines are displayed on the screen, defining the cells included in the print range.
- 3) Click on the **Print Directly** icon on the Standard toolbar to print the defined print range, or open the Print dialog and click **Print** to print the defined print range.

#### Tip

You can check the print range by using **Toggle Print Preview** or the Preview pane in the Print dialog. Calc will display only the cells in the print range. See “Viewing print ranges” below.

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### Editing a print range

At any time, you can edit the print range, For example to add or remove cells, or define rows and columns to repeat (such as column or row headings). For more details on how to define repeated rows and/or columns, see “Repeat printing of rows or columns” below.

- 1) Go to **Format > Print Ranges > Edit** on the Menu bar to open the *Edit Print Ranges* dialog (Figure 5).

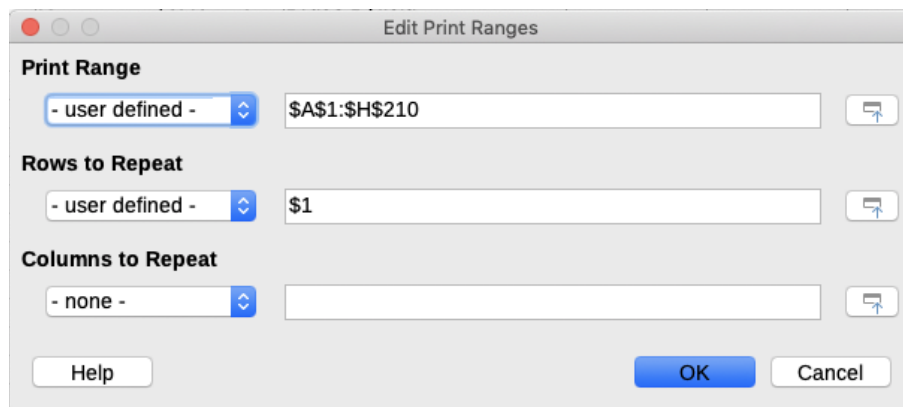


Figure 5: *Edit Print Ranges* dialog

- 2) If only a single range is defined, then clicking anywhere in the *Print Range* text box displays the defined print range bounded in blue, as shown in Figure 6.

	A	B
1		
2		
3		
4		
5		
6		
7		
8		
9		

Figure 6: Single print range marked by a bounding box

- 3) Multiple cell ranges can also be defined by separating each range with a single comma. This can be done with the keyboard by typing in a comma and the cell references, using the same format as the print ranges already defined in the *Print Range* text box. Remember to separate the cell references with a colon. New cell ranges can also be added by holding *Ctrl* as you select the cell range using the cursor.
- 4) To remove a print range, select the print range in the *Print Range* text box and delete it. Make sure the remaining print ranges are separated by a single comma and there is not a comma at the end of the sequence.
- 5) Click **OK** to save your changes and close the dialog.

## Viewing print ranges

After print ranges have been defined, they are formatted with automatic page breaks. To view the page breaks, go to **View > Page Break** on the Menu bar to open the preview (Figure 7).

The print ranges are outlined by default with a blue border and contain a pale gray page number in the center of each page. The non-printing area of the spreadsheet normally has a gray background.

To exit the page break preview, go to **View > Normal** on the Menu bar.

	A	B	C	D	E	F	G
1	Date	Sales Value	Category	Region	Employee		
2	19/01/08	\$2,032	Golf	West	Brigitte		
3	29/01/08	\$3,491	Golf	South	Brigitte		
4	20/02/08	\$1,860	Golf	South	Brigitte		
5	27/02/08	\$1,148	Golf	West	Brigitte		
6	27/02/08	\$1,790	Golf	East	Brigitte		
7	18/03/08	\$3,814	Golf	North	Brigitte		
8	04/04/08	\$4,045	Golf	West	Brigitte		
9	18/04/08	\$3,060	Golf	West	Brigitte		
10	29/04/08	\$1,316	Golf	West	Brigitte		
11	08/05/08	\$575	Golf	West	Brigitte		
12	02/06/08	\$2,213	Golf	East	Brigitte		
13	03/06/08	\$1,819	Golf	East	Brigitte		
14	25/01/08	\$3,116	Sailing	West	Brigitte		
15	27/01/08	\$2,095	Sailing	North	Brigitte		
16	28/01/08	\$155	Sailing	West	Brigitte		
17	27/02/08	\$4,433	Sailing	West	Brigitte		
18	02/04/08	\$1,355	Sailing	North	Brigitte		
19	25/04/08	\$2,564	Sailing	North	Brigitte		
20	12/05/08	\$3,887	Sailing	South	Brigitte		
21	15/05/08	\$520	Sailing	North	Brigitte		
22	04/06/08	\$2,135	Sailing	East	Brigitte		
23	20/06/08	\$3,617	Sailing	North	Brigitte		
24	28/06/08	\$546	Sailing	South	Brigitte		
25	03/01/08	\$4,872	Tennis	East	Brigitte		
26	02/02/08	\$1,218	Tennis	West	Brigitte		
27	11/02/08	\$2,565	Tennis	West	Brigitte		
28	28/02/08	\$3,145	Tennis	West	Brigitte		
29	03/03/08	\$3,985	Tennis	North	Brigitte		
30	07/06/08	\$769	Tennis	West	Brigitte		
31	08/06/08	\$1,167	Tennis	West	Brigitte		
32	07/01/08	\$3,739	Golf	South	Fritz		

Figure 7: Page break preview

## Named print ranges

In addition to defining a print range for each print job, you can also define a range of cells to be used repeatedly, without having to select a range of cells every time. This is useful if different areas of a large spreadsheet have to be printed for different reports; several named print ranges can be defined to meet this need.

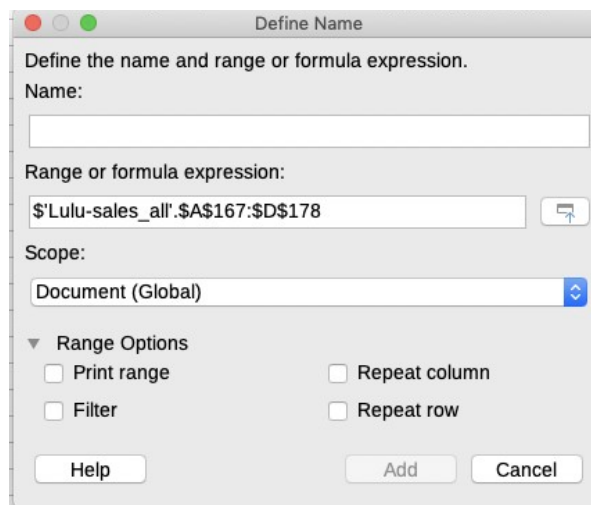


Figure 8: Define Name dialog

### Defining and naming

- 1) Select the cells you want to define and name as a print range, then go to **Sheet > Named Ranges and Expressions > Define** on the Menu bar to open the Define Name dialog (Figure 8). The selected cells are displayed in the *Range or formula expression* box.

Alternatively, open the Define Name dialog, then select the cells you want to define and name. The selected cells are then displayed in the *Range or formula expression* box.

- 2) Type a name for the range in the *Name* box. Use only letters, numbers, and underscores in the name; no spaces, hyphens, or other characters are allowed.
- 3) If necessary, you can edit or set the range of selected cells for the print range in the *Range or formula expression* box. See “Editing a print range” above for more information.
- 4) Make sure **Document (Global)** is selected in the *Scope* drop-down list.
- 5) Select **Print range** from *Range Options* to define the settings as a print range.
- 6) Click **Add** to accept the data and close the dialog.

### Printing a named range

To select a named range for printing:

- 1) Go to **Format > Print Ranges > Edit** on the Menu bar to open the Edit Print Ranges dialog (Figure 9).
- 2) Select the defined and named print range in the *Print Range* drop-down list.
- 3) Click **OK** to close the dialog.
- 4) Open the Print dialog, which will show only the named range in the preview area. Click **Print**.

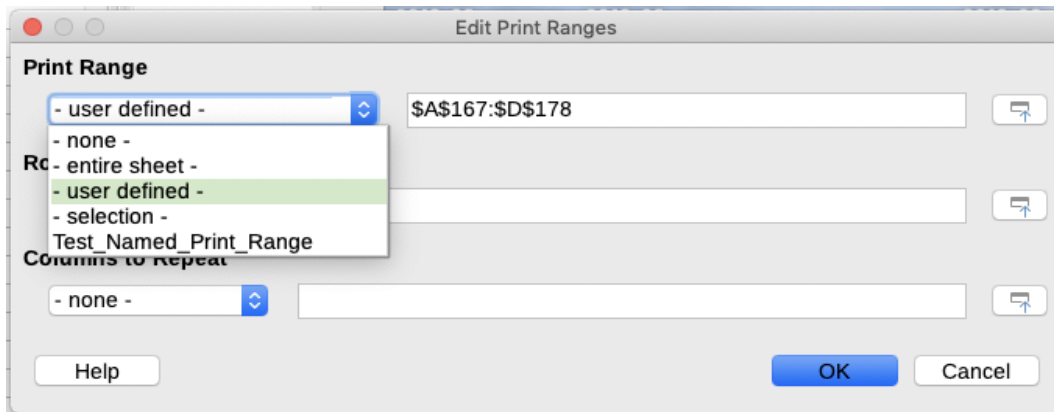


Figure 9: Choosing a named range for printing

### Deleting a named print range

To delete a named print range if it is no longer required:

- 1) Go to **Sheet > Named Ranges and Expressions > Manage** on the Menu bar, or press **Ctrl+F3**, to open the Manage Names dialog (Figure 10).

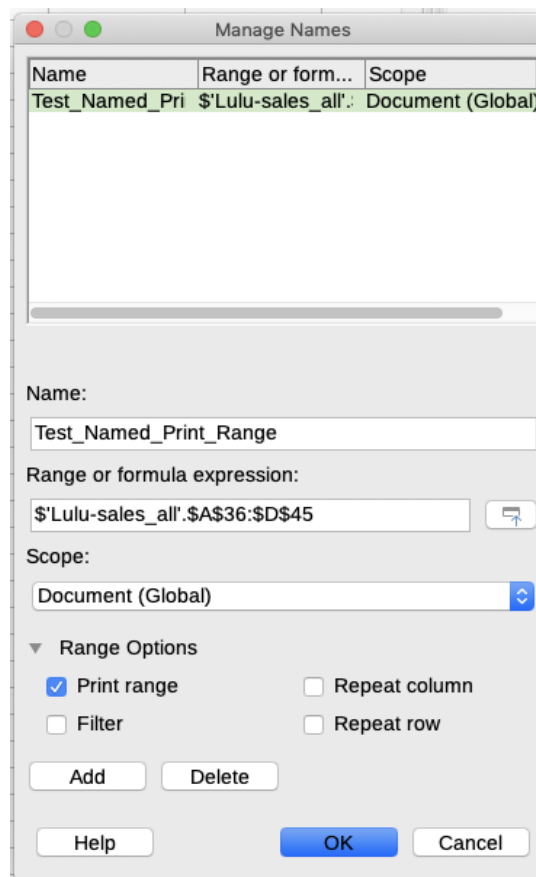


Figure 10: Manage Names dialog

- 2) Select the named print range you want to delete and confirm it is a print range by checking the options from the *Range Options*.
- 3) Click **Delete** and then click **OK** to close the dialog.

## Removing print ranges

It may become necessary to remove a defined print range, for example if the whole sheet needs to be printed later, or you no longer want to print some of the added ranges.

Go to **Format > Print Ranges > Clear** on the Menu bar to remove all of the defined print ranges in the spreadsheet, except for named print ranges. After the print range is removed, the default page break lines for the selected paper size will appear on the screen (assuming that **Tools > Options > LibreOffice Calc > View > Page breaks** is enabled).

To remove named print ranges, see “Deleting a named print range” above.

## Repeat printing of rows or columns

If a spreadsheet is printed on multiple pages, you can define specific rows or columns (for example, headings) to repeat print on each printed page.

### Using print ranges

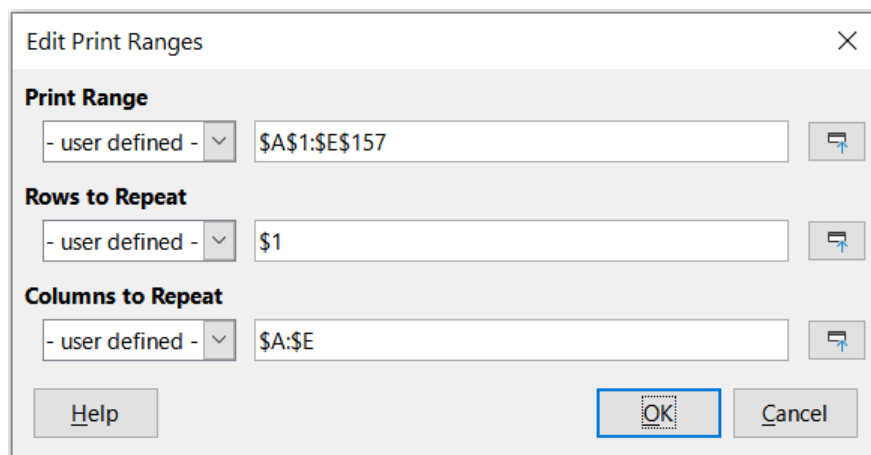


Figure 11: Repeat printing of rows and columns

- 1) Go to **Format > Print Ranges > Edit** to open the Edit Print Ranges dialog (Figure 11).
- 2) In the *Rows to Repeat* box, type the references for the rows to be repeat printed. For example, to repeat rows 1, 2 and 3, type \$1:\$3. This automatically changes the *Rows to Repeat* drop-down from *- none -* to *- user defined -*.

You can also place the cursor in the *Rows to Repeat* box and then, using the mouse, select a cell in each row you want to be repeat printed. It is not necessary to select the whole row.

- 3) In the *Columns to Repeat* box, type the references for the columns to be repeat printed. For example, to repeat column A, type \$A. This automatically changes the *Columns to Repeat* drop-down from *- none -* to *- user defined -*.

You can also place the cursor in the *Columns to Repeat* box and then, using the mouse, select a cell in each column you want to be repeat printed.

- 4) Click **OK** to save your changes and close the dialog.

### Using named print ranges

You can also define named print ranges to use for repeat printing of rows or columns as follows:

- 1) Define and name the rows and/or columns you want to repeat print. See “Named print ranges” above for more information. Similar to user defined print ranges, it is sufficient to select one cell from the row or column you want to be repeat printed.

- 2) Select **Repeat column** and / or **Repeat row** from *Range Options* to define the columns and/or rows for repeat printing in the Define Name dialog (Figure 8 on page 11).
- 3) Click **Add** to accept the data and close the dialog.
- 4) Go to **Format > Print Ranges > Edit** to open the Edit Print Ranges dialog (Figure 11).
- 5) Select the defined and named print ranges from the *Rows to Repeat* and/or *Columns to Repeat* drop-down lists.
- 6) Click **OK** to save your changes and close the dialog.

## Page breaks

---

While defining a print range can be a powerful tool, you may sometimes need to manually adjust the page breaks to make sure the spreadsheet prints the way you want it to look. You can insert two types of page breaks into a spreadsheet:

- **Row break** – inserts a horizontal page break above a selected cell in a row. For example, if the selected cell is H15, then a row break is created between rows 14 and 15.
- **Column break** – inserts a vertical page break to the left of the selected cell in a column. For example, if the selected cell is H15, then a column break is created between columns G and H.

When a manual break is inserted, it appears as a blue line or as a bold line between the rows or columns on the display. The actual appearance depends on your computer setup. To see manual break lines more easily on your display, you can change their appearance. Go to **Tools > Options > LibreOffice > Application Colors** and scroll down to the *Spreadsheet* section where you can change how page breaks appear.

## Inserting page breaks

- 1) Select the cell where you want to insert a manual break in the spreadsheet.
- 2) Go to **Sheet > Insert Page Break** on the Menu bar.
- 3) Select **Row Break** to insert a row break above the cell or **Column Break** to insert a column break to the left of the cell.

Alternatively, go to **View > Page Break** on the Menu bar. Select the cell where you want to insert a manual break, right-click in the spreadsheet and select **Row Break** or **Column Break** in the context menu. Remember to go to **View > Normal** on the Menu bar and return to the standard spreadsheet view.

## Deleting page breaks

- 1) Select the cell where you want to delete a manual break from the spreadsheet.
- 2) Go to **Sheet > Delete Page Break** on the Menu bar.
- 3) Select **Row Break** to delete a row break from above the cell or **Column Break** to delete a column break from the left of the cell.

### Note

The **Column Break** or **Row Break** options are grayed if an appropriate cell has not been selected, either to the right of a column break or below a row break.

---

## Deleting multiple page breaks

Multiple manual row and column breaks can exist in the same spreadsheet. If you want to remove all breaks from the spreadsheet:

- 1) Go to **View > Page Break** on the Menu bar.
- 2) Right-click in the spreadsheet and select **Delete Page Breaks** in the context menu to remove all manual breaks from your spreadsheet.
- 3) Go to **View > Normal** on the Menu bar to return to the standard spreadsheet view.

## Printing options for page styles

When using page styles for your spreadsheets, you can include printing options within the page style. For example, page order, details, scale to be printed, and so on. Using page styles allows you to quickly set up and change the printing options of different sheets within your spreadsheet. See Chapter 5, Using Styles and Templates, for more information about page styles.

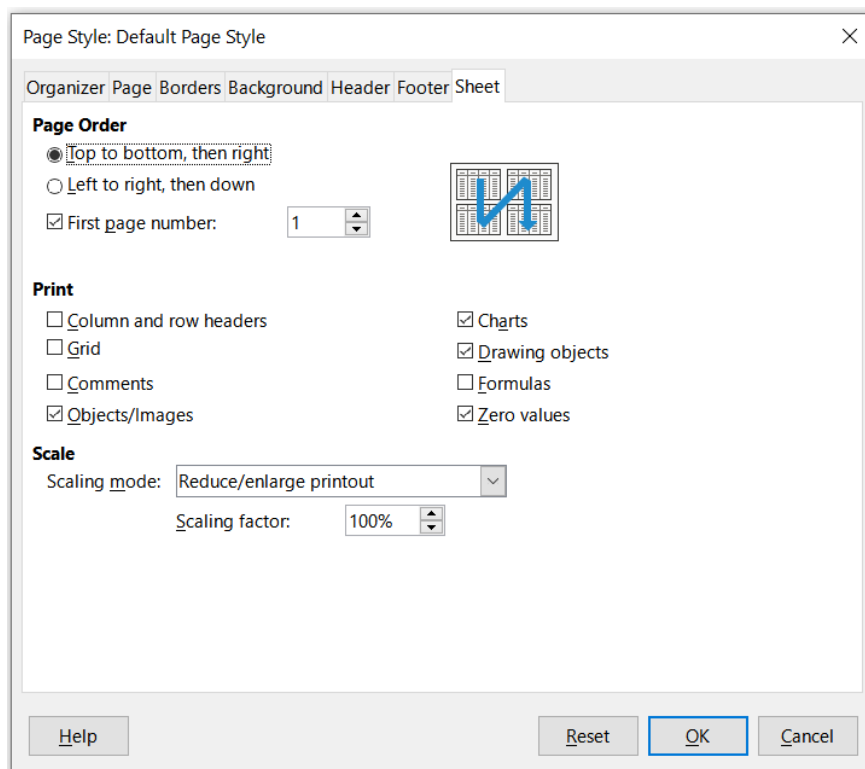


Figure 12: Page Style dialog – Sheet tab

Make sure you have selected the correct sheet within the spreadsheet before setting the print options. Go to **Format > Page Style** on the Menu bar to open the Page Style dialog, then click on the *Sheet* tab (Figure 12) to set the printing options for a page style. The dialog title indicates the name of the page style you are about to change.

### Tip

You can also open the Page Style dialog by going to the Styles deck of the Sidebar, right-clicking the relevant page style, and selecting **Modify** in the context menu. Another alternative is to double-click the name of the page style on the Status Bar.

- **Page Order** – defines the order in which data in a sheet is numbered and printed when it does not fit on one printed page. A preview of the page order is shown in the graphic on the top right of the dialog in Figure 12.
  - **Top to bottom, then right** – prints vertically from the left column to the bottom of the sheet.
  - **Left to right, then down** – prints horizontally from the top row of the sheet to the right column.
  - **First page number** – select this option if you want the first page to start with a number other than 1. Enter the number of the first page in the box.
- **Print** – defines which elements of the spreadsheet are to be printed.
  - **Column and row headers** – prints the column and row headers.
  - **Grid** – prints the borders of the individual cells as a grid. For the view on screen, make your selection under **Tools > Options > LibreOffice Calc > View > Grid lines**.
  - **Comments** – prints the comments defined in the spreadsheet. Comments will be printed on a separate page, along with the corresponding cell reference.
  - **Objects/Images** – includes all inserted objects (if printable) and graphics with the printed spreadsheet.
  - **Charts** – prints the charts that have been inserted into your spreadsheet.
  - **Drawing objects** – includes all drawing objects in the printed spreadsheet.
  - **Formulas** – prints the formulas contained in the cells, instead of the results of any formulas used in the spreadsheet.
  - **Zero values** – specifies that cells with a zero value are printed with a zero (0) in the cell.
- **Scale** – defines a page scale for the printed spreadsheet.
  - *Scaling mode* – select a scaling mode in the drop-down list. Appropriate controls for the scaling mode selected will be shown below the drop-down list box.
    - i) **Reduce/enlarge printout** – specifies a scaling factor to scale all printed pages. Enter the scaling factor as a percentage in the box, in the range 10% to 400%. Factors less than 100% reduce the pages, while higher factors enlarge the pages.
    - ii) **Fit print range(s) to width/height** – specifies the maximum number of pages horizontally (width) and vertically (height) on which every sheet with the current page style is to be printed.

The print ranges are always scaled proportionally, so the resulting number of pages may be less than specified. You may clear one of the boxes; then the unspecified dimension will use as many pages as necessary. If you clear both boxes, the scaling factor will be 100%.

    - iii) **Fit print range(s) on number of pages** – specifies the maximum number of pages to be printed for each sheet that uses the same page style. The scale will be reduced as necessary to fit the defined number of pages.



## Headers and footers

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Headers and footers are predefined pieces of text that are printed at the top or bottom of a sheet outside of the sheet area. Headers and footers are set the same way and you can have different content on left and right pages that use the same page style.

### Setting headers and footers

To turn the headers or footers on in your spreadsheet:

- 1) Select the sheet where you want to turn on the header or footer.
- 2) Open the Page Style dialog using one of the following methods:
  - Select **Format > Page Style** on the Menu bar.
  - Go to the Styles deck of the Sidebar, right-click the relevant page style, and select **Modify** in the context menu.
  - Double-click the name of the page style on the Status Bar.
- 3) Select the *Header* (or *Footer*) tab (Figure 13). The *Header* and *Footer* tabs on the Page Style dialog are identical.
- 4) Select the **Header on** or **Footer on** option.
- 5) Enter the values for the other options according to your requirements. These options are described below.
- 6) Click **OK** to save your changes and close the dialog.

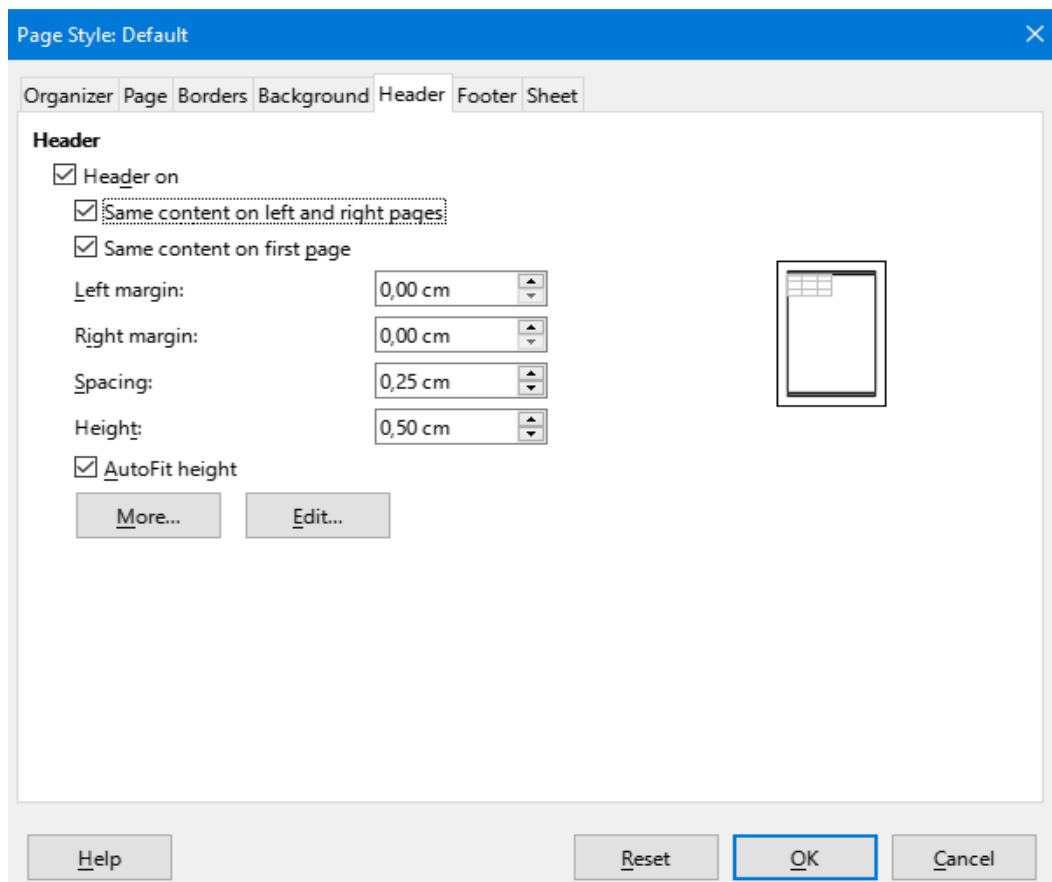


Figure 13: Page Style dialog – Header tab

- **Header on** or **Footer on** – adds a header or footer to the current page style.
- **Same content on left and right pages** – causes left and right pages to share the same header or footer content. To assign a different header or footer to left and right pages, deselect this option and then click **Edit**. See “Header or footer contents” below for more information.
- **Same contents on first page** – causes the first page to have a different header or footer than the remaining pages. To assign a different header or footer to the first page, deselect this option and then click **Edit**. See “Header or footer contents” below for more information.
- **Left margin** – enter the amount of space to leave between the left page margin and the left edge of the header or footer.
- **Right margin** – enter the amount of space to leave between the right page margin and the right edge of the header or footer.
- **Spacing** – enter the amount of space to maintain between the bottom edge of the header and the top edge of the spreadsheet, or the top edge of the footer and the bottom edge of the spreadsheet.
- **Height** – enter the height for the header or footer.
- **AutoFit height** – automatically adjusts the height of the header or footer to fit the content.
- Preview box – shown on the right side of Figure 13, this area displays a preview of the current selection.
- **More** – opens the Border/Background dialog, where you can define the appearance of borders and background colors or images for headers or footers. See Chapter 5, Using Styles and Templates, for more information.
- **Edit** – opens the Header or Footer dialog where you can add, edit, or format text that is placed in the header or footer. See “Header or footer contents” below for more information.

## Header or footer contents

The headers and footers in a Calc spreadsheet have three columns for text. Each column can either be empty or have different contents than the other columns.

- 1) Select the sheet where you want to turn on the header or footer.
- 2) Open the Page Style dialog (Figure 13), then select *Header on* or *Footer on* and the options for the header or footer. See “Setting headers and footers” above.
- 3) Click **Edit** to open the Header or Footer dialog (Figure 14). If **Same content on left and right pages** and / or **Same contents on first page** is deselected in the Page Style dialog, the Header or Footer dialog will have tabbed pages where you can set the header or footer contents for the first page as well as right and left pages.

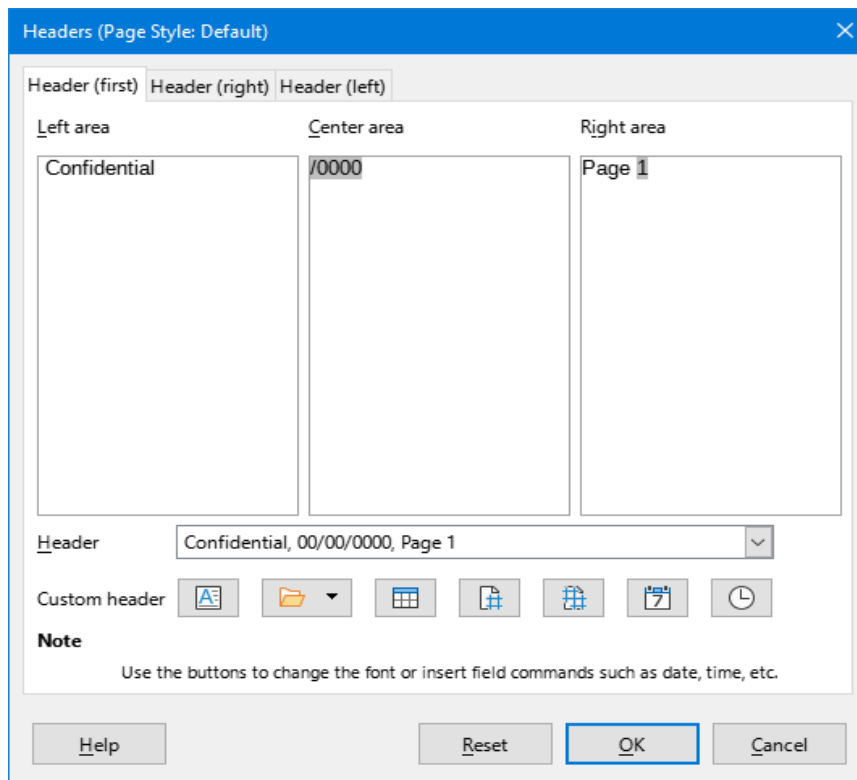


Figure 14: Header dialog

- 4) To enter standard contents into the header or footer, select an option from the *Header* or *Footer* drop-down list.
- 5) To enter customized contents into the header or footer, click in one of the area boxes and type your text, or click in one of the area boxes and click one of the **Custom header** or **Custom footer** icons. These icons are explained below.
- 6) To change the appearance of the text in the header or footer, click the **Text Attributes** icon to open the Text Attributes dialog, where you can set the font, font effects and font position.
- 7) Click **OK** to save the changes to text attributes and close the Text Attributes dialog.
- 8) Click **OK** to save the changes to the contents of the header or footer and close the Header or Footer dialog.
- 9) Click **OK** to save the changes to your header or footer and close the Page Style dialog.

The options available for a *Custom header* or *Custom footer* are as follows:

- **Text Attributes** – opens a Text Attributes dialog where you can assign formats to new or selected text. The Text Attributes dialog contains tabs for *Font*, *Font Effects*, and *Position*.
- **Title** – inserts a file name placeholder in the selected area. Click and select either **Title**, **File Name**, or **Path/File Name** in the drop-down menu that opens. If a title has not been assigned to the spreadsheet, the file name for the spreadsheet will be inserted instead.
- **Sheet Name** – inserts a placeholder in the selected area for the sheet name of the selected sheet in the spreadsheet.
- **Page** – inserts a placeholder in the selected area for the page number. This allows continuous page numbering in a spreadsheet.
- **Pages** – inserts a placeholder in the selected area for the total number of pages in the spreadsheet.

- **Date** – inserts a placeholder in the selected area for the current date, which will be repeated in the header/footer on each page of the spreadsheet.
- **Time** – inserts a placeholder in the selected area for the current time, which will be repeated in the header/footer on each page of the spreadsheet.

## Exporting to PDF

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Calc can export documents to PDF (Portable Document Format). This industry-standard file format is ideal for sending a file to someone else, for viewing using Adobe Acrobat Reader or any other PDF viewer.

### Caution

By default, a document in PDF format is not protected against contents tampering or editing. The PDF document contents can be edited by specialized software tools, including LibreOffice Draw.

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### Tip

Unlike **Save As**, the **Export** command writes a copy of the current document in a new file with the chosen format, but keeps the current document and format open in your session.

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## Quick export to PDF

Click the **Export Directly as PDF** icon on the Standard toolbar to export the entire spreadsheet using the PDF settings most recently selected on the PDF Options dialog (see below). You are asked to enter the file name and location for the PDF, but you do not get a chance to choose a page range, image compression, or other options.

## Controlling PDF content and quality

For more control over the content and quality of the resulting PDF, use **File > Export as PDF**. The PDF Options dialog opens. This dialog has six tabs (*General*, *Initial View*, *User Interface*, *Links*, *Security*, and *Digital Signatures*). Select the appropriate settings, and then click **Export**. Then enter the location and file name of the PDF to be created, and click **Save** to export the file.

### Tip

You can also access the PDF Options dialog by going to **File > Export** on the Menu bar and then selecting the **PDF - Portable Document Format** entry in the *Save as type* drop-down menu.

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## General tab of PDF Options dialog

On the *General* tab (Figure 11), 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 the *Getting Started Guide* or the Help. In most cases, the defaults will be what you need.

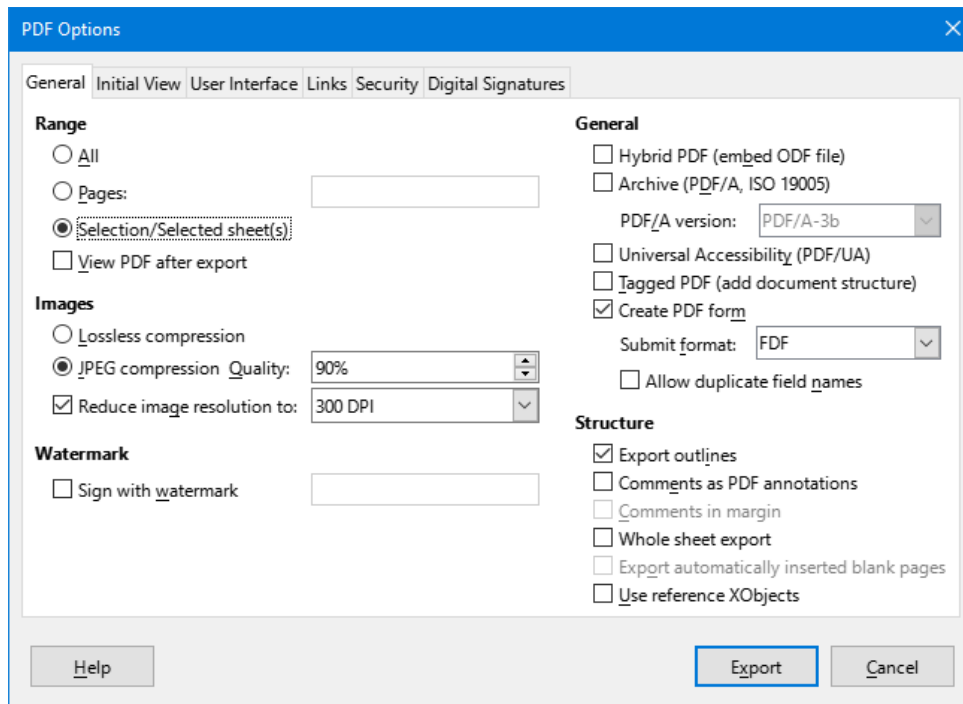


Figure 15: PDF Options dialog – General tab

### Range section

- **All:** Exports the entire document to PDF.
- **Pages:** To export a range of pages within a selected sheet, use the format 3-6 (pages 3 to 6). To export single pages, use the format 7;9;11 (pages 7, 9, and 11), or a combination of the two formats.
- **Selection/Selected sheet(s):** Exports the selected material (one or more sheets or part of a sheet).
- **View PDF after export:** If selected, your default PDF viewer will open and display the newly exported PDF.

### Images section

- **Lossless compression:** Images are stored without any loss of quality. This option can lead to large files when used with photographs. Recommended for other kinds of images or graphics.
- **JPEG compression:** Allows for varying degrees of quality, in the range 1 to 100%. A setting of 90% works well with photographs (small file size, little perceptible loss of quality).
- **Reduce image resolution:** Select the required value from the options in the drop-down menu. Lower DPI (dots per inch) images have lower quality. Higher DPI settings can greatly increase the size of the exported file.

### Watermark section

- **Sign with watermark:** When this option is selected, a transparent overlay of the text you enter into the text box will appear on each page of the PDF.

## General section

- **Hybrid PDF (embed ODF file):** Use this setting to export the document as a PDF file containing two file formats: PDF and ODF. In PDF viewers it behaves like a normal PDF file, and it remains fully editable in LibreOffice.
- **Archive (PDF/A, ISO 19005):** PDF/A is an ISO standard for long-term preservation of documents, by embedding all the information necessary for faithful reproduction (such as fonts) while forbidding other elements (including forms, security, and encryption). PDF tags are written. Also select which version of the standard to use, **PDF/A-1b**, **PDF/A-2b**, or **PDF/A-3b**.
- **Universal Accessibility (PDF/UA):** Use this setting to create a universal accessibility-compliant PDF file that follows the requirements of the PDF/UA standard (formerly ISO 14289).
- **Tagged PDF:** Tagged PDF contains information about the structure of the document's contents. This can help to display the document on devices with different screens, and when using screen reader software. Some tags that are exported are table of contents, hyperlinks, and controls. This option can increase file sizes significantly.
- **Create PDF form – Submit format:** Use the drop-down menu to choose the format of submitting forms from within the PDF file (**PDF**, **HTML**, or **XML**).
- **Allow duplicate field names** – If enabled, the same field name can be used for multiple fields in the generated PDF file. If disabled, field names will be exported using generated unique names.

## Structure section

- **Export outlines:** Generally not used in Calc.
- **Comments as PDF annotations:** Exports comments as PDF notes. You may not want this!
- **Comments in margins:** Not available in Calc.
- **Whole Sheet Export:** The setting allows you to export your Calc spreadsheet to PDF, with the content of a sheet exported as one page in the PDF. This facility is not intended for printing but allows you to easily see and review the full content of a spreadsheet document in a PDF form, without the usual slicing of the sheets into printable pages. Preview pages will have different sizes, as do the source sheets.

### Note:

Selecting the **Whole Sheet Export** option causes Calc to disregard many of the other settings on the PDF Options dialog.

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- **Export automatically inserted blank pages:** Not available in Calc.
- **Use reference XObjects:** Reference XObjects enable one PDF file to import content from another. More information can be found in the ISO 32000 standard that defines the core specifications of PDF files. If you are not familiar with reference XObjects, leave this box unchecked.

### Initial View tab of PDF Options dialog

On the *Initial View* tab (Figure 16), you can select how the PDF file opens by default in a PDF viewer. The options should be self-explanatory.

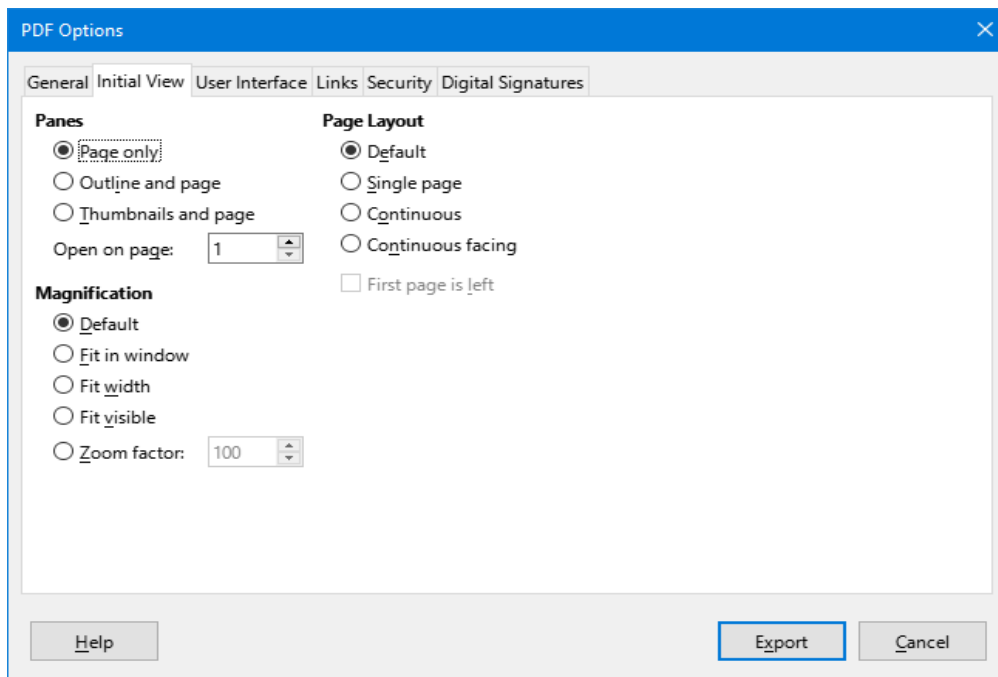


Figure 16: PDF Options dialog – Initial View tab

### User Interface tab of PDF Options dialog

On the *User Interface* tab (Figure 17), you can select options to control how a PDF viewer displays the file. Some of these options are useful when you are creating a PDF to be used as a presentation or a kiosk-type display.

#### Window Options

- **Resize window to initial page:** the PDF reader window displays the whole first page.
- **Center window on screen:** the PDF is shown in a reader window centered on screen.
- **Open in full screen mode:** the PDF reader window is in front of all other windows.
- **Display document title:** the PDF is shown with the document title in the reader title bar.

#### Transitions

Not used in Calc.

#### User Interface Options

- **Hide menubar:** hides the reader menu bar when the document is active.
- **Hide toolbar:** hides the reader toolbar when the document is active.
- **Hide window controls:** hides the reader controls when the document is active.

#### Collapse Outlines

- **Show All:** shows all outline levels when the reader opens the PDF.
- **Visible levels:** shows outline levels down to the selected level (in the range 1 to 10) when the reader opens the PDF.

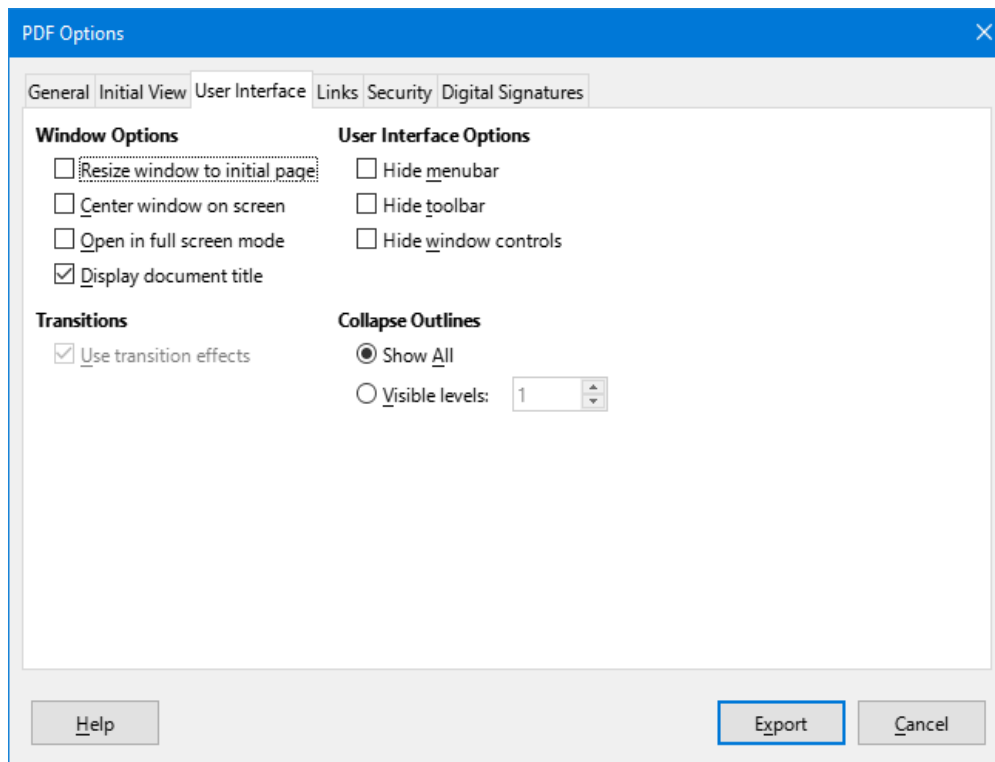


Figure 17: PDF Options dialog – User Interface tab

## ✓ Note

Outlines are generally not used in Calc.

## Links tab of PDF Options dialog

On the *Links* tab (Figure 18) you can select how bookmarks and hyperlinks are exported to PDF.

### General

- **Export outlines as named destinations:** If you have defined Calc sheet names, this option exports them as “named destinations” to which Web pages and PDF documents can link. Generally not used in Calc.
- **Convert document references to PDF targets:** If you have defined links to other documents with OpenDocument extensions (such as .odt, .ods, and .odp), this option converts the file extensions to .pdf in the exported PDF document.
- **Export URLs relative to file system:** If you have defined relative links in a document, this option exports those links to the PDF. See *Relative hyperlinks* in the Calc Help for more information.

### Cross-document links

Defines the behavior of links clicked in PDF files. Select one among the following alternatives:

- **Default mode:** The PDF links will be handled as specified in your operating system.
- **Open with PDF reader application:** Use the same application used to display the PDF document to open linked PDF documents.
- **Open with Internet browser:** Use the default Internet browser to display linked PDF documents.



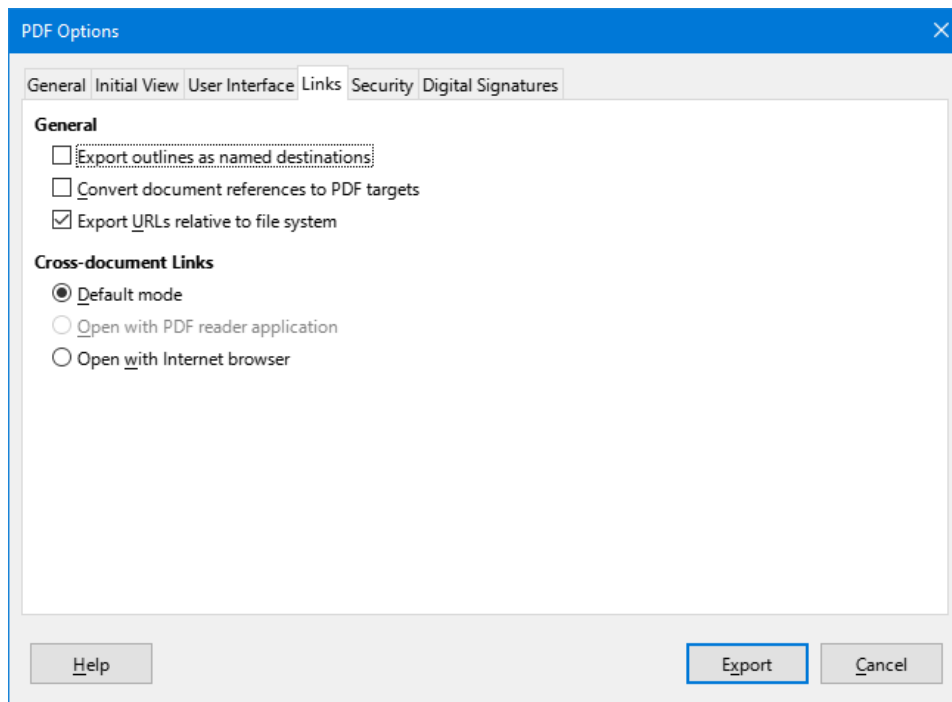


Figure 18: PDF options dialog - Links tab

### Security tab of PDF Options dialog

Use the *Security* tab (Figure 19) to encrypt and set passwords when you export your spreadsheet and create the PDF file. Setting encryption and passwords also allows you to apply restrictions on printing and if changes or copying can be carried out on the PDF file.

Click the **Set Passwords** button to open the Set Passwords dialog (Figure 20), where you enter the passwords. You can enter a password (**Set open password**) to open the file and an optional password (**Set permission password**) to restrict what readers can do with the PDF file.

- 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 permission password set, the PDF can be opened by anyone, but its permissions can be restricted. See Figure 19. After you set a password for permissions, the other choices on the right half of the *Security* tab become available.
- 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.

The options on the *Security* tab become available only when passwords have been set.

#### Note

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

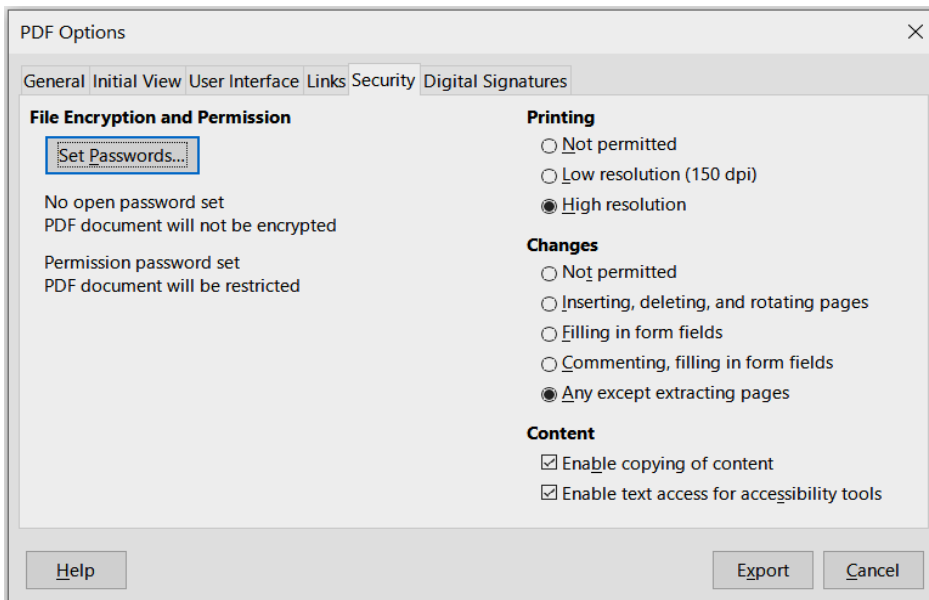


Figure 19: PDF Options dialog – Security tab

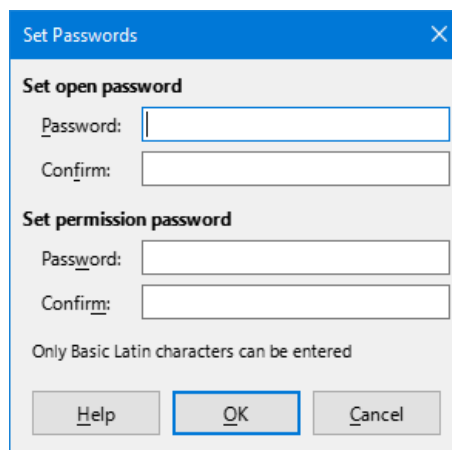


Figure 20: Set Passwords dialog

### Digital Signatures tab of PDF Options dialog

The *Digital Signatures* tab contains the options related to exporting a digitally signed PDF.

Digital signatures are used to ensure that the PDF was really created by the original author (that is, you), and that the document has not been modified since it was signed.

The signed PDF export uses the keys and X.509 certificates already stored in your default key store location or on a smartcard. The key store to be used can be selected under **Tools > Options > LibreOffice > Security > Certificate Path**. (Not available on Microsoft Windows systems, where LibreOffice will access the system certificate storage.) When using a smartcard, it must already be configured for use by your key store. This is usually done during installation of the smartcard software. Details about using these features is outside the scope of this chapter.

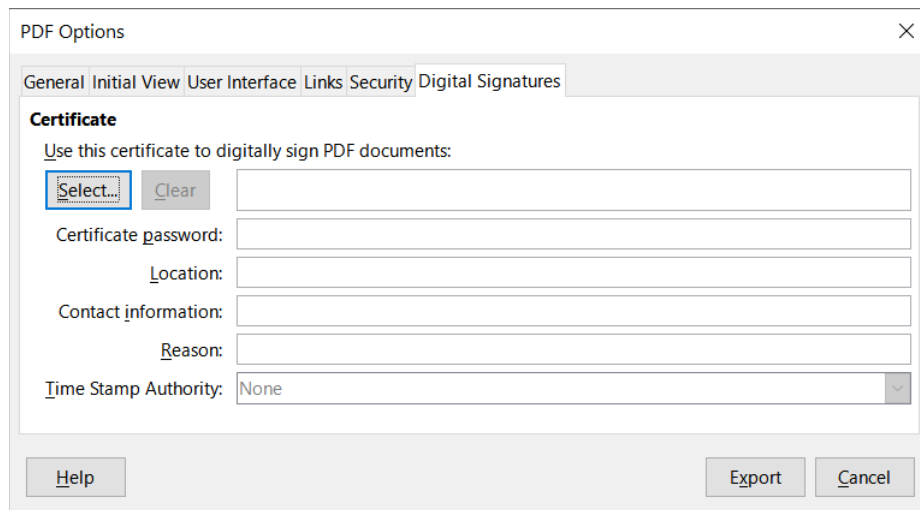


Figure 21: PDF Options dialog – Digital Signatures tab

- **Use this certificate to digitally sign PDF documents:** Click **Select** to open the Select X.509 Certificate dialog, where all certificates found in your selected key store are displayed. If the key store is protected by a password, you are prompted for it. When using a smartcard that is protected by a PIN, you are also prompted for that.

Select the certificate to use for digitally signing the exported PDF, then click **Select**.

All other fields on the *Digital Signatures* tab are accessible only after a certificate has been selected.

- **Certificate password:** Enter the password used for protecting the private key associated with the selected certificate. Usually this is the key store password. If the key store password has already been entered in the Select X.509 Certificate dialog, the key store may already be unlocked and not require the password again.

When using a smartcard, enter the PIN here. Some smartcard software will prompt you for the PIN again before signing.

- **Location, Contact information, Reason:** Optionally enter additional information about the digital signature that will be applied to the PDF. This information will be embedded in the appropriate PDF fields and will be visible to anyone viewing the PDF. Each or all of the three fields may be left blank.
- **Time Stamp Authority:** Optionally select a Time Stamping Authority (TSA) URL. During the PDF signing process, the TSA will be used to obtain a digitally signed timestamp that is then embedded in the signature. Anyone viewing the PDF can use this timestamp to verify when the document was signed.

The list of TSA URLs that can be selected is maintained under **Tools > Options > LibreOffice > Security > TSAs**. If no TSA URL is selected (the default), the signature will not be timestamped, but will use the current time from your local computer.

## Exporting to other formats

LibreOffice uses the term “export” for some file operations involving a change of file type. If you want to use another spreadsheet file format (for example, Microsoft Excel), use **File > Save As**. If you want to create web pages from your spreadsheet, use **File > Export**.

## Emailing spreadsheets

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LibreOffice provides several ways to send a document quickly and easily as an email attachment in OpenDocument format (LibreOffice default format), other spreadsheet formats, or as a PDF file. You can also email a document to several recipients. For more information, see the *Getting Started Guide*.

To send the spreadsheet as an email attachment:

- 1) Go to **File > Send** on the Menu bar and select from the following options. LibreOffice opens your default email program (if set) with the spreadsheet attached in the selected format.
  - *Email Document*: the spreadsheet is sent in its current format.
  - *Email as OpenDocument Spreadsheet*: the spreadsheet is sent in the ODF format (.ods).
  - *Email as Microsoft Excel*: the spreadsheet is sent in the Excel format (.xlsx).
  - *Email as PDF*: The PDF Options dialog opens. Select the parameters to be used for the PDF file. See “Controlling PDF content and quality” above.
- 2) In your email program, enter the recipient, subject, and any text you want to add, then send the email.

## Digital signing of documents

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To sign a document digitally, you need a personal key, also known as a 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 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 LibreOffice, 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, the change breaks the digital signature.

On Windows operating systems, the Windows features for validating a signature are used. On Linux systems, files that are supplied by Mozilla Thunderbird or Firefox are used to validate the signature. For a more detailed description of how to get and manage a certificate, and signature validation, see *About Digital Signatures* in the LibreOffice Help.

### Applying a digital signature

The following procedure is only an example of how to digitally sign a document. The actual procedure depends on how your computer is set up and the computer’s operating system.

- 1) Open the file that you want to digitally sign.
- 2) Go to **File > Digital Signatures > Digital Signatures** on the Menu bar.

- If you have set LibreOffice to warn you when the document contains certain types of information (see “Removing personal data” below), you may see a message box asking whether you want to continue signing the document. Click **Yes** to continue, or click **No** to exit and take appropriate action to remove the private information and restart this procedure.
  - If you have not saved the document since the last change, a message box appears. Click **Yes** to save the file. When you have saved the file, the Digital Signatures dialog opens (Figure 22). It lists existing signatures and their descriptions (if they have any).
- 3) On the Digital Signatures dialog, click **Sign Document** to open the Select X.509 Certificate dialog (Figure 23).

Select the certificate you want to use and click **Sign** to close the Select X.509 Certificate dialog.

The certificate used is displayed in the Digital Signatures dialog with an icon next to its name. This icon indicates the status of the digital signature.

- An icon with a red seal indicates that the document was signed and the certificate was validated.
- An icon with a yellow caution triangle overlaying the red seal indicates that the document is signed but that the certificate could not be validated.
- An icon with a yellow caution triangle by itself indicates an invalid digital signature.

- 4) Click **Close** to close the Digital Signatures dialog and digitally sign your file.

A signed document shows an icon in the status bar. You can double-click the icon to view the certificate. More than one signature can be added to a document.

### Note

If you make any changes to the document after digitally signing, the digital signature is removed automatically and you have to repeat the above procedure to digitally sign it again.

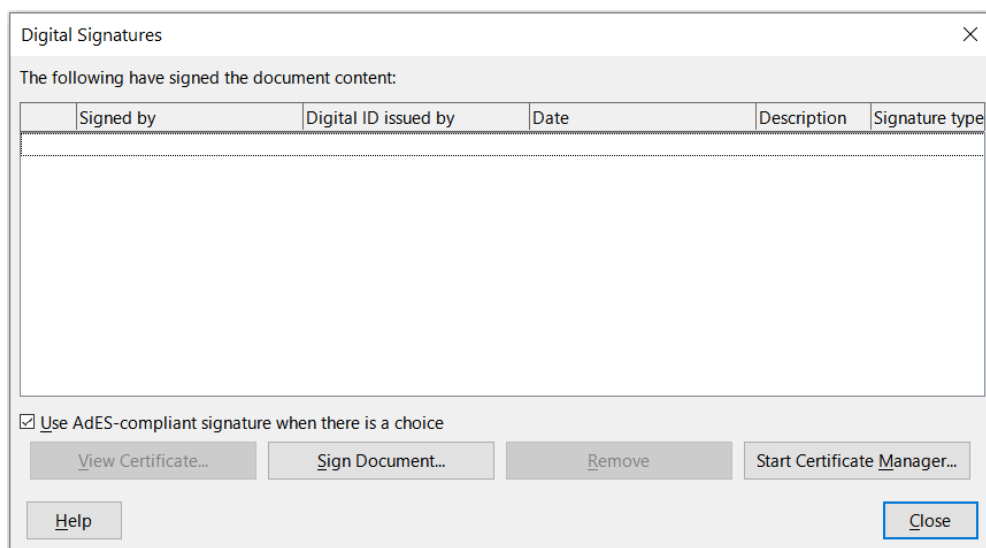


Figure 22: Digital Signatures dialog

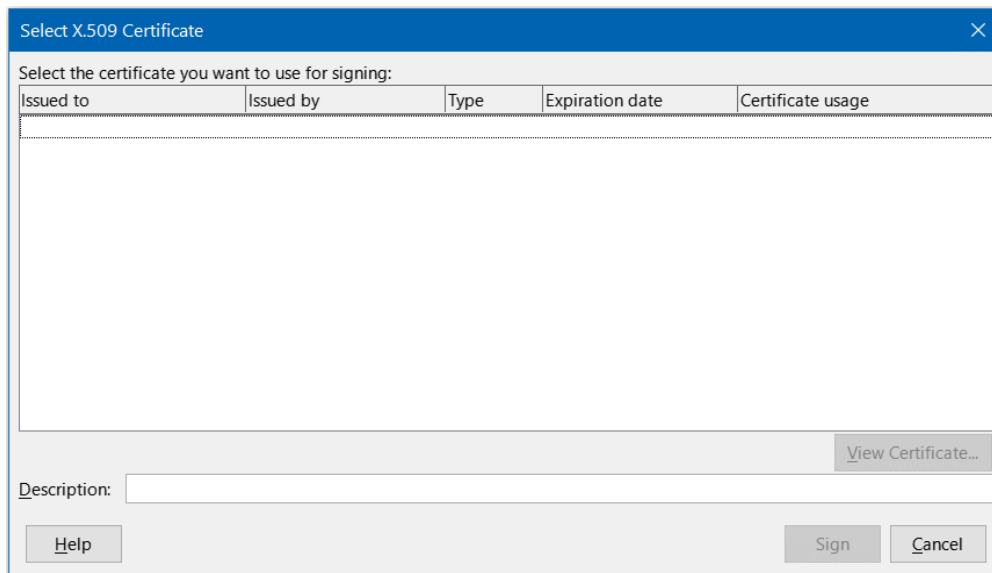


Figure 23: Select X.509 Certificate dialog

## Signing multiple times with the same signature

In the past, LibreOffice prohibited creating multiple signatures by the same author on a document, because there was no semantic meaning of signing the same document multiple times. LibreOffice now provides a signature description, so multiple signatures from the same author are allowed, because each signature can have a different meaning.

When you select **File > Digital Signatures > Digital Signatures**, the dialog (Figure 22) lists existing signatures together with their description (if they have any).

When you click the **Sign Document** button, the dialog (Figure 23) for certificate selection now also asks for an optional description.

Changing the value of an existing description invalidates the signature.

## Digitally signing macros

Normally, macros are part of a document. If you sign a document, the macros inside the document are signed automatically. If you want to sign only the macros, but not the document, go to **Tools > Macros > Digital Signature** on the Menu bar and apply the signature as described above.

## Removing personal data

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You may wish to ensure that personal data, versions, notes, hidden information, or recorded changes are removed from files before you send them to other people or create PDFs from them.

- In **Tools > Options > LibreOffice > Security > Options**, you can set Calc to remind you when files contain certain information and to remove personal information automatically on saving.
- To remove personal and some other data from a file, go to **File > Properties**. On the *General* tab, deselect **Apply user data** and then click **Reset Properties**. This removes any names in the created and modified fields, deletes the modification and printing dates, and resets the *Total editing time* to zero, the creation date to the current date and time, and the *Revision number* to 1.

- To remove version information, either go to **File > Versions** on the Menu bar, select the versions from the list and click **Delete**, or go to **File > Save As** and save the file with a different name.