



Calc Guide

Chapter 2 *Entering, Editing, and* *Formatting Data*

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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 book. For a more detailed list, see the application Help.

<i>Windows or Linux</i>	<i>macOS equivalent</i>	<i>Effect</i>
Tools > Options menu	LibreOffice > Preferences	Access setup options
Right-click	<i>Control</i> +click or right-click depending on computer setup	Open a context menu
<i>Ctrl</i> (Control)	⌘ (Command)	Used with other keys
<i>F5</i>	<i>Shift</i> +⌘+ <i>F5</i>	Open the Navigator
<i>F11</i>	⌘+ <i>T</i>	Open the sidebar Styles deck

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Introduction

You can enter data into Calc in several ways: using the keyboard, dragging and dropping, the Fill tool, and selection lists. Calc also provides the ability to enter data into multiple sheets of the same spreadsheet at the same time. After entering data, you can format and display it in various ways.

Entering data

Most data entry in Calc can be done using the keyboard.

Numbers

Click in the cell and type the number using the number keys on either the main keyboard or the numeric keypad.

Negative numbers

To enter a negative number, either type a minus (–) sign in front of the number or enclose the number in parentheses (), for example (1234). The result for both methods of entry is the same; for example, –1234.

Leading zeroes

If a number is entered with leading zeroes, for example 01481, by default Calc will automatically drop the leading zero. To retain a minimum number of characters in a cell when entering numbers and retain the number format, for example 1234 and 0012, use this method to add leading zeroes:

- 1) With the cell selected, right-click on the cell and select **Format Cells** from the context menu, or go to **Format > Cells** on the Menu bar, or use the keyboard shortcut *Ctrl+1* to open the Format Cells dialog (Figure 1).

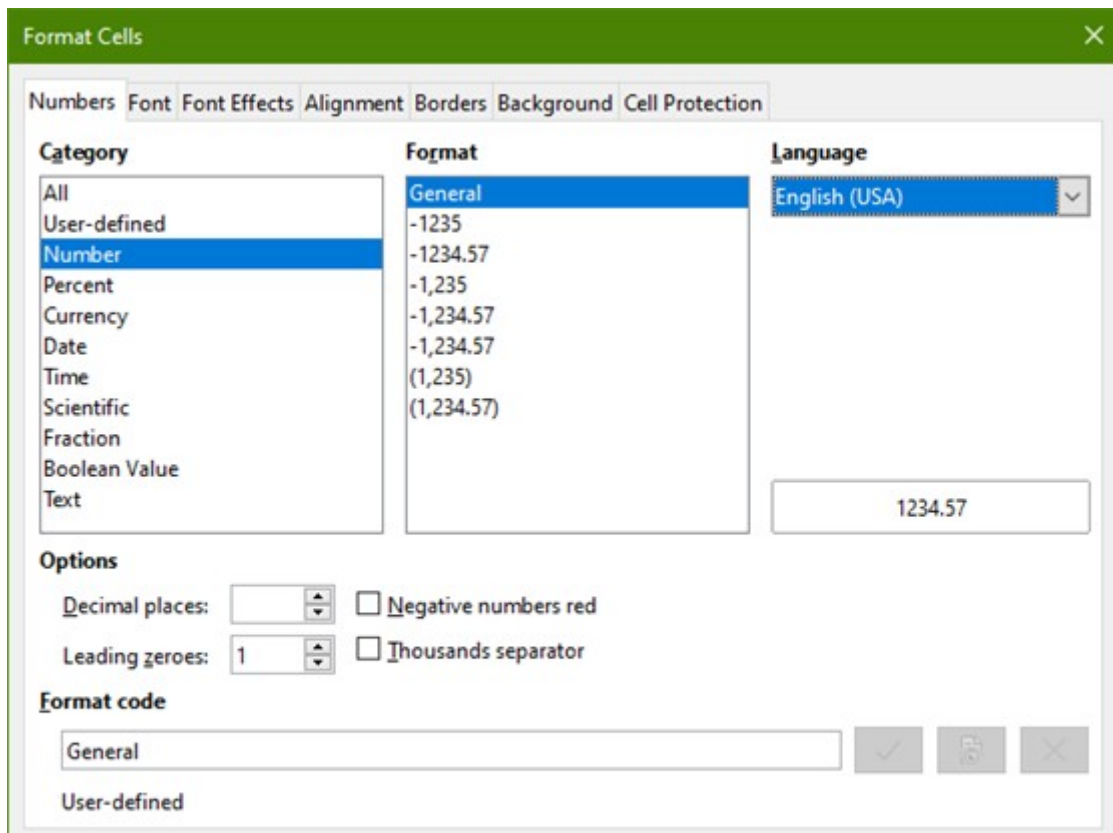


Figure 1: Format Cells dialog – Numbers tab

- 2) Make sure the *Numbers* tab is selected, then select **Number** in the Category list.
- 3) In **Options > Leading Zeroes**, enter the minimum number of characters required. For example, for four characters, enter 4. Any number less than four characters will then have leading zeroes added, for example 12 becomes 0012.
- 4) Click **OK**. The number entered retains its number format and any formula used in the spreadsheet will treat the entry as a number in formula functions.



Tip

To format numbers with only decimal places, but without a leading zero, follow steps 1 and 2 above, then in the **Format code** box type a . (period or full stop) followed by ? (question marks) to represent the number of decimal places required. For example, for 3 decimal places, type .??? and click **OK**. Any number with only decimal places will then have no leading zero, for example 0.01856 becomes .019.

Numbers as text

Numbers can also be converted into text as follows:

- 1) With the cell selected, open the Format Cells dialog (Figure 1).
- 2) Make sure the *Numbers* tab is selected, then select **Text** from the *Category* list.
- 3) Click **OK**. The number is converted to text and, by default, is left-aligned. You can change the formatting and alignment of any text numbers just as you would with normal text.



Note

Any numbers formatted as text in a spreadsheet will be treated as a zero value by any formulas used in the spreadsheet. Formula functions will ignore text entries.

Text

Click in a cell and type the text. The text is left-aligned by default. Cells can contain several lines of text. If you want to use paragraphs, press **Ctrl+Enter** to create another paragraph.

On the Formula Bar, you can extend the Input Line if you are entering several lines of text. Click on the **Extend Formula Bar** icon located on the right of the Formula Bar and the Input Line becomes multi-line, as shown in Figure 2. Click the **Extend Formula Bar** icon again to return to a single input line.

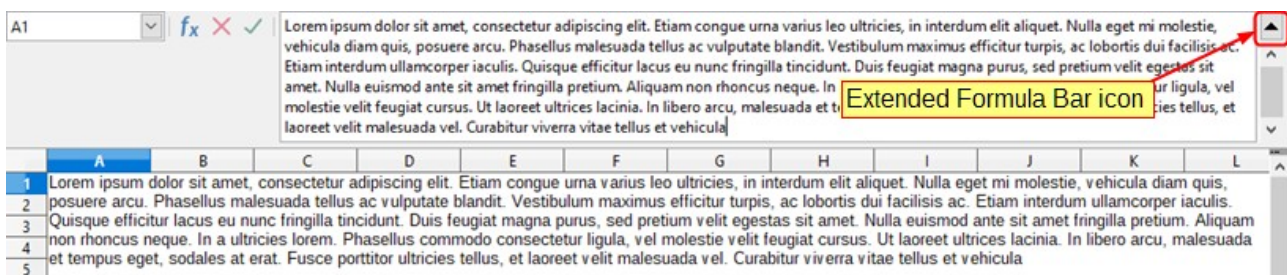


Figure 2: Extended input line on Formula Bar

Date and time

Select the cell and type the date or time. You can separate the date elements with a slash (/) or a hyphen (-) or use text, for example 10 Oct 2012. The date format automatically changes to the selected format used by Calc.

When you enter a time, separate time elements with colons, for example 10:43:45. The time format automatically changes to the selected format used by Calc.

To change the date or time format used by Calc:

- 1) With the cell selected, open the Format Cells dialog (Figure 1).
- 2) Make sure the **Numbers** tab is selected, then select **Date** or **Time** from the *Category* list.
- 3) Select the date or time format you want to use from the Format list.
- 4) Click **OK** to save the changes and close the dialog.



Note

The date format will be influenced by the system or worksheet language settings.

Special characters

A special character is a character not normally found on a standard keyboard; for example, © ¾ æ ç ñ ö ø Ć. To insert a special character:

- 1) Place the cursor where you want the character to appear.
- 2) Go to **Insert > Special Character...** on the Menu bar to open the Special Characters dialog (Figure 3).

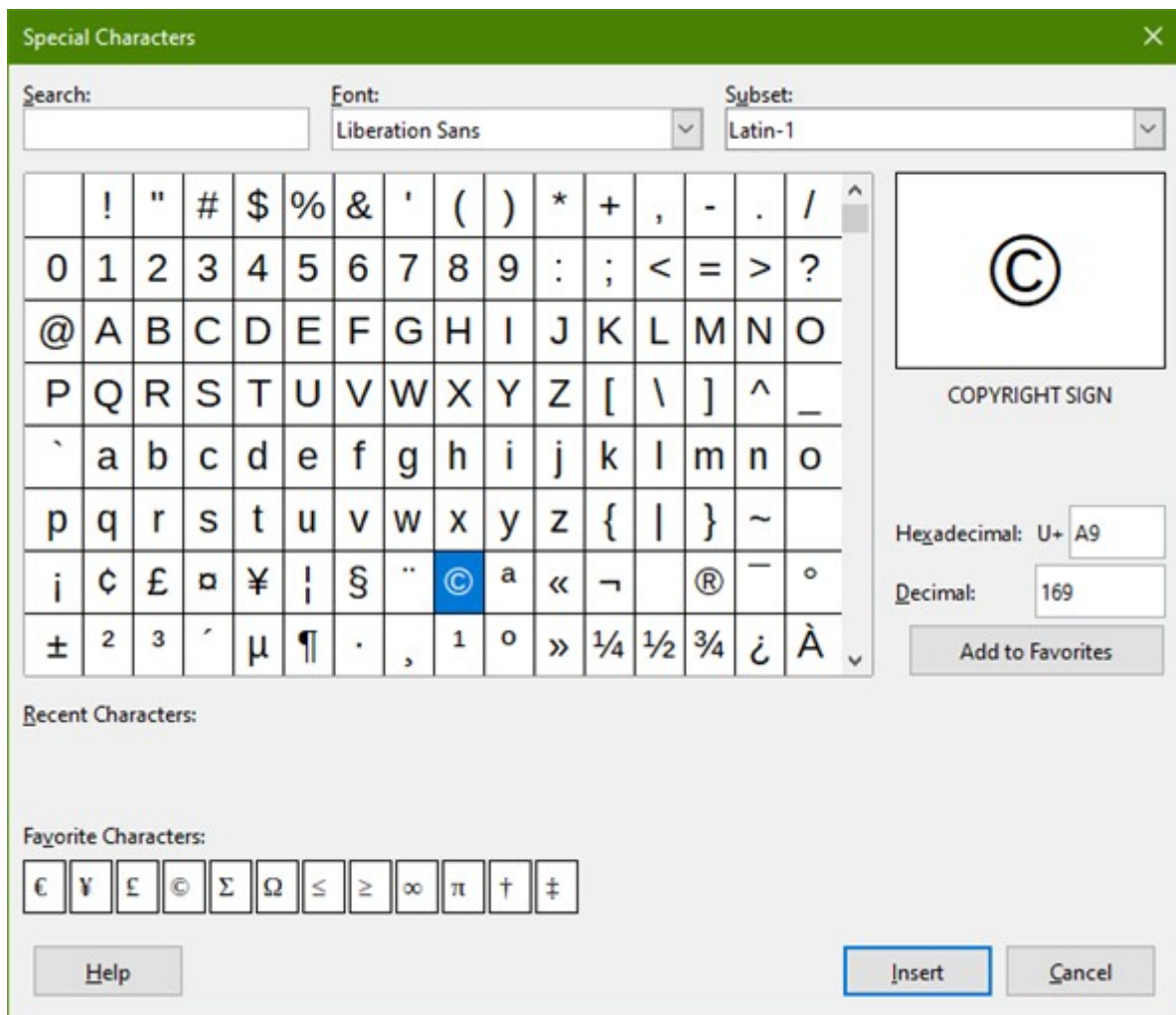


Figure 3: Special Characters dialog

- 3) From the grid of characters, select the required character. The last character selected is shown on the right of the Special Characters dialog along with its numerical code.
- 4) Any recently inserted characters are shown below the grid of characters and can be selected in the same way as any other character in the dialog.
- 5) At the bottom of the dialog there is provision for building a small collection of *Favorite Characters*. To add a new character to the collection, select the required character and click the **Add to Favorites** button. To remove an existing character from the collection, select the character and click the **Remove from Favorites** button.
- 6) Click **Insert** to close the dialog and the special character is inserted into the selected cell.



Note

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

AutoCorrect options

Calc automatically applies many changes during data input using AutoCorrect, unless you have deactivated any AutoCorrect changes. You can also undo any AutoCorrect changes by using the keyboard shortcut *Ctrl+Z* or manually by going back to the change and replacing the autocorrection with what you want to actually see.

To change the AutoCorrect options, go to **Tools > AutoCorrect > AutoCorrect Options** on the Menu bar to open the AutoCorrect dialog (Figure 4).

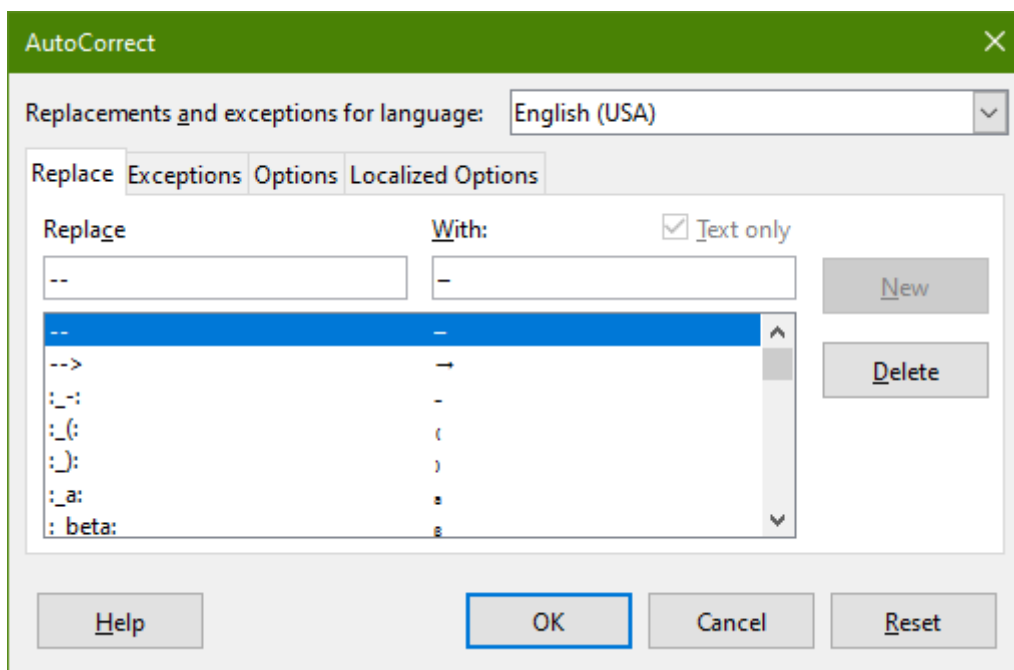


Figure 4: AutoCorrect dialog

Replace

Edit the replacement table for automatically correcting or replacing words or abbreviations.

Exceptions

Specify the abbreviations or letter combinations that you do not want corrected automatically.

Options

Select the options for automatically correcting errors as you type and then click **OK**.

Localized Options

Specify the AutoCorrect options for quotation marks and for options that are specific to the language of the text.

Reset

Reset modified values back to the LibreOffice default values.

Inserting dashes

Calc provides text shortcuts so that you can quickly insert dashes into a cell and these shortcuts are shown in Table 1.

Table 1: Inserting dashes

Text that you type	Result
A - B (A, space, hyphen, space, B)	A – B (A, space, en-dash, space, B)
A -- B (A, space, hyphen, hyphen, space, B)	A – B (A, space, en-dash, space, B)
A-B (A, hyphen, hyphen, B)	A—B (A, em-dash, B)
A-B (A, hyphen, B)	A-B (unchanged)
A -B (A, space, hyphen, B)	A -B (unchanged)
A --B (A, space, hyphen, hyphen, B)	A –B (A, space, en-dash, B)

Speeding up data entry

Entering data into a spreadsheet can be very labor-intensive, but Calc provides tools for removing some of the drudgery from input. These tools include drag and drop to move or copy contents of one cell to another using a mouse, an AutoInput tool, the Fill tool, and selection lists.

The Fill tool and selection lists automate input of repetitive material into cells. Calc also has the ability to input information into multiple sheets of the same spreadsheet at the same time.

AutoInput tool

The AutoInput function in Calc automatically completes entries, based on other entries in the same column. The column is scanned up to a maximum of 2000 cells or 200 different strings.

When text is highlighted in a cell, AutoInput can be used as follows:

- 1) To accept the completion, press *Enter* or *F2* or click the mouse button.
- 2) To view more completions, use the key combinations *Ctrl+Tab* to scroll forward, or *Ctrl+Shift+Tab* to scroll backward.
- 3) To see a list of all available AutoInput text items for the current column, use the keyboard combination *Alt+Down Arrow*.

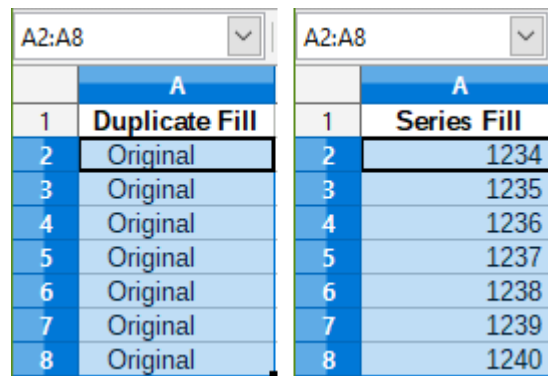
When typing formulas using characters that match previous entries, a Help tip will appear listing the last ten functions used in the Function Wizard from all defined range names and from the content of all label ranges.

AutoInput ignores the case sensitivity of any data you enter. If, for example, you have written "Total" in a cell, you cannot then enter "total" in another cell of the same column without first deactivating AutoInput.

By default, AutoInput is activated in Calc. To turn it off, go to **Tools** on the Menu bar and deselect **AutoInput**.

Fill tool

You can use the Fill tool in Calc to duplicate existing content or create a series in a range of cells in the spreadsheet as shown by the examples in Figure 5.



	A
1	Duplicate Fill
2	Original
3	Original
4	Original
5	Original
6	Original
7	Original
8	Original

	A
1	Series Fill
2	1234
3	1235
4	1236
5	1237
6	1238
7	1239
8	1240

Figure 5: Examples of using the Fill tool

- 1) Select the cell containing the contents you want to copy or start the series from.
- 2) Drag the cursor in any direction or hold down the *Shift* key and click in the last cell you want to fill.
- 3) Go to **Sheet > Fill Cells** on the Menu bar and select the direction in which you want to copy or create data (**Down, Right, Up, Left, Sheets, Series** or **Random Number**). A menu option will be grayed out if it is not available.

Alternatively, you can use a shortcut to fill cells:

- 1) Select the cell containing the contents you want to copy or start the series from.
- 2) Move the cursor over the small selection handle in the bottom right corner of the selected cell. The cursor will change shape.
- 3) Click and drag in the direction you want the cells to be filled, vertical or horizontal. If the original cell contained text, then the text will automatically be copied. If the original cell contained a number, a series will be created.



Caution

When you are selecting cells so you can use the Fill tool, make sure that none of the cells contain data, except for the cell data you want to use. When you use the Fill tool, any data contained in selected cells is overwritten.

Using a fill series

When you select a series fill from **Sheet > Fill Cells > Series** on the Menu bar, the Fill Series dialog (Figure 6) opens. Here you can select the type of series you want or create your own list.

Direction

Determines the direction of series creation.

- *Down* – creates a downward series in the selected cell range for the column using the defined increment to the end value.
- *Right* – creates a series running from left to right within the selected cell range using the defined increment to the end value.
- *Up* – creates an upward series in the cell range of the column using the defined increment to the end value.
- *Left* – creates a series running from right to left in the selected cell range using the defined increment to the end value.

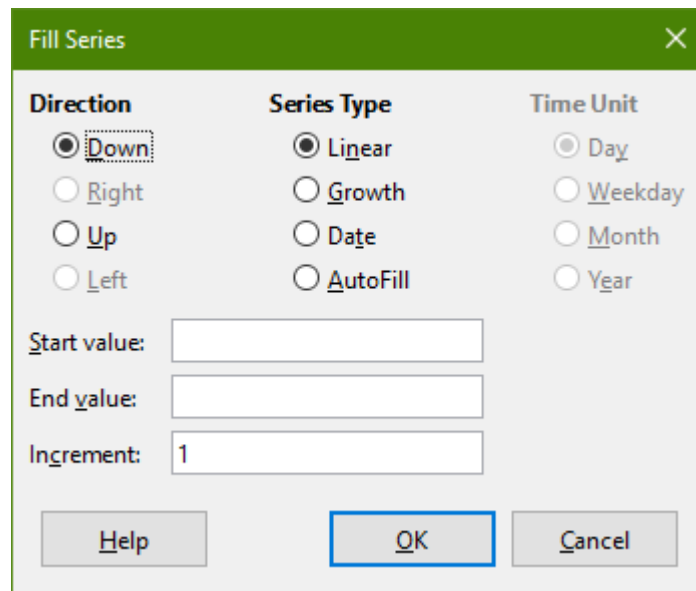


Figure 6: Fill Series dialog

Series Type

Defines the series type. These are:

- *Linear* – creates a linear number series using the defined increment and end value.
- *Growth* – creates a growth series using the defined increment and end value.
- *Date* – creates a date series using the defined increment and end date.
- *AutoFill* – forms a series directly in the sheet. The AutoFill function takes account of customized lists. For example, by entering January in the first cell, the series is completed using the list defined in **LibreOffice > Tools > Options > LibreOffice Calc > Sort Lists**. *AutoFill* tries to complete a value series by using a defined pattern. For example, a numerical series using 1,3,5 is automatically completed with 7,9,11,13; a date and time series using 01.01.99 and 15.01.99, an interval of fourteen days is used.

Time Unit

In this area you specify the desired unit of time. This area is only active if the Date option has been selected in Series Type. These are:

- *Day* – use the Date series type and this option to create a series using seven days.
- *Weekday* – use the Date series type and this option to create a series of five day sets.
- *Month* – use the Date series type and this option to form a series from the names or abbreviations of the months.
- *Year* – use the Date series type and this option to create a series of years.

Start Value

Determines the start value for the series. Use numbers, dates or times.

End Value

Determines the end value for the series. Use numbers, dates or times.

Increment

Determines the value by which the series of the selected type increases by each step. Entries can only be made if the linear, growth or date series types have been selected.

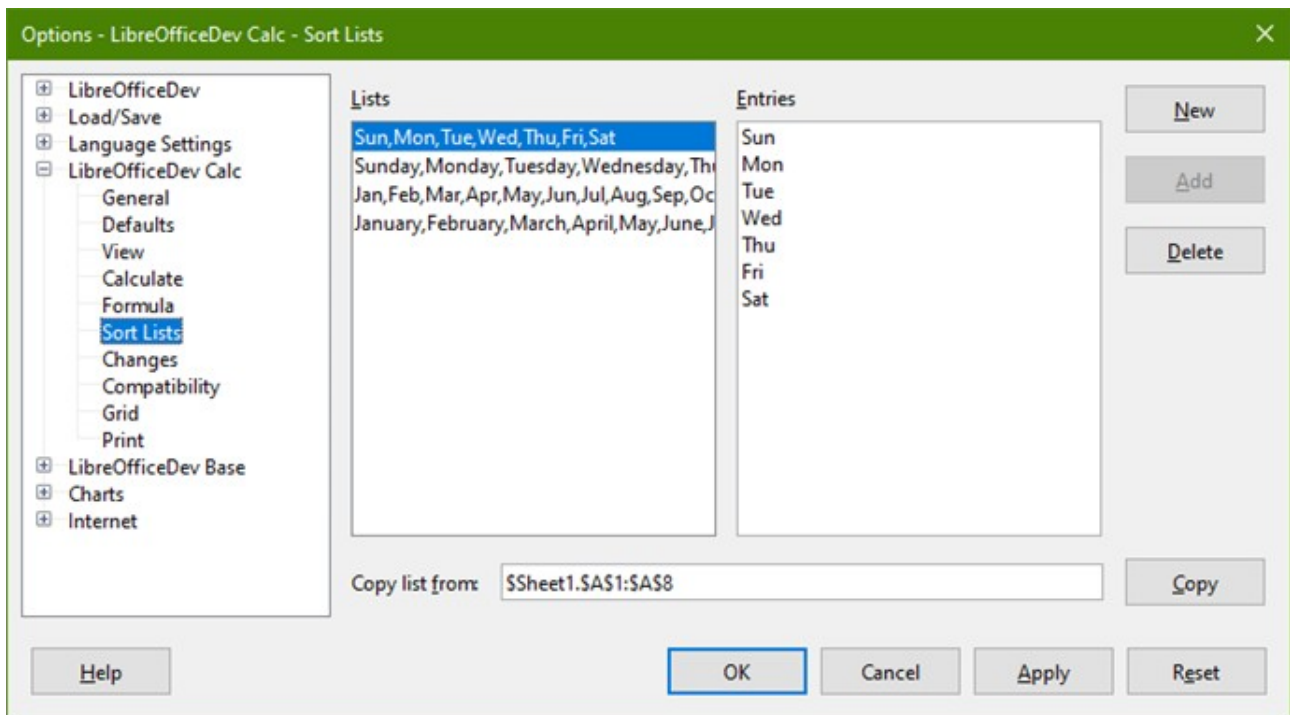


Figure 7: Sort Lists dialog

Defining a fill series

To define your own fill series:

- 1) Go to **Tools > Options > LibreOffice Calc > Sort Lists** to open the Sort Lists dialog (Figure 7). This dialog shows any previously defined series in the Lists box on the left and the contents of the highlighted list in the Entries box.
- 2) Click **New** and the *Entries* box is cleared.
- 3) Type the series for the new list in the *Entries* box (one entry per line) (Figure 8).
- 4) Click **Add** and the new list will now appear in the *Lists* box.
- 5) Click **OK** to save the new list and close the dialog.

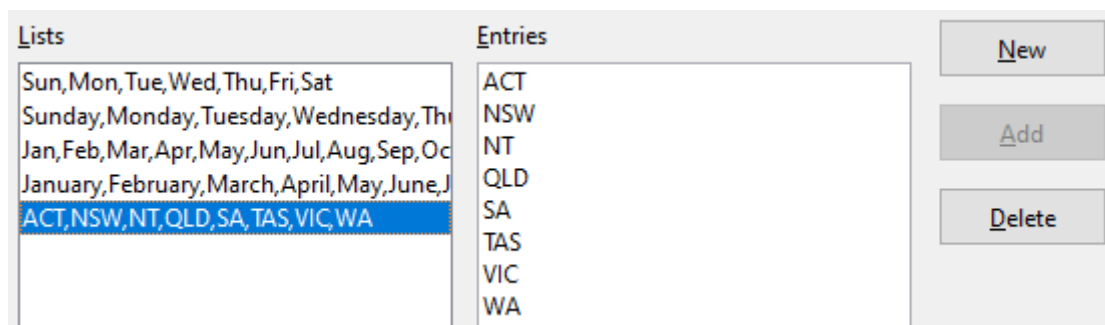


Figure 8: Creating a new sort list

Selection lists

Selection lists are available only for text and are limited to using only text that has already been entered in the same column.


- 1) Select a blank cell in a column that contains cells with text entries.

- 2) Right-click and select **Selection Lists** from the context menu, or use the keyboard shortcut *Alt+↓*. A drop-down list appears listing any cell in the same column that either has at least one text character or whose format is defined as text.
- 3) Click on the text entry you require and it is entered into the selected cell.

Merging and splitting cells

Merging

You can select contiguous cells and merge them into one as follows:

- 1) Select the range of contiguous cells you want merge.
- 2) Right-click on the selected cells and select **Merge Cells** from the context menu, or go to **Format > Merge cells > Merge cells** or **Merge and Center Cells** on the Menu bar, or click on the **Merge and Center Cells** icon  on the Formatting toolbar. Using *Merge and Center Cells* will center align any contents in the cells.
- 3) If the cells contain any data, a small dialog (Figure 9) opens, showing choices for moving or hiding data in the hidden cells.
- 4) Make your selection and click **OK**.

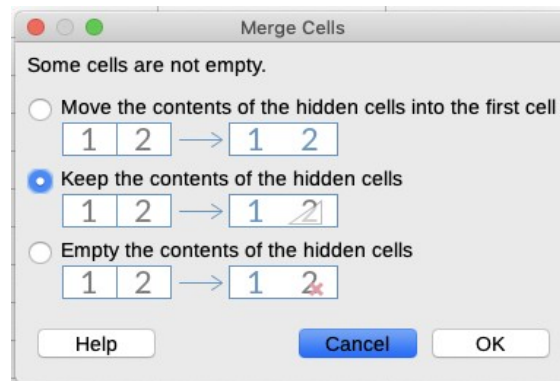


Figure 9: Merge choices for non-empty cells




Caution

Merging cells can lead to calculation errors in formulas used in the spreadsheet.

Splitting

You can reverse or split only a cell that was created from several cells by merging.

- 1) Select a merged cell.
- 2) Go to **Format > Merge cells > Split cells** on the Menu bar, or right-click and select **Split Cells** from the context menu, or click on the **Merge and Center Cells** icon  on the Formatting toolbar.
- 3) Any data in the cell will remain in the first cell. If the hidden cells did have any contents before the cells were merged, then you have to manually move the contents in to the correct cell.

Sharing content between sheets

You might want to enter the same information in the same cell on multiple sheets, for example to set up standard listings for a group of individuals or organizations. Instead of entering the list on each sheet individually, you can enter the information in several sheets at the same time.

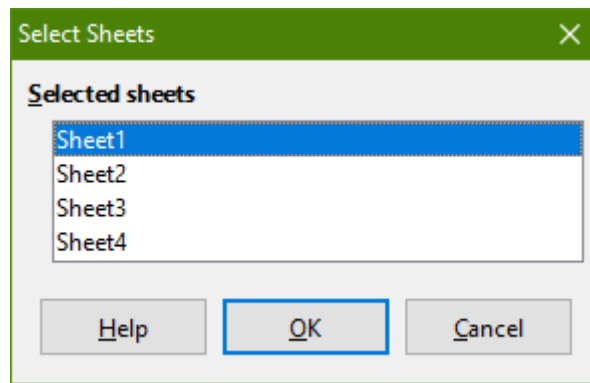


Figure 10: Select Sheets dialog

- 1) Go to **Edit > Select > Select Sheets** on the Menu bar to open the Select Sheets dialog (Figure 10).
- 2) Select the individual sheets where you want the information to be repeated.
- 3) Click **OK** to select the sheets and the sheet tabs will change color.
- 4) Enter the information in the cells on the sheet where you want the information to first appear and the information will be repeated in the selected sheets.
- 5) Deselect the sheets when you have finished entering the information that you want repeated in the sheets.



Caution

This technique automatically overwrites, without any warning, any information that is already in the cells on the selected sheets. Make sure you deselect the additional sheets when you have finished entering the information to be repeated before continuing to enter data into the spreadsheet.

Validating cell contents

When creating spreadsheets for other people to use, you may want to make sure they enter data that is valid or appropriate for the cell. You can also use validation in your own work as a guide to entering data that is either complex or rarely used.

Fill series and selection lists can handle some types of data, but are limited to predefined information. For example, a cell may require a date or a whole number with no alphabetic characters or decimal points, or a cell may not be left empty.

Depending on how validation is set up, it can also define the range of contents that can be entered, provide help messages explaining the content rules set up for the cell and what users should do when they enter invalid content. You can also set the cell to refuse invalid content, accept it with a warning, or start a macro when an error is entered.

Defining validation

To validate any new data entered into a cell:

- 1) Select a cell and go to **Data > Validity** on the Menu bar to open the Validity dialog.
- 2) Define the type of contents that can be entered in that cell using the options given on the tabbed pages for *Criteria*, *Input Help*, and *Error Alert*. The options are explained below (Figure 11).

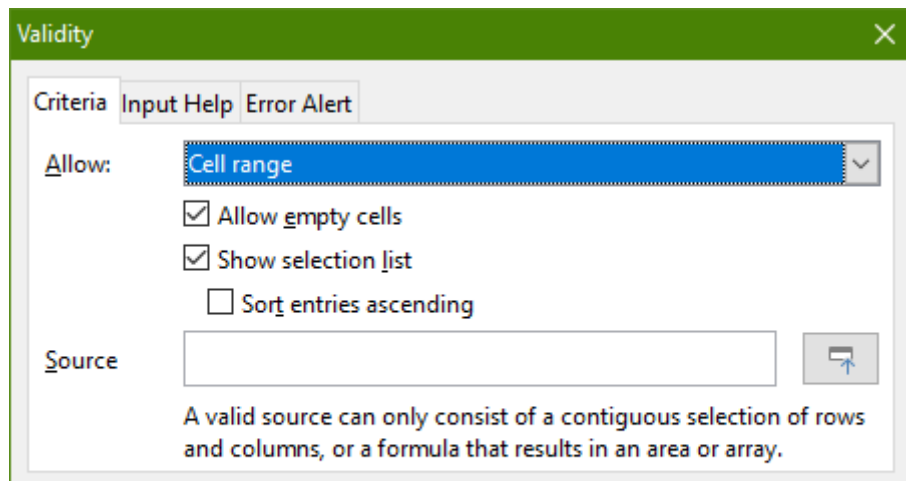


Figure 11: Validity dialog – Criteria page

Criteria options

Specify the validation rules for the selected cells using the *Criteria* page in the Validity dialog as shown in Figure 11. For example, you can define criteria such as: *Numbers between 1 and 10* or *Texts that are no more than 20 characters*.

The options available on the *Criteria* page will depend on what has been selected in the Allow drop-down list.

- **Allow** – select a validation option for the selected cells from the drop-down list.
 - *All values* – no limitation.
 - *Whole number* – only whole numbers allowed.
 - *Decimal* – all numbers correspond to decimal format.
 - *Date* – all numbers correspond to date format. The entered values are formatted the next time the dialog is called up.
 - *Time* – all numbers correspond to time format. The entered values are formatted the next time the dialog is called up.
 - *Cell range* – allow only values that are given in a cell range. The cell range can be specified explicitly, or as a named database range, or as a named range. The range may consist of one column or one row of cells. If you specify a range of columns and rows, only the first column is used.
 - *List* – allow only values or strings specified in a list. Strings and values can be mixed. Numbers evaluate to their value, so if you enter the number 1 in the list, the entry 100% is also valid.
 - *Text length* – allow entries whose length corresponds to the number of characters that have been set.
 - *Custom* – allow entries that correspond to a formula entered in the Formula box.
- **Allow empty cells** – in conjunction with **Tools > Detective > Mark Invalid Data**, this defines that blank cells are shown as invalid data (disabled) or not shown (enabled).
- **Show selection list** – shows a list of all valid strings or values to select from. The list can also be opened by selecting the cell and pressing *Ctrl+D*.
- **Sort entries ascending** – sorts the selection list in ascending order and filters duplicates from the list. If not checked, the order from the data source is taken.
- **Source** – enter the cell range that contains the valid values or text.

- **Entries** – enter the entries that will be valid values or text strings.
- **Data** – select the comparative operator that you want to use from the drop-down list. The available operators depend on what you have selected in the Allow drop-down list. For example, if you select valid range, the **Minimum** and **Maximum** input boxes replace the **Value** box.
- **Value** – enter the value for the data validation option that you selected in the Allow drop-down list.
- **Minimum** – enter the minimum value for the data validation option that you selected in the Allow drop-down list.
- **Maximum** – enter the maximum value for the data validation option that you selected in the Allow drop-down list.

Input Help options

Enter the message to be displayed when the cell or cell range is selected in the spreadsheet (Figure 12).

- **Show input help when cell is selected** – displays the message that you enter in the *Title* and *Contents* boxes when the cell or cell range is selected in the sheet. If you enter text in the *Title* and *Contents* boxes and then deselect this option, the text will be lost.
- **Title** – enter the title to be displayed when the cell or cell range is selected.
- **Input help** – enter the message to be displayed when the cell or cell range is selected.

The screenshot shows the 'Validity' dialog box with the 'Input Help' tab selected. A checkbox labeled 'Show input help when cell is selected' is checked. Below this, under the 'Contents' section, there are two empty text input fields: 'Title' and 'Input help'.

Figure 12: Validity dialog – Input Help page

Error Alert options

Define the error message that is displayed when invalid data is entered in a cell (Figure 13).

The screenshot shows the 'Validity' dialog box with the 'Error Alert' tab selected. A checkbox labeled 'Show error message when invalid values are entered' is checked. Below this, under the 'Contents' section, there is a dropdown menu for 'Action' with 'Stop' selected, a 'Browse...' button, and two empty text input fields: 'Title' and 'Error message'.

Figure 13: Validity dialog – Error Alert page

- **Show error message when invalid values are entered** – when selected, displays the error message that you enter in the Contents area when invalid data is entered in a cell.
- **Action** – select the action that you want to occur when invalid data is entered in a cell.
 - *Stop* – rejects the invalid entry and displays a dialog that you have to close by clicking **OK**.
 - *Warning and Information* – displays a dialog that can be closed by clicking **OK** or **Cancel**. The invalid entry is only rejected when you click **Cancel**.
 - *Macro* – activates the **Browse** button to open the Macro dialog where you can select a macro that is executed when invalid data is entered in a cell. The macro is executed after the error message is displayed.
- **Title** – enter the title of the macro or the error message that you want to display when invalid data is entered in a cell.
- **Error message** – enter the message that you want to display when invalid data is entered in a cell.

Calc detective

The Detective is a tool within Calc that you can use to locate any cells in a spreadsheet that contain invalid data if the cells are set to accept invalid data with a warning.

- 1) Go to **Tools > Detective > Mark Invalid Data** on the Menu bar to locate any cells containing invalid data. The Detective function marks any cells containing invalid data.
- 2) Correct the data so that it becomes valid.
- 3) Go to **Tools > Detective > Mark Invalid Data** on the Menu bar again and any cells that were previously marked as containing invalid data have the invalid data mark removed.



Note

A validity rule is considered part of the format for a cell. If you select **Delete All** from the Delete Contents dialog (Figure 15), then it is removed. If you want to copy a validity rule with the rest of the cell, use **Edit > Paste Special > Paste Special** to open the Paste Special dialog (Figure 16), then select **Paste All** or **Formats** and click **OK**.

Editing data

Deleting data

Deleting cell data only

Data can be deleted from a cell without deleting any of the cell formatting. Select a cell or a range of cells and then press the *Delete* key.

Delete Cells

This option completely deletes selected cells, columns, or rows. The cells below or to the right of the deleted cells will fill the space.

- 1) Select a cell or a range of cells.
- 2) Press the *Ctrl+–* keys, or select **Sheet > Delete Cells** from the Menu bar, or right-click inside the selected cells and choose **Delete** from the context menu.

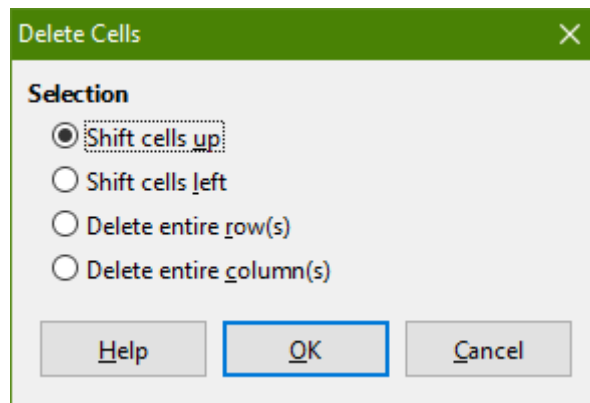


Figure 14: Delete Cells dialog

- 3) The Delete Cells dialog (Figure 14) provides four options to specify how sheets are displayed after deleting cells:

Shift cells up

Fills the space produced by the deleted cells with the cells underneath it.

Shift cells left

Fills the resulting space by the cells to the right of the deleted cells.

Delete entire row(s)

After selecting at least one cell, deletes the entire row from the sheet.

Delete entire column(s)

After selecting at least one cell, deletes the entire column from the sheet.

- 4) To confirm the selection, click **OK**.



Note

The selected delete option is stored and reloaded when the dialog is next called.

Deleting data and formatting

Data and cell formatting can be deleted from a cell at the same time. To do this:

- 1) Select a cell or a range of cells.
- 2) Press the *Backspace* key, or right-click inside the selected cells and choose **Clear Contents** from the context menu, or select **Sheet > Clear Cells** from the Menu bar.
- 3) In the Delete Contents dialog (Figure 15), choose any of the options or choose **Delete All**. Click **OK**.

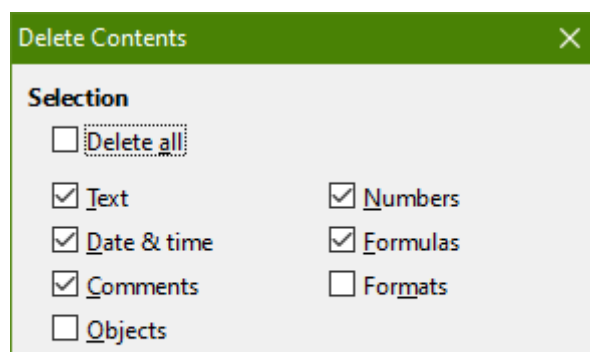


Figure 15: Delete Contents dialog

Replacing data

To completely replace data in a cell and insert new data, select the cell and type in the new data. The new data will replace the data already contained in the cell and will retain the original formatting used in the cell.

Alternatively, click in the Input Line on the Formula Bar, then double-click on the data to highlight it completely and type the new data.

Editing data

Sometimes it is necessary to edit the contents of cell without removing all of the data from the cell. For example, changing the phrase “Sales in Qtr. 2” to “Sales rose in Qtr” can be done as follows.

Using the keyboard

- 1) Click in the cell to select it.
- 2) Press the *F2* key and the cursor is placed at the end of the cell.
- 3) Press the *Backspace* key to delete any data up to the point where you want to enter new data.
- 4) Alternatively, use the keyboard arrow keys to reposition the cursor where you want to start entering the new data in the cell, then press the *Delete* key or *Backspace* key to delete any unwanted data before typing the new data.
- 5) When you have finished editing, press the *Enter* key to save the changes.



Note

Each time you select a cell, the contents are displayed in the Input Line on the Formula Bar. Using the Input Line may be easier when editing data.

Using the mouse

- 1) Double-click on the cell to select it and place the cursor in the cell for editing.
- 2) Reposition the cursor to where you want to start editing the data in the cell.
- 3) Alternatively, single-click to select the cell, then move the cursor to the Input Line on the Formula Bar and click at the position where you want to start editing the data in the cell.
- 4) When you have finished, click away from the cell to deselect it and the editing changes are saved.

Paste Special function

You can use the Paste Special function to paste into another cell selected parts of the data in the original cell or cell range, for example its format or the result of its formula.

Paste Special dialog

- 1) Select a cell or a cell range.
- 2) Go to **Edit > Copy** on the Menu bar, or right-click and select **Copy** from the context menu.
- 3) Select the target cell or cell range.
- 4) Go to **Edit > Paste Special > Paste Special** from the Menu bar, or use the keyboard shortcut *Ctrl+Shift+V*, or right-click and select **Paste Special > Paste Special** from the context menu to open the Paste Special dialog (Figure 16).
- 5) Select the options for *Selection*, *Operations*, *Options* and *Shift cells*. The Paste Special options are explained below.
- 6) Click **OK** to paste the data into to the target cell or range of cells and close the dialog.

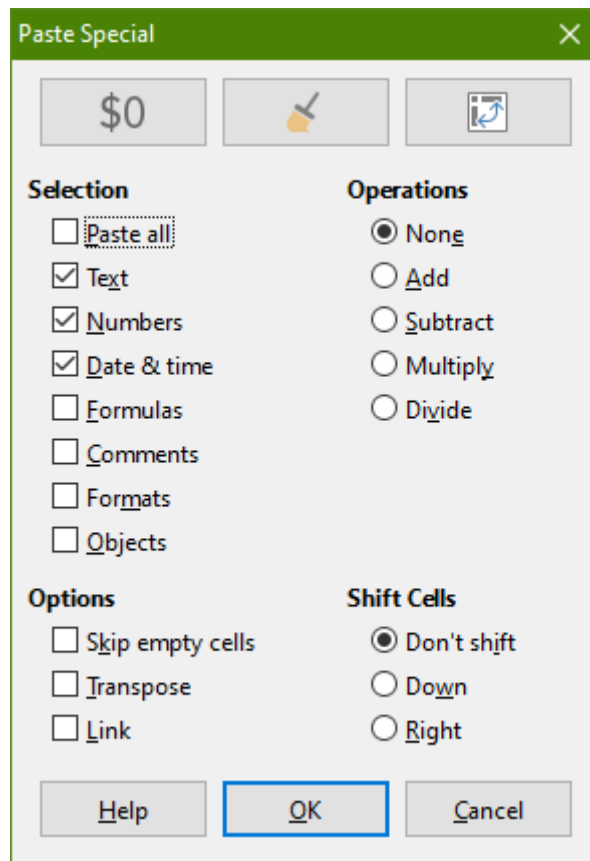


Figure 16: Paste Special dialog

Paste Special options

- **Selection** – select a format for the clipboard contents that you want to paste.
 - *Paste all* – pastes all cell contents, comments, formats, and objects into the current document.
 - *Text* – pastes cells containing text.
 - *Numbers* – pastes cells containing numbers.
 - *Date & Time* – pastes cells containing date and time values.
 - *Formulas* – pastes cells containing formulas.
 - *Comments* – pastes comments that are attached to cells. If you want to add the comments to the existing cell content, select the *Add* operation.
 - *Formats* – pastes cell format attributes.
 - *Objects* – pastes objects contained within the selected cell range. These can be OLE objects, chart objects, or drawing objects.
- **Operations** – select the operation to apply when you paste cells into the sheet.
 - *None* – does not apply an operation when you insert the cell range from the clipboard. The contents of the clipboard will replace existing cell contents.
 - *Add* – adds the values in the clipboard cells to the values in the target cells. Also, if the clipboard only contains comments, adds the comments to the target cells.
 - *Subtract* – subtracts the values in the clipboard cells from the values in the target cells.
 - *Multiply* – multiplies the values in the clipboard cells with the values in the target cells.
 - *Divide* – divides the values in the target cells by the values in the clipboard cells.

- **Options** – sets the paste options for the clipboard contents.
 - *Skip empty cells* – empty cells from the clipboard do not replace target cells. If you use this option in conjunction with the *Multiply* or the *Divide* operation, the operation is not applied to the target cell of an empty cell in the clipboard. If you select a mathematical operation and deselect the *Skip empty cells*, empty cells in the clipboard are treated as zeroes. For example, if you apply the *Multiply* operation, the target cells are filled with zeroes.
 - *Transpose* – the rows of the range in the clipboard are pasted to become columns of the output range. The columns of the range in the clipboard are pasted to become rows.
 - *Link* – inserts the cell range as a link, so that changes made to the cells in the source file are updated in the target file. To ensure that changes made to empty cells in the source file are updated in the target file, ensure that *Paste All* is also selected. You can also link sheets within the same spreadsheet. When you link to other files, a DDE link is automatically created. A DDE link is inserted as a matrix formula and can only be modified as a whole.
- **Shift cells** – sets the shift options for the target cells when the clipboard content is inserted.
 - *Don't shift* – inserted cells replace the target cells.
 - *Down* – target cells are shifted downward when you insert cells from the clipboard.
 - *Right* – target cells are shifted to the right when you insert cells from the clipboard.

Paste Only options

If you only want to copy text, numbers, or formulas to the target cell or cell range:

- 1) Select the source cell or cell range and copy the data.
- 2) Select the target cell or cell range.
- 3) Right-click on the target cell or cell range and select **Paste Special** from the context menu, then select **Text**, **Number**, or **Formula**.

Insert cell fields

You can insert a field linked to the date, sheet name, or document name in a cell.

- 1) Select a cell and double-click to activate edit mode.
- 2) Right-click and select **Insert Field > Date** or **Sheet Name** or **Document Title** from the context menu.



Note

The **Insert Field > Document Title** command inserts the name of the spreadsheet and not the title defined in the *Description* page in the Properties dialog for the file.



Tip

The fields are refreshed when the spreadsheet is saved or recalculated when using the *Ctrl+Shift+F9* shortcut.

Formatting data



Note

All the settings discussed in this section can also be set as a part of the cell style. See Chapter 4, Using Styles and Templates, for more information.

You can format the data in Calc in several ways, either defined as part of a cell style so that it is automatically applied, or applied manually to the cell. For more control and extra options, select a cell or cell range and use the Format Cells dialog. All of the format options are discussed below.

Multiple lines of text

Multiple lines of text can be entered into a single cell using automatic wrapping or manual line breaks. Each method is useful for different situations.

Automatic wrapping

To automatically wrap multiple lines of text in a cell:

- 1) Select a cell or cell range.
- 2) Right-click and select **Format Cells** from the context menu, or go to **Format > Cells** on the Menu bar, or press *Ctrl+1* to open the Format Cells dialog.
- 3) Click on the *Alignment* tab (Figure 17).
- 4) Under **Properties**, select *Wrap text automatically* and click **OK**.

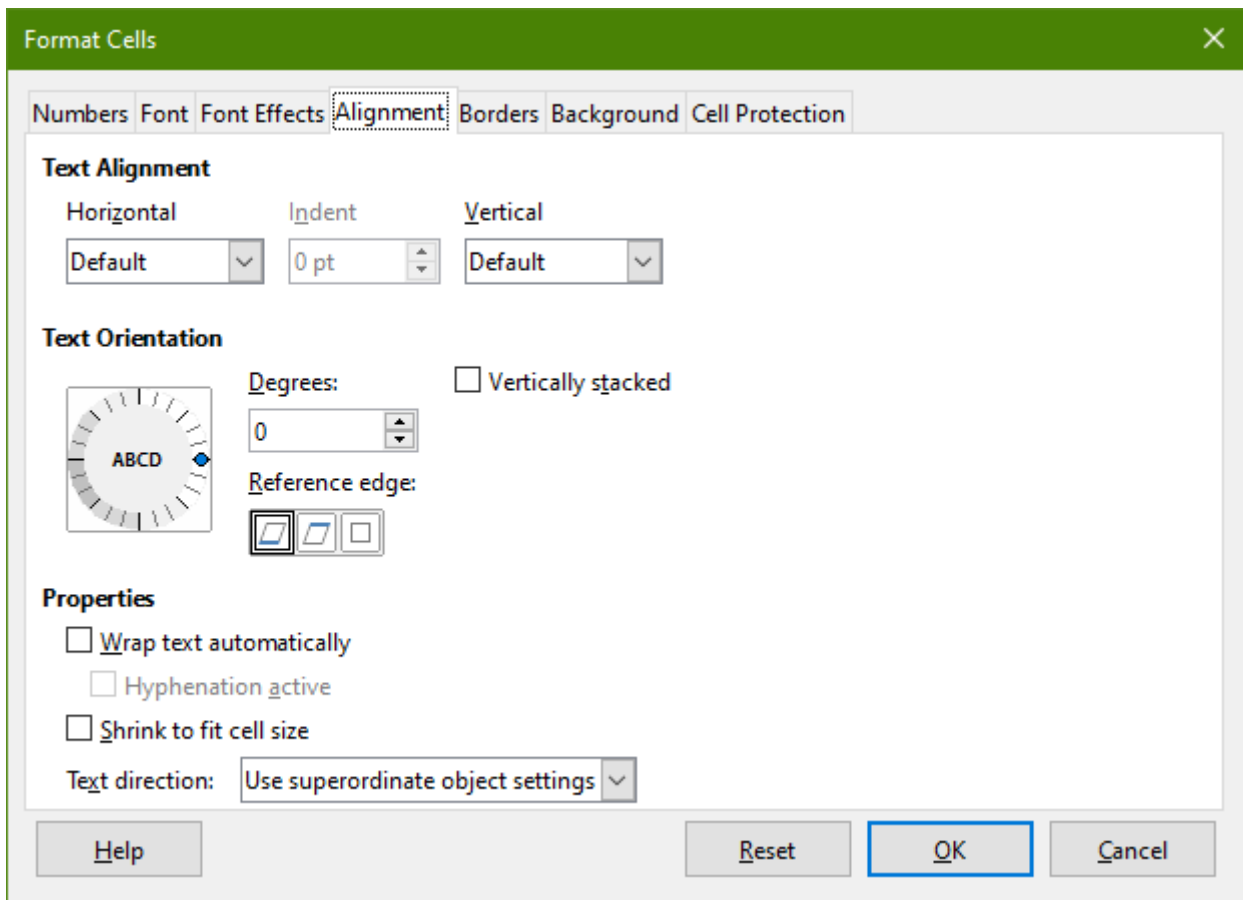


Figure 17: Format Cells dialog – Alignment page

Manual line breaks

To insert a manual line break while typing in a cell, press *Ctrl+Enter*. This method does not work with the cursor in the input line. When editing text, double-click the cell, then reposition the cursor to where you want the line break.

When a manual line break is entered, the cell width does not change and the text may still overlap the end of the cell. You have to change the cell width manually or reposition the line break so that the text does not overlap the end of the cell.

Shrinking text to fit a cell

The font size of the data in a cell can automatically adjust to fit inside cell borders.

- 1) Select a cell or cell range.
- 2) Right-click on the selection and select **Format Cells** from the context menu, or go to **Format > Cells** on the Menu bar, or press *Ctrl+1* to open the Format Cells dialog.
- 3) Click on the *Alignment* tab (Figure 17).
- 4) Under *Properties*, select *Shrink to fit cell size* and click **OK**.

Formatting numbers

Several different number formats can be applied to cells by using icons on the Formatting toolbar (highlighted in Figure 18). Select the cell, then click the relevant icon to change the number format.

For more control or to select other number formats, use the *Numbers* page of the Format Cells dialog (Figure 1 on page 6):

- Apply any of the data types in the *Category* list to the data.
- Control the number of decimal places and leading zeros in *Options*.
- Enter a custom format code.
- The *Language* setting controls the local settings for the different formats such as the date format and currency symbol.



Figure 18: Number icons on Formatting toolbar

Formatting fonts

To select a font and format it for use in a cell:

- 1) Select a cell or cell range.
- 2) Click the small triangle on the right of the Font Name box on the Formatting toolbar (highlighted in Figure 19) and select a font from the drop-down list. The font can also be changed using the Font page on the Format Cells dialog.
- 3) Click on the small triangle on the right of the Font Size box on the Formatting toolbar and select a font size from the drop-down list. The font size can also be changed using the *Font* page on the Format Cells dialog.
- 4) To change the character format, click on the **Bold**, *Italic*, or Underline icons.
- 5) To change the paragraph alignment of the font, click on one of the four alignment icons (**Left**, **Center**, **Right**, **Justified**).



Figure 19: Font Name and Size on Formatting toolbar



Note

To specify the language used in the cell, open the *Font* page on the Format Cells dialog. Changing language in a cell allows different languages to exist within the same document. For more changes to font characteristics, see “Font effects” below for more information.



Tip

To choose whether to show the font names in their font or in plain text, go to **Tools > Options > LibreOffice > View** and select or deselect the **Show preview of fonts** option in the *Font Lists* section. For more information, see Chapter 14, Setting Up and Customizing Calc.

Font effects

- 1) Select a cell or cell range.
- 2) Right-click and select **Format Cells** from the context menu, or go to **Format > Cells** on the Menu bar, or press *Ctrl+1* to open the Format Cells dialog.
- 3) Click on the *Font Effects* tab (Figure 20).
- 4) Select the font effect you want to use from the options available. The options available are described in Chapter 4, Using Styles and Templates.
- 5) Click **OK** to apply the font effects and close the dialog.

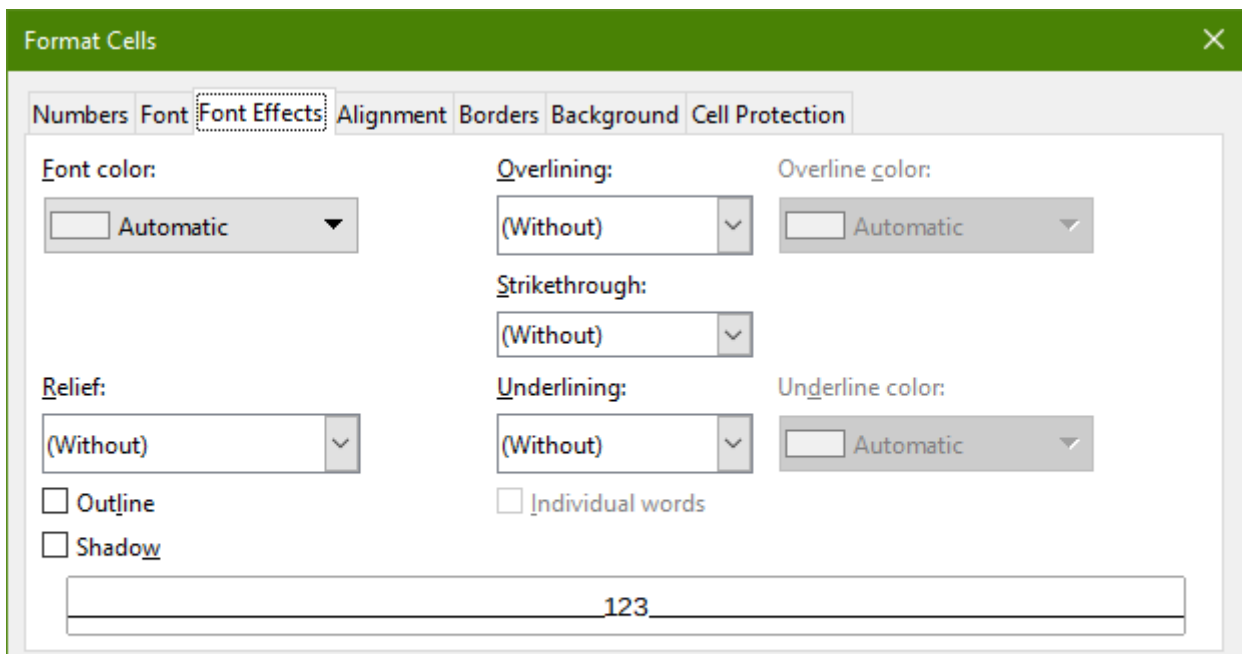


Figure 20: Format Cells dialog – Font Effects page

Any font effect changes are applied to the current selection, or to the entire word that contains the cursor, or to any new text that you type.





Text direction

To change the text direction within a cell, use the Alignment page on the Format Cells dialog (Figure 17 on page 23).

- 1) On the *Alignment* page of the Format Cells dialog, select the *Reference edge* from which to rotate the text as follows:
 - *Text Extension From Lower Cell Border* – writes the rotated text from the bottom cell edge outwards.
 - *Text Extension From Upper Cell Border* – writes the rotated text from the top cell edge outwards.
 - *Text Extension Inside Cells* – writes the rotated text only within the cell.
- 2) Click on the small indicator at the edge of the *Text orientation* dial and rotate it until you reach the required degrees.
- 3) Alternatively, enter the number of degrees to rotate the text in the **Degrees** box.
- 4) Select **Vertically stacked** to make the text appear vertically in the cell.

Using the icons on the Formatting toolbar

The icons on the Formatting toolbar can be used as follows after the cell has been selected:

- To change the text direction from horizontal (default direction) to vertical, click on the **Text direction from top to bottom** icon .
- To change text direction from vertical to horizontal (default), click on the **Text direction from left to right** icon .
- To change text direction from left to right, which is the default direction for Western fonts, to a right to left direction used in some fonts, for example Arabic, the click on the **Right-To-Left** icon . This only works if a font has been used that requires a right to left direction.
- To change text direction back to the default left to right direction used for Western fonts, click on the **Left-To-Right** icon .



Note

The text direction icons can only be made available if *Asian* under **Tools > Language Settings > Language > Default Language for Documents** is checked. To make the buttons visible, right-click on the toolbar and select **Visible Buttons** from the context menu, then click on the icon you require and it will be placed on the Formatting toolbar.

Formatting cell borders

To format the borders of a cell or a group of selected cells, you can use the border icons on the Formatting toolbar to apply the default styles to borders, or the Format Cells dialog for greater control. See Chapter 4, Using Styles and Templates, for more information on the options.



Note

Cell border properties apply only to the selected cells and can only be changed if you are editing those cells. For example, if cell C3 has a top border, that border can only be removed by selecting C3. It cannot be removed in C2 it appears to be the bottom border for cell C2.

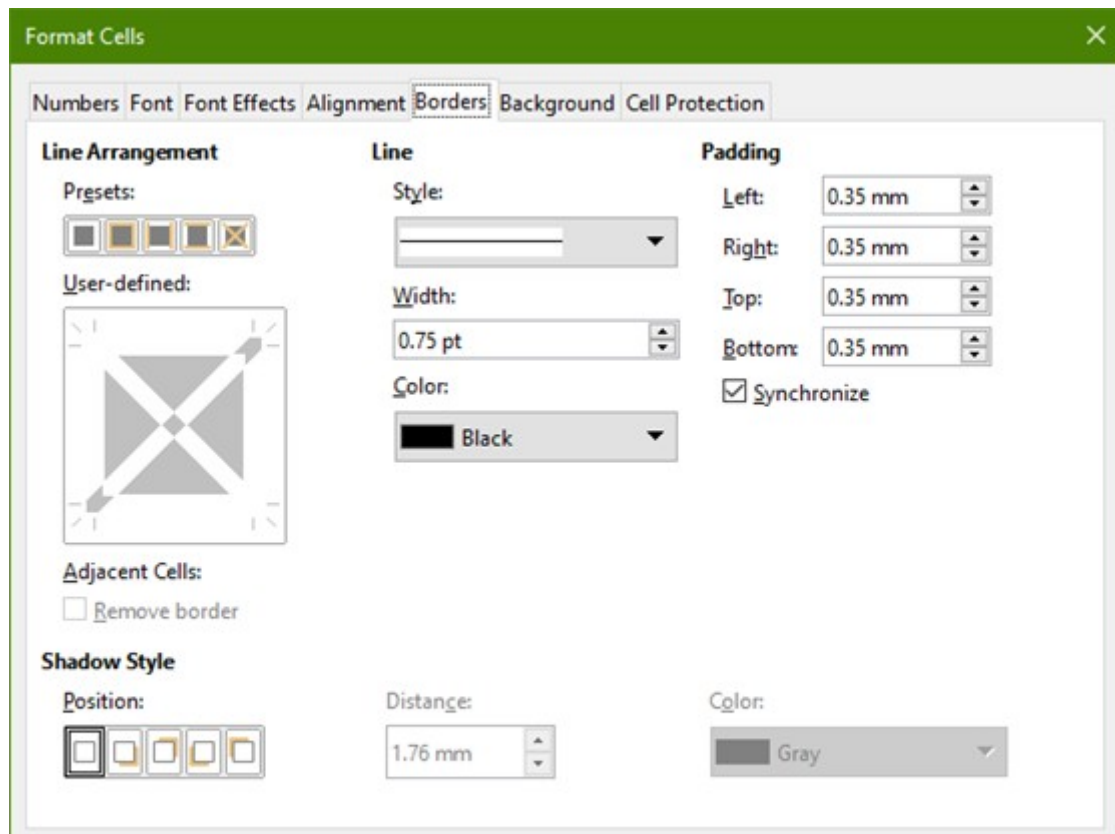





Figure 21: Format Cells dialog – Borders tab

- 1) Select a cell or a range of cells.
- 2) Right-click and select **Format Cells** from the context menu, or go to **Format > Cells** on the Menu bar, or press *Ctrl+1* to open the Format Cells dialog.
- 3) On the *Borders* tab (Figure 21), select the options required.
- 4) Click **OK** to close the dialog and save the changes.

Alternatively, use the icons on the Formatting toolbar to apply default styles to borders:

- 1) Click the **Borders** icon  and select one of the options displayed in the Borders palette.
- 2) Click the **Border Style** icon  and select one of the line styles from the Border Style palette.
- 3) Click the **Border Color** icon  and select a color from Border Color palette.



Note

When entering borders with the Border icons on the Formatting toolbar, you have two choices: click the required icon to add a border to the present borders or *Shift-click* to add a border and remove the present borders.

Formatting cell backgrounds

To format the background color for a cell or a group of cells (see Chapter 4, Using Styles and Templates, for more information):

- 1) Select a cell or a range of cells.
- 2) Right-click and select **Format Cells** from the context menu, or go to **Format > Cells** on the Menu bar, or press *Ctrl+1* to open the Format Cells dialog.
- 3) On the *Background* tab, select a color from the color palette.

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

Alternatively, click on the **Background Color** icon on the Formatting toolbar and select a color from the Background color palette.

AutoFormat of cells and sheets

Using AutoFormat

You can use AutoFormat to format a group of cells.

- 1) Select the cells in at least three columns and rows, including column and row headers, that you want to format.
- 2) Go to **Format > AutoFormat Styles** on the Menu bar to open the AutoFormat dialog (Figure 22).
- 3) Select the type of format and format color from the list.
- 4) Select the formatting properties to be included in the AutoFormat function.
- 5) Click **OK** to apply the changes and close the dialog.

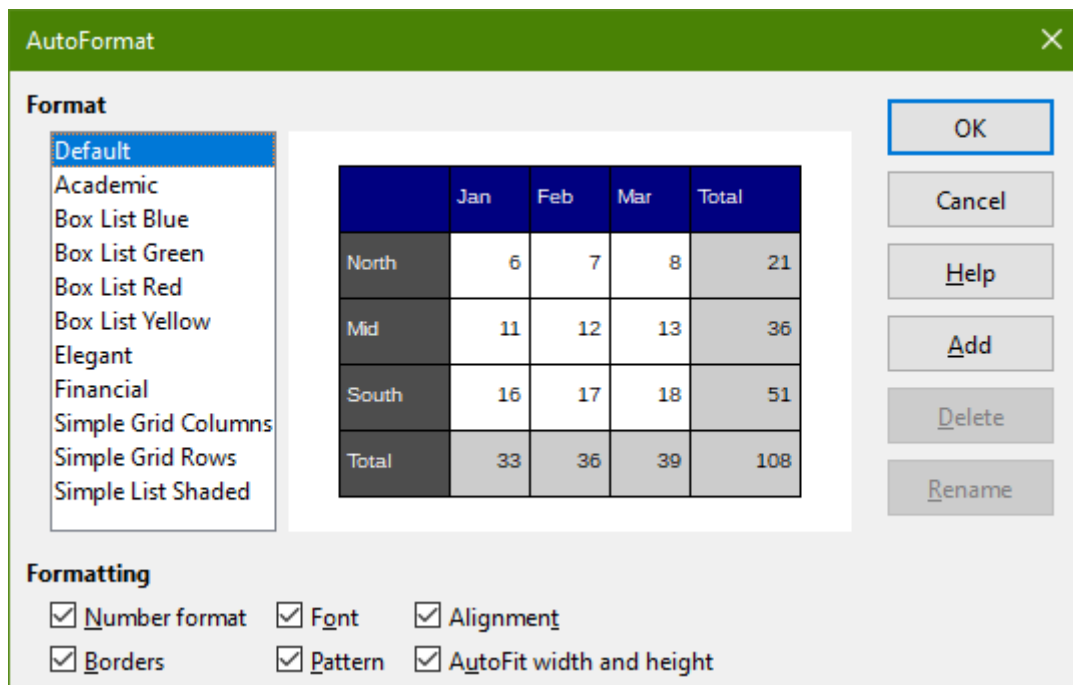


Figure 22: AutoFormat dialog

Defining a new AutoFormat

You can define a new AutoFormat so that it becomes available for use in all spreadsheets.

- 1) Format the data type, font, font size, cell borders, cell background, and so on for a group of cells.
- 2) Go to **Edit > Select All** on the Menu bar to select the whole spreadsheet.
- 3) Go to **Format > AutoFormat Styles** to open the AutoFormat dialog. The **Add** button is now active.
- 4) Click **Add**.
- 5) In the Name box of the Add AutoFormat dialog that opens, type a meaningful name for the new format and click **OK**.

- 6) Click **OK** to close the dialog. The new AutoFormat is now available in the Format list in the AutoFormat dialog.

Using themes

Calc comes with a predefined set of formatting themes that you can apply to spreadsheets. It is not possible to add new themes to Calc and the predefined styles cannot be modified. You can modify styles after you apply them to a spreadsheet, but the modified styles are only available for use for that spreadsheet.

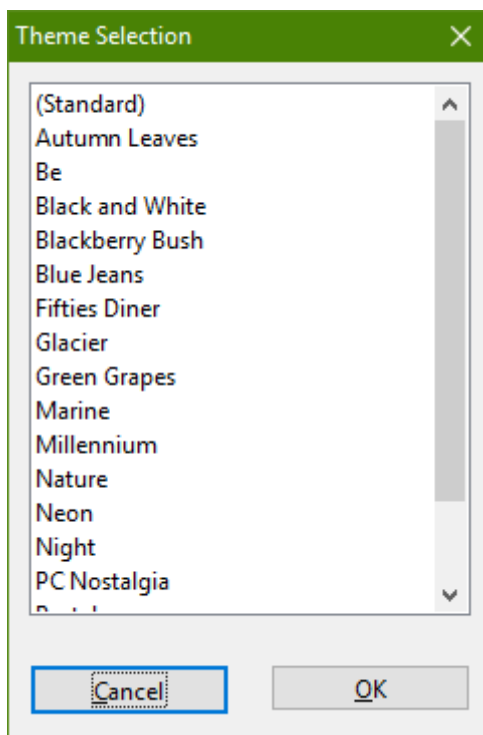


Figure 23: Theme Selection dialog

To apply a theme to a spreadsheet:

- 1) Go to **Format > Spreadsheet Theme** on the Menu bar or click the **Spreadsheet Theme** icon in the Tools toolbar to open the Theme Selection dialog (Figure 23), which lists the available themes for the whole spreadsheet.
- 2) Select the theme that you want to apply. As soon as you select a theme, the theme styles are applied to the spreadsheet and are immediately visible.
- 3) Click **OK**.

If you wish, you can now use the Styles pane on the Sidebar to modify specific styles. These modifications do not modify the theme; they only change the appearance of the style in the spreadsheet you are creating. For more about modifying styles, see Chapter 4, Using Styles and Templates.

Value highlighting

Value highlighting displays cell contents in different colors depending on the type of content. An example of value highlighting is shown in Figure 24.

- Text is shown in black.
- Formulas are shown in green.
- Numbers are shown in blue.

15	01/03/2008	Kurt	7:30	17:45	9.50
16	01/03/2008	Ute	8:30	18:30	9.25
17	01/06/2008	Brigitte	9:30	17:30	7.25
18	01/06/2008	Fritz	11:00	14:30	3.50

Figure 24: Example of value highlighting

The value highlighting colors override any colors used in formatting. This color change applies only to the colors seen on a display. When a spreadsheet is printed, the original colors used for formatting are printed.

Go to **View > Value Highlighting** on the Menu bar, or use the keyboard shortcut **Ctrl+F8** to turn the function on or off. When value highlighting is switched off, the original formatting colors are used for display.

You can make value highlighting the default when opening a spreadsheet in Calc, by selecting **Tools > Options > LibreOffice Calc > View > Value highlighting**. This default mode for value highlighting may not be what you want if you are going to format the cells for printing.

Using conditional formatting

You can set up cell formats to change depending on conditions that you specify. Conditional formatting is used to highlight data that is outside the specifications that you have set. It is recommended not to overuse conditional formatting as this could reduce the impact of data that falls outside those specifications.

See page 33 for an example of how to use conditional formatting.



Note

Conditional formatting depends upon the use of styles and the AutoCalculate feature must be enabled. If you are not familiar with styles, see Chapter 4, Using Styles and Templates, for more information.

Setting up conditional formatting

- 1) Ensure that AutoCalculate is enabled: **Data > Calculate > AutoCalculate**.
- 2) Select the cells where you want to apply conditional formatting.

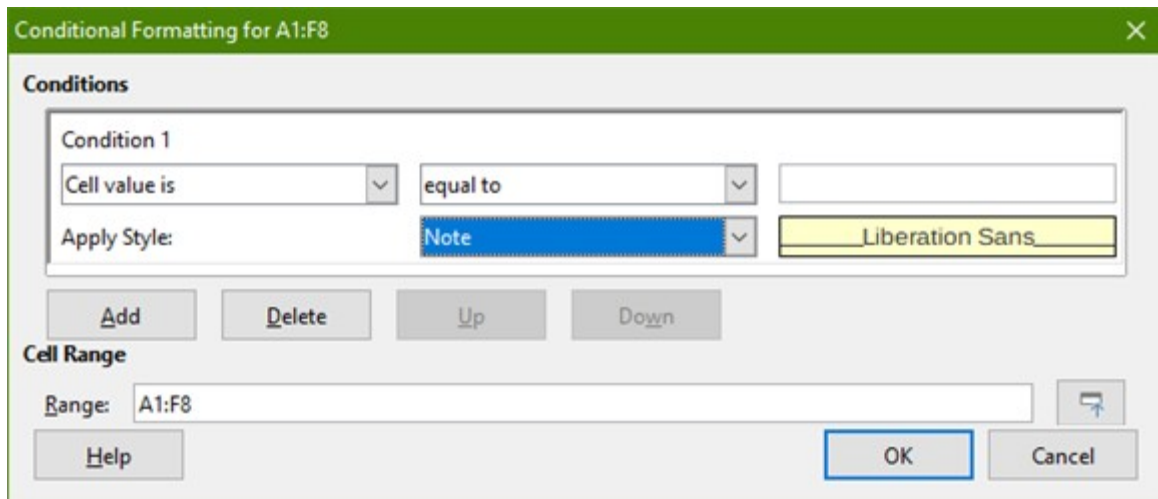


Figure 25: Conditional Formatting dialog – Condition

- 3) Go to **Format > Conditional > Condition** (Figure 25), **Color Scale** (Figure 26), **Data Bar** (Figure 27), or **Date** on the Menu bar to open the Conditional Formatting dialog. Any conditions already defined are displayed.

- 4) Click **Add** to create and define a new condition. Repeat this step as necessary.
- 5) Select a style from the styles already defined in the Apply Style drop-down list. Repeat this step as necessary.
Alternatively, select **New Style** to open the Cell Style dialog (Figure 28) and create a new cell style. Repeat this step as necessary.
- 6) Click **OK** to save the conditions and close the dialog. The selected cells are now set to apply a result using conditional formatting.

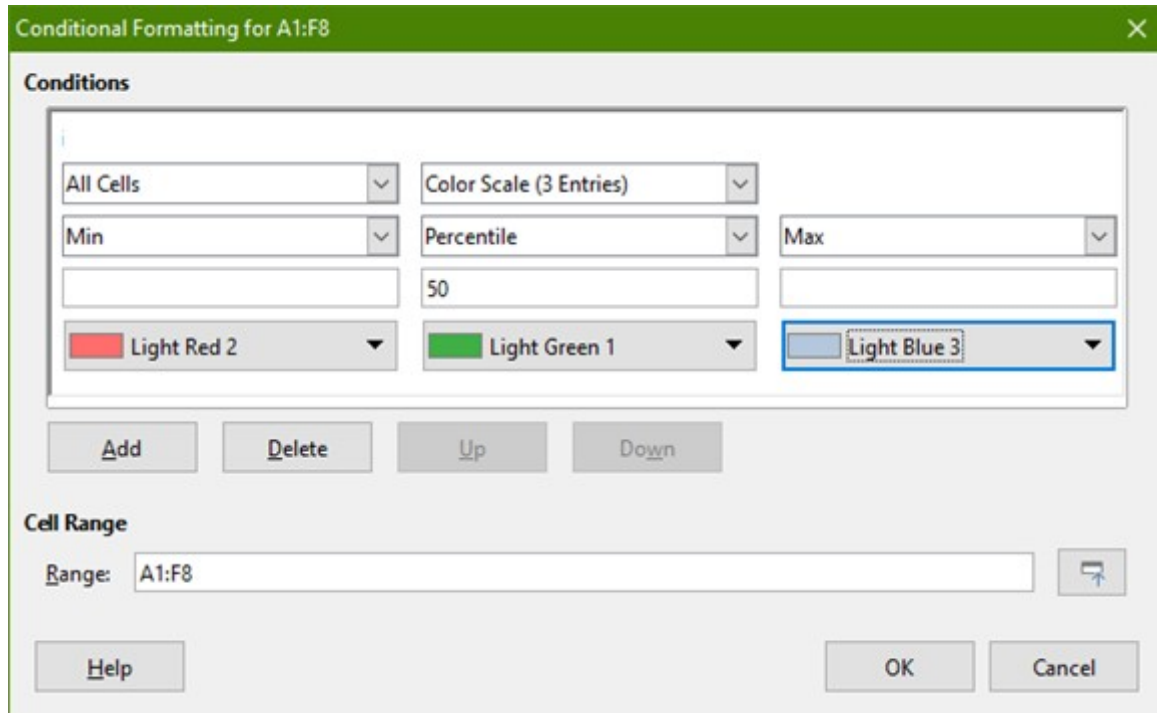


Figure 26: Conditional Formatting dialog – Color Scale

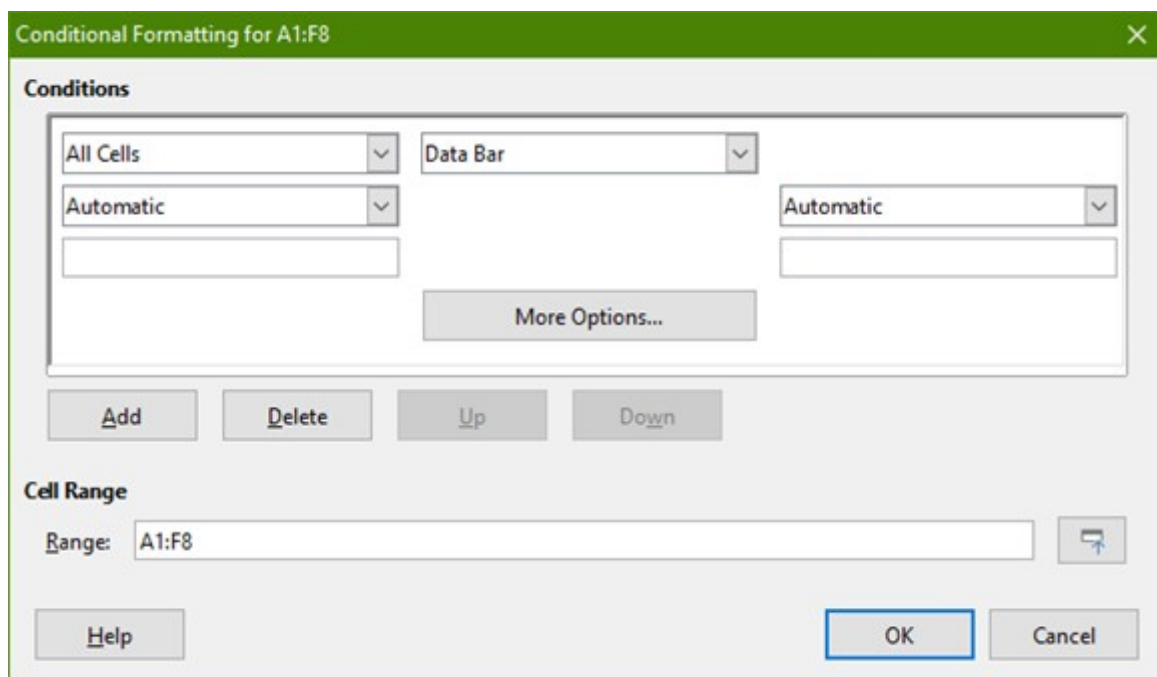


Figure 27: Conditional Formatting dialog – Data Bar

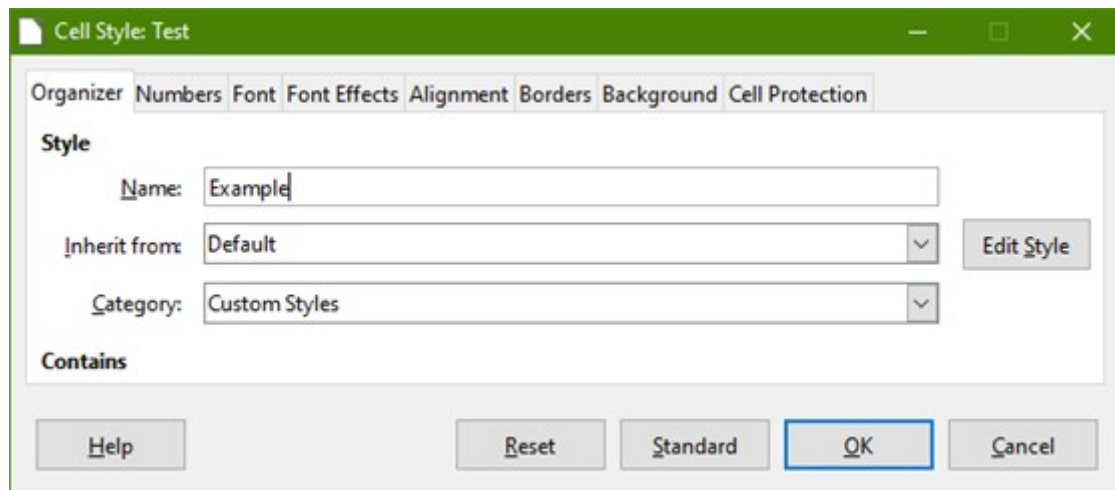


Figure 28: Cell Style dialog

Types of conditional formatting

Condition

Condition is the starting point when using conditional formatting. Here you can define what formats to use to highlight any data in the spreadsheet that falls outside the specifications that you have defined.

Color scale

Use Color scale to set the background color of cells depending on the value of the data in a spreadsheet cell. Color scale can only be used when **All Cells** has been selected for the condition. You can use either two or three colors for the color scale.

Data bars

Data bars provide a graphical representation of data in the spreadsheet. The graphical representation is based on the values of data in a selected range. Click on **More Options** in the Conditional Formatting dialog to define how the data bars will look. Data bars can only be used when **All Cells** has been selected for the condition.

Icon sets

Icon sets display an icon next to the data in each selected cell to give a visual representation of where the cell data falls within the defined range that you set. The icons sets available are colored arrows, gray arrows, colored flags, colored signs, symbols, bar ratings and quarters. Icon sets can only be accessed when the Conditional Formatting dialog has been opened and **All Cells** has been selected for the condition.

Conditional formatting management

To see all the conditional formatting defined in the spreadsheet and any styles used:

- 1) Go to **Format > Conditional > Manage** on the Menu bar to open the Manage Conditional Formatting dialog (Figure 29).
- 2) Select a range from the Range list and click **Edit** to redefine the conditional formatting.
- 3) Select a range from the Range list and click **Remove** to delete the conditional formatting. The deletion is immediate with no confirmation.
- 4) Select **Add** to create a new definition of conditional formatting.
- 5) Click **OK** to save the changes and close the dialog.

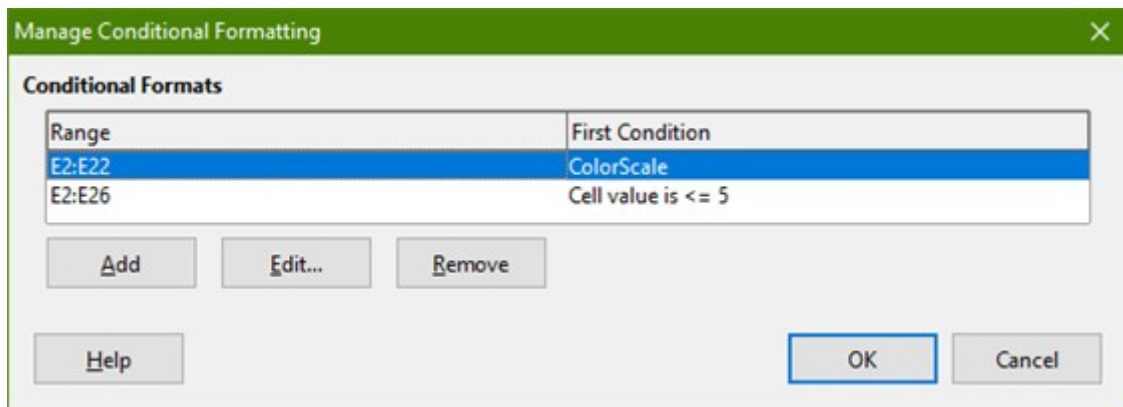


Figure 29: Manage Conditional Formatting dialog

Copying cell styles

To apply the style used for conditional formatting to other cells later:

- 1) Click one of the cells that has been assigned conditional formatting and copy the cell to the clipboard.
- 2) Select the cells that are to receive the same formatting as the copied cell.
- 3) Go to **Edit > Paste Special > Paste Special** on the Menu bar to open the Paste Special dialog (Figure 16 on page 21).
- 4) Make sure that only *Formats* is selected and click **OK** to paste the conditional formatting into the cell.

Conditional formatting example

With conditional formatting, you can, for example, highlight the totals that exceed the average value of all totals. If the totals change, the formatting changes correspondingly, without having to apply other styles manually. It is recommended that the Styles panel on the Sidebar is open and visible before proceeding.

Defining conditions

- 1) Select the cells where you want to apply a conditional style.
- 2) Go to **Format > Conditional > Condition, Color scale** or **Data bar** from the Menu bar to open the Conditional Formatting dialog.
- 3) Enter the conditions you want to use for conditional formatting.

Generating number values

You may want to give certain values in your tables particular emphasis. For example, in a table of turnovers, you can show all the values above the average in green and all those below the average in red. This is possible with conditional formatting.

- 1) Create a table in which a few different values occur. For your test you can create tables with any random numbers. In one of the cells enter the formula `=RAND()`, and you will obtain a random number between 0 and 1. If you want integers of between 0 and 50, enter the formula `=INT(RAND()*50)`.
- 2) Copy the formula to create a row of random numbers.
- 3) Click the bottom right corner of the selected cell, and drag to the right and downward until the desired cell range is selected.

Defining cell styles

The next step is to apply a cell style to all values that represent above-average turnover and one to cells that are below the average.

- 1) Right-click in a blank cell and select **Format Cells** in the context menu to open the Format Cells dialog.
- 2) Click the *Background* tab and select a background color, then click **OK**.
- 3) In the Conditional Formatting dialog, select **New Style** from the *Apply Style* drop-down list to open the Cell Style dialog.
- 4) Enter a name of the new style. For this example, name the style *Above*.
- 5) Define a second style, click again in a blank cell and proceed as described above. Assign a different background color to the cell and assign a name. For this example, name the style *Below*.

Calculating average

In our particular example, we are calculating the average of the random values. The result is placed in a cell:

- 1) Click in a blank cell, for example, J14, and go to **Insert > Function** on the Menu bar, or click the **Function Wizard** icon on the Formula bar to open the Function Wizard dialog.
- 2) Select AVERAGE from the Function list.
- 3) Use the cursor to select all your random numbers.
- 4) Click **OK** to close the Function Wizard.

Applying cell styles

Now you can apply the conditional formatting to the sheet:

- 1) Select all cells containing the random numbers.
- 2) Go to the **Format > Conditional > Condition** on the Menu bar to open the Conditional Formatting dialog.
- 3) Define the condition for each cell as follows: if cell value is less than J14, format with cell style *Below* OR if cell value is greater than or equal to J14, format with cell style *Above*.

Hiding and showing data

In Calc you can hide elements so that they are neither visible on a computer display nor printed when a spreadsheet is printed. However, hidden elements can still be selected for copying if you select the elements around them; for example, if column B is hidden, it is copied when you select columns A and C. When you require a hidden element again, you can reverse the process and show the element.

Hiding data

Sheets

Right-click on any sheet tab and select **Hide Sheet** from the context menu. Choose which sheet from the list in the popup box.

Rows and columns

- 1) Select the row or column you want to hide.
- 2) Go to **Format** on the Menu bar and select **Row** or **Column**.

- 3) Select **Hide** from the menu and the row or column can no longer be viewed or printed. Alternatively, right-click on the row or column header and select **Hide Row** or **Hide Column** from the context menu.

Cells

Hiding individual cells is more complicated. First you need to define the cells as Protected and Hidden; then you need to protect the sheet.

- 1) Select the cells you want to hide.
- 2) Go to **Format > Cells** on the Menu bar, or right-click and select **Format Cells** from the context menu, to open the Format Cells dialog (Figure 30).
- 3) Click the *Cell Protection* tab and select an option for hiding and printing the cells.
- 4) Click **OK** to save the changes and close the dialog.
- 5) Go to **Tools > Protect Sheet** on the Menu bar to open the Protect Sheet dialog (Figure 31).
- 6) Select *Protect this sheet and the contents of protected cells*.
- 7) Create a password and then confirm the password.
- 8) Select or deselect the options for *Allow all users of this sheet to:* so users can select protected or unprotected cells.
- 9) Click **OK** to save the changes and close the dialog.

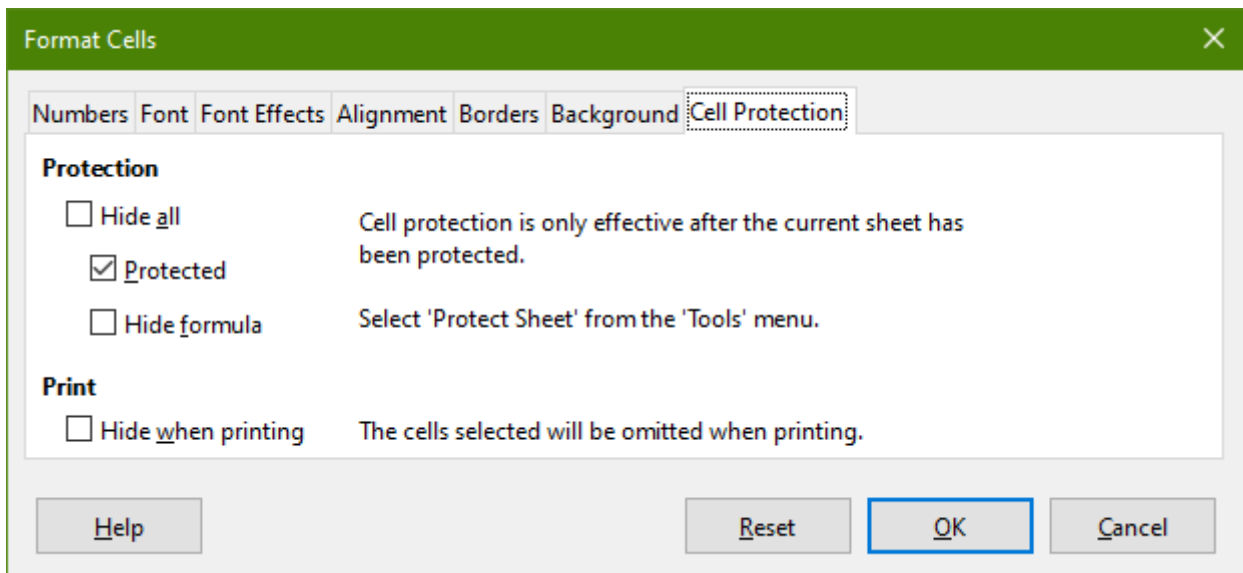


Figure 30: Format Cells dialog – Cell Protection tab

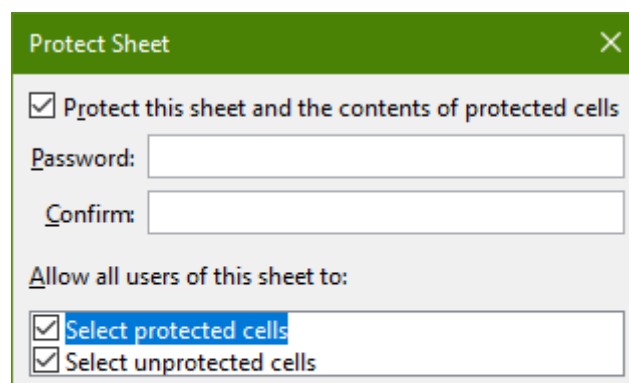


Figure 31: Protect Sheet dialog



Note

When data in cells are hidden, it is only the data contained in the cells that are hidden and the protected cells cannot be modified. The blank cells remain visible in the spreadsheet.

Showing data

Sheets

Right-click on any sheet tab and select **Show Sheet** from the context menu. Choose which sheet from the list in the popup box.

Rows and columns

- 1) Select the rows or columns on each side of the hidden row or column.
- 2) Go to **Format** on the Menu bar and select **Rows** or **Columns**.
- 3) Select **Show** from the context menu and the row or column will be displayed and can be printed.

Alternatively, right-click on a row or column header and select **Show Rows** or **Show Columns** from the context menu.

Cells

- 1) Go to **Tools > Protect Sheet** on the Menu bar to open the Protect Sheet dialog (Figure 31).
- 2) Enter the password to unprotect the sheet and click **OK**.
- 3) Go to **Format > Cells** on the Menu bar, or right-click and select **Format Cells** from the context menu, to open the Format Cells dialog (Figure 30).
- 4) Click the *Cell Protection* tab and deselect the hide options for the cells. Click **OK**.

Group and outline

If you are continually hiding and showing the same cells, you can create an outline of your data and group rows or columns together so that you can collapse a group to hide it or expand a group to show it using a single click.

The basic controls for grouping and outlining show plus (+) or minus (-) signs on the group indicator to show or hide rows or columns. However, if there are groups nested within each other, the basic controls have numbered buttons so you can hide the different levels of nested groups.

Grouping

To group rows or columns:

- 1) Select the cells you want to group in the spreadsheet.
- 2) Go to **Data > Group and Outline > Group** on the Menu bar, or press the *F12* key.
- 3) In the Group dialog that opens, select either *Rows* or *Columns* and click **OK**. A group indicator appears to the left of any rows grouped or above any columns grouped. Figure 32 shows a group indicator on the left of the first two rows of the spreadsheet have been grouped.

	A	B	C	D	E
1	Date	Name	Arrives	Leaves	Hours
2	01/01/1018	Briggite	10:15	16:15	6.00
3	01/01/1018	Fanz	11:00	18:45	7.00
4	01/01/1018	Hans	08:15	19:00	10.00

Figure 32: Group indicator

Hiding details

To hide the details of any group of rows or columns:

- 1) Click on the minus (–) sign on the group indicator.
- 2) Alternatively, select a cell within the group and go to **Data > Group and Outline > Hide Details** on the Menu bar.
- 3) The rows or columns are hidden and the minus (–) sign becomes a plus (+) sign on the group indicator.

Showing details

To show the details of any hidden groups or rows or columns:

- 1) Click on the plus (+) sign on the group indicator.
- 2) Alternatively, select a cell on each side of the hidden group and go to **Data > Group and Outline > Show Details** on the Menu bar.
- 3) The hidden rows or columns are displayed and the plus (+) sign becomes a minus (–) sign on the group indicator.

Ungrouping

To ungroup any groups of rows or columns:

- 1) Make sure the grouped rows or columns are displayed.
- 2) Go to **Data > Group and Outline > Ungroup** on the Menu bar, or use the keyboard combination *Ctrl+F12*.
- 3) If only rows or only columns are grouped, they are ungrouped. If both rows and columns are grouped, select either *Rows* or *Columns* to ungroup and click **OK**.



Note

Any hidden groups of rows or columns must be displayed. If they are hidden, then the grouped rows or columns are deleted from the spreadsheet.



Note

If there are nested groups, only the last group of rows or columns created is ungrouped.

AutoOutline

If a selected cell range contains formulas or references, Calc automatically outlines the selection. For example, in Figure 33 the cells for the 1st and 2nd quarters each contain a sum formula for the three cells to their left. If you apply the **AutoOutline** command, the columns are grouped into two quarters.

To apply the AutoOutline function, go to **Data > Group and Outline > AutoOutline** on the Menu bar. Calc will then check for cells that contain formulas or references and automatically group the cells as necessary.

	A	B	C	D	E	F	G	H
1	Jan	Feb	Mar	1 st . Quarter	Apr	May	Jun	2 nd . Quarter
2	100	120	130	350	100	100	200	400

Figure 33: Example of AutoOutline

Removing

To remove any cell groups of rows or columns, go to **Data > Group and Outline > Remove Outline** on the Menu bar and any groups are removed.

Any cell group of rows or columns that are hidden, the grouping is removed from the cells and the cells are displayed in the spreadsheet.

Filtering

A filter is a list of conditions that each entry has to meet to be displayed. Calc provides three types of filter:

Standard – Specifies the logical conditions to filter the data.

AutoFilter – Filters data according to a specific value or string. Automatically filters the selected cell range and creates one-row list boxes where you can choose the items that you want to display.

Advanced – Uses filter criteria from specified cells.

Applying a standard filter

A standard filter is more complex than AutoFilter. You can set as many as eight conditions as a filter, combining them with the operators AND or OR. Standard filters are mostly useful for numbers, although a few of the conditional operators can also be used for text.

- 1) Select a cell range in the spreadsheet.
- 2) Go to **Data > More Filters > Standard Filter** on the Menu bar to open the Standard Filter dialog (Figure 34).
- 3) Specify the filter criteria and filtering options that you want to use.
- 4) Click **OK** to carry out standard filtering and close the dialog. Any records that match the filter criteria and options that you specified are shown.

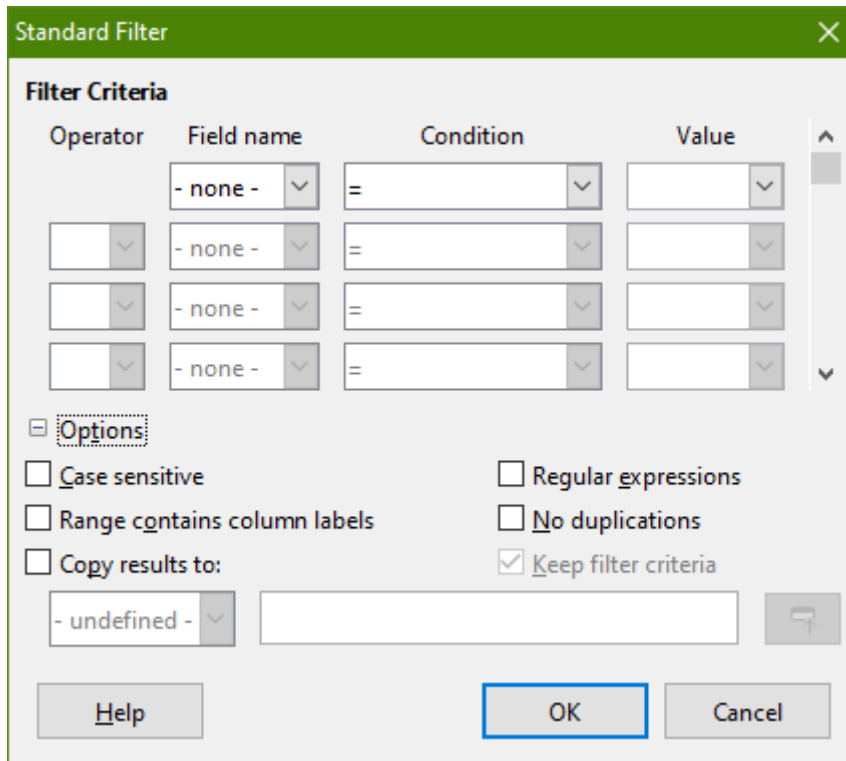


Figure 34: Standard Filter dialog

The filter criteria used in standard filtering defines a filter by indicating the type of line, the name of the field, a logical condition and a value or a combination of arguments.

- **Operator** – for the following arguments, you can choose between the logical operators AND / OR.
- **Field name** – specifies the field names from the current table to set them in the argument. You will see the column identifiers if no text is available for the field names.
- **Condition** – specifies the comparative operators through which the entries in the Field name and Value fields can be linked.
- **Value** – specifies a value to filter the field. The Value list box contains all possible values for the specified Field name. Select a value to be used in the filter, including Empty and Not Empty entries.
- **Case sensitive** – distinguishes between uppercase and lowercase letters when filtering the data.
- **Range contains column labels** – includes the column labels in the first row of a cell range.
- **Copy results to** – select the check box and then select the cell range where you want to display the filter results. You can also select a named range from the list.
- **Regular expressions** – select to use wildcards in the filter definition. See LibreOffice Help for a list of the regular expressions that LibreOffice supports. If selected, you can use regular expressions in the Value field if the Condition list box is set to '=' EQUAL or '<>' UNEQUAL. This also applies to the respective cells that you reference for an advanced filter.
- **No duplications** – excludes duplicate rows from the list of filtered data.
- **Keep filter criteria** – select **Copy results to** and then specify the destination range where you want to display the filtered data. If this box is checked, the destination range remains linked to the source range. You must have defined the source range under **Data > Define range** as a database range. You can also reapply the defined filter at any time by clicking into the source range and then go to **Data > Refresh Range**.

Applying an AutoFilter

An AutoFilter adds a drop-down list to the top row of one or more data columns which lets you select the rows to be displayed. The list includes every unique entry in the selected cells sorted into lexical order (see <https://www.dictionary.com/browse/lexical-order> for an explanation of lexical order). AutoFilter can be used on multiple sheets without first defining a database range.

- 1) Click in a cell range on the spreadsheet. If you want to apply multiple AutoFilters to the same sheet, you must first define database ranges, then apply the AutoFilters to the database ranges.
- 2) Go to **Data > AutoFilter** on the Menu bar. An arrow button is added to the head of each column in the database range.
- 3) Click the arrow or small triangle in the column that contains the value or string that you want to set as the filter criteria (shown in Figure 35).
- 4) Select the value or string that you want to use as the filter criteria. The records that match the filter criteria that you selected are then shown.

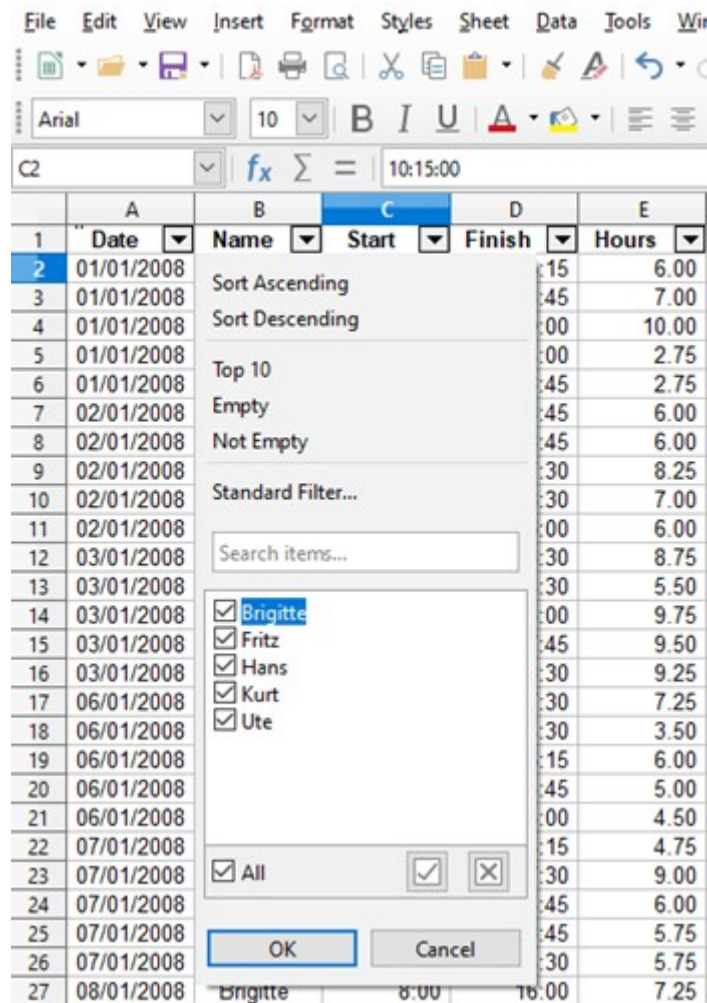


Figure 35: AutoFilter example

Applying an advanced filter

An advanced filter has a structure similar to a standard filter. The difference is that the Advanced Filter arguments are not entered in a dialog. Instead, filters can be entered in a blank area of a spreadsheet, then referenced by the filter dialog to apply the filters.

- 1) Select a cell range in the spreadsheet.
- 2) Go to **Data > More Filters > Advanced Filter** on the Menu bar to open the Advanced Filter dialog (Figure 36).
- 3) In *Read Filter Criteria From*, select the named range, or enter the cell range that contains the filter criteria that you want to use.
- 4) Click **OK** to carry out advanced filtering and close the dialog. Any records that match the filter criteria and options that you specified are shown.



Note

The options for advanced filtering are the same as those used for standard filtering, see “Applying a standard filter” on page 38 for more information.

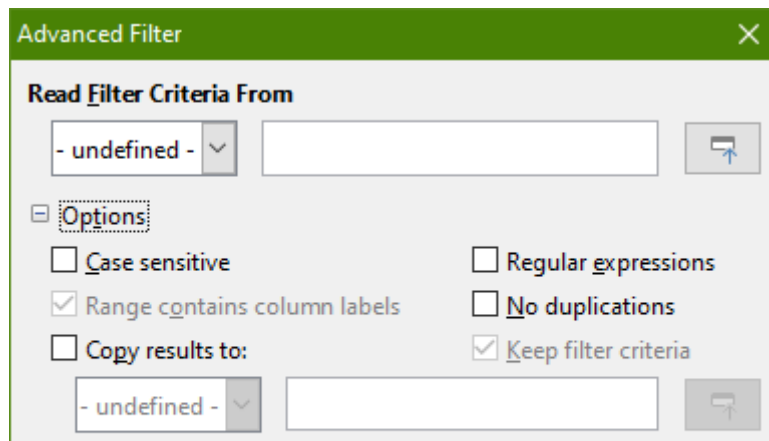


Figure 36: Advanced Filter dialog

Sorting records

Sorting within Calc arranges the cells in a sheet using the sort criteria that you specify. Several criteria can be used and a sort applies each criteria consecutively. Sorts are useful when you are searching for a particular item and become even more useful after you have filtered data.

Also, sorting is useful when you add new information to a spreadsheet. When a spreadsheet is long, it is usually easier to add new information at the bottom of the sheet, rather than adding rows in their correct place. After you have added information, you can then sort the records to update the spreadsheet.

Sort dialog

To sort cells in a spreadsheet using the Sort dialog:

- 1) Select the cells, rows, or columns to be sorted.
- 2) Go to **Data > Sort** on the Menu bar to open the Sort dialog.
- 3) On the *Sort Options* page (Figure 38), choose options including whether to sort on rows or columns. See “Sort options” on page 42 for details.

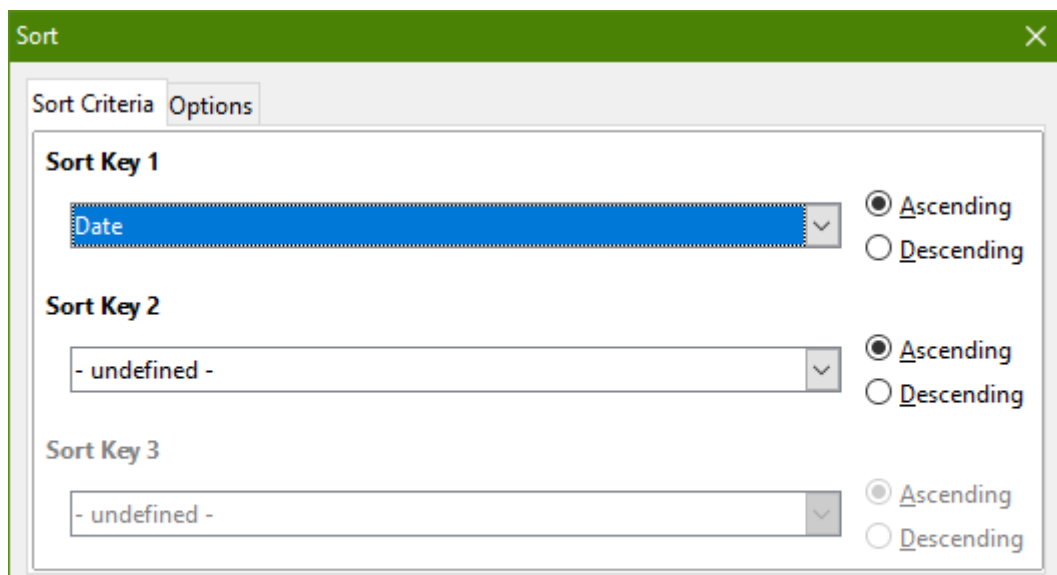


Figure 37: Sort dialog – Sort Criteria tab

- 4) On the *Sort Criteria* page (Figure 37), select the criteria from the drop-down lists. The selection lists are populated from the selected cells.

- 5) Select either **Ascending** order (A-Z, 1-9) or **Descending** order (Z-A, 9-1).
- 6) Click **OK** and the sort is carried out on the spreadsheet.

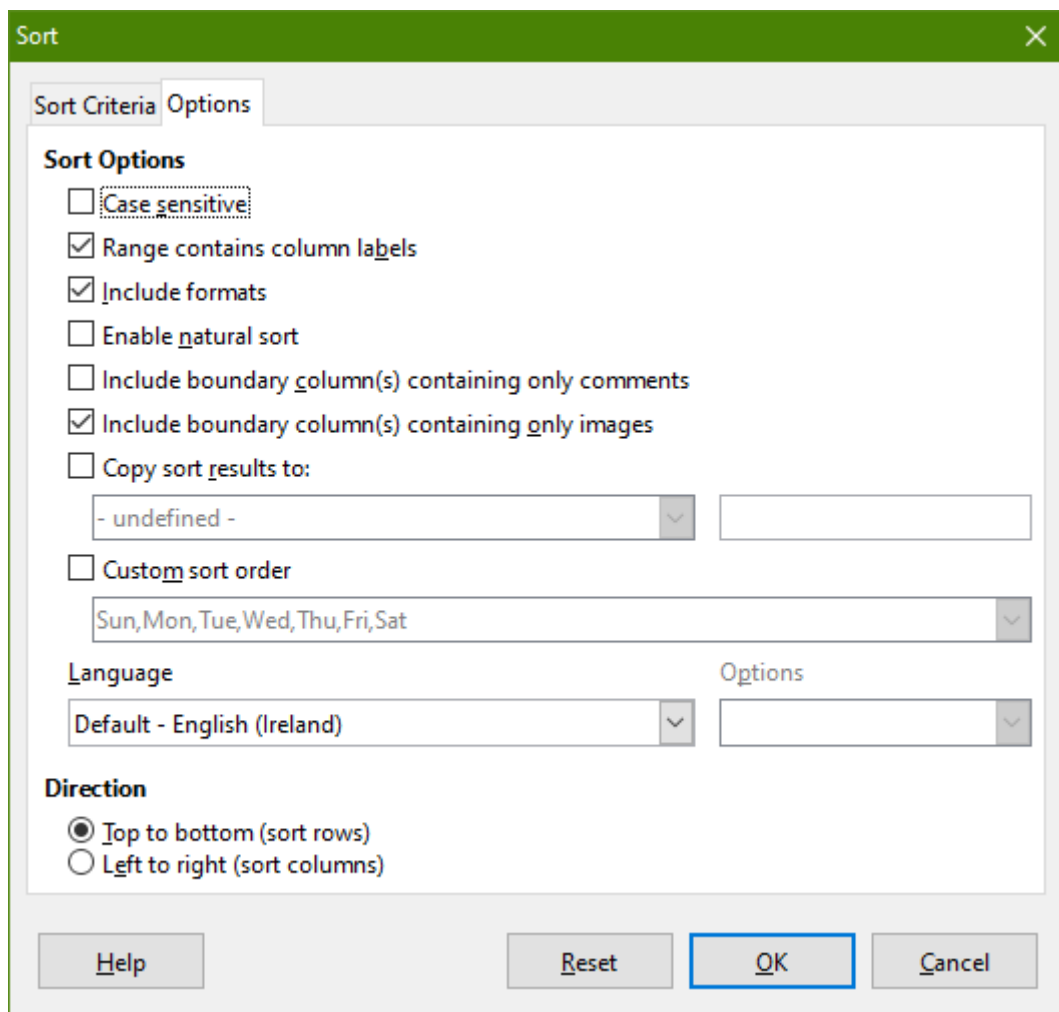


Figure 38: Sort dialog – Options tab

Sort options

On the Options page of the Sort dialog (Figure 38), you can set these options:

- **Case sensitive** – sorts first by uppercase letters and then by lowercase letters. For Asian languages, special handling applies.



Note

For Asian languages, select **Case Sensitive** to apply multi-level collation. With multi-level collation, entries are first compared in their primitive forms with their cases and diacritics ignored. If they evaluate as the same, their diacritics are taken into account for the second-level comparison. If they still evaluate as the same, their cases, character widths, and Japanese Kana difference are considered for the third-level comparison.

- **Range contains column/row labels** – omits the first column/row in the selection from the sort. The Direction setting at the bottom of the dialog defines the name and function of this check box: if top to bottom, then column labels; if left to right, then row labels.
- **Include formats** – preserves the current cell formatting.

- **Enable natural sort** – natural sorting is a sort algorithm that sorts string-prefixed numbers based on the value of the numerical element in each sorted number, instead of the traditional way of sorting them as ordinary strings. For instance, assume you have a series of values such as, A1, A2, A3, A4, A5, A6, ..., A19, A20, A21. When you put these values into a range of cells and run the sort, it will become A1, A11, A12, A13, ..., A19, A2, A20, A21, A3, A4, A5, ..., A9. With natural sorting selected, values such as these are sorted correctly.
- **Include boundary columns containing only comments** – keeps these cells associated with the cells being sorted.
- **Include boundary columns containing only images** – keeps these cells associated with the cells being sorted.
- **Copy sort results to** – copies the sorted list to the cell range that you specify. Select a named cell range where you want to display the sorted list, or enter a cell range in the input box.
- **Custom sort order** – select this option and then select the custom sort order that you want to apply. The available selections are defined as “fill series” in **Tools > Options > LibreOffice Calc > Sort Lists**. See “Defining a fill series” on page 13.
- **Language** – select the language for the sorting rules.
- **Options** – select a sorting option for the language. For example, select the “phonebook” option for German to include the umlaut special character in the sorting.
- **Top to Bottom (sort rows)** – sorts rows by the values in the active columns of the selected range.
- **Left to Right (sort columns)** – sorts columns by the values in the active rows of the selected range.

Quick sort

If the columns in the spreadsheet have a header with a text format, you can use a quick sort.

- 1) Select a cell or a cell range to be sorted.
- 2) Click the **Sort Ascending** or **Sort Descending** icon on the Standard toolbar.

Find and replace

Calc has two ways to find text within a document: the Find toolbar and the Find & Replace dialog. The toolbar is quick and easy to use, but its functions are more limited than using the dialog.

Find toolbar

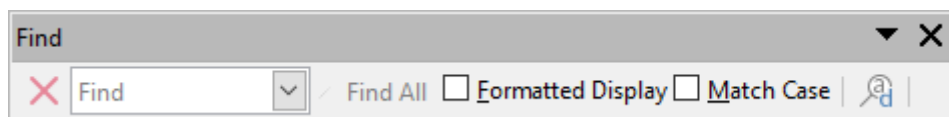


Figure 39: Find toolbar

- 1) Go to **View > Toolbars > Find** or **Edit > Find** on the Menu bar, or use the keyboard shortcut *Ctrl+F* to open the Find toolbar (Figure 39). By default this toolbar is docked in the lower left of the Calc window. You can undock the toolbar and move it.
- 2) Type a search term in the *Find* box.
- 3) To refine the search, you can select the **Match Case** option. For example, if *Owner* is the search term, selecting **Match Case** will find *Owner* but not *owner*. You can also select the Find All or Formatted Display options.

- 4) Click the **Find Next** or **Find Previous** icon. To find other occurrences of the same term, continue clicking the icon.

Find & Replace dialog

To open the Find & Replace dialog (Figure 40), go to **Edit > Find & Replace** on the Menu bar, or use the keyboard shortcut *Ctrl+H*, or click the **Find & Replace** icon on the Find toolbar.

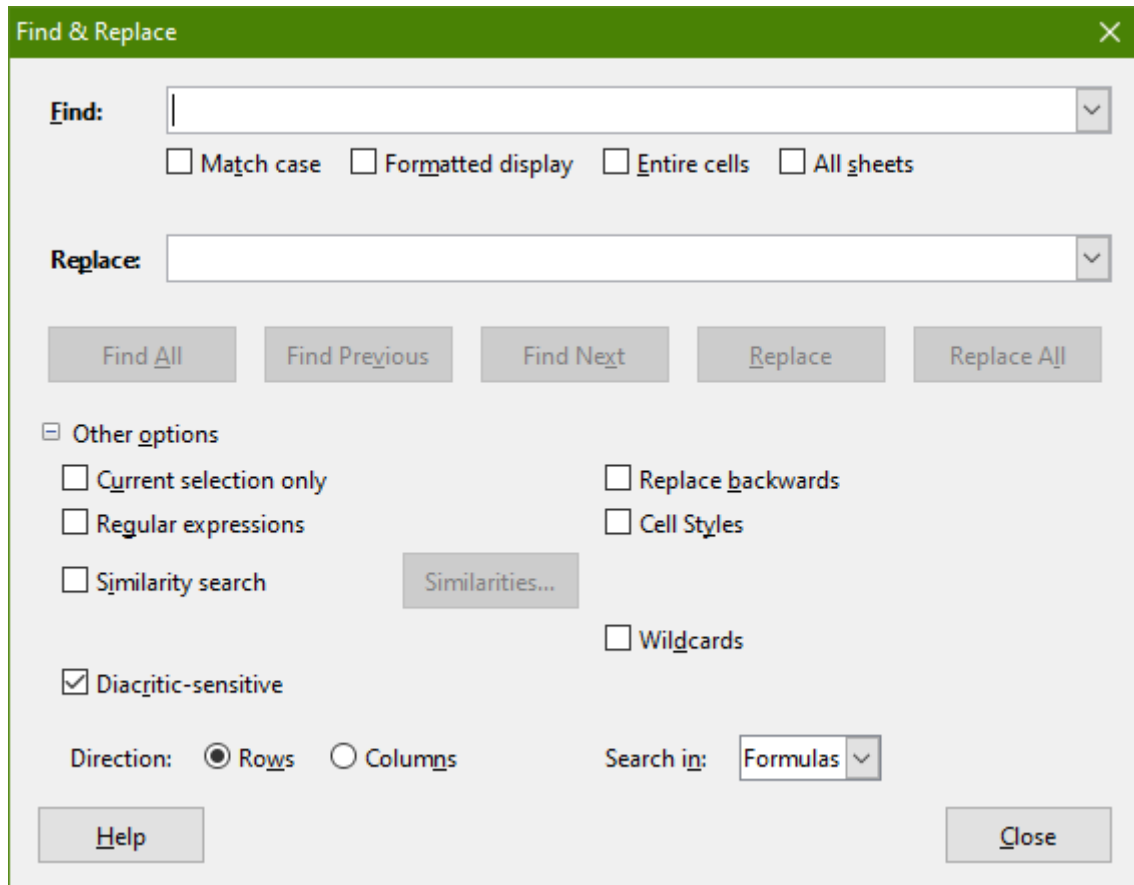


Figure 40: Find & Replace dialog

Finding

- 1) In the Find & Replace dialog (Figure 40), enter the search criteria in the *Find* box.
- 2) If necessary, click on *Other Options* to increase the number of search filters.
- 3) Click **Find Next** to locate the first instance of the search criteria.
- 4) Click **Find Next** again to locate the next instance of the search criteria. Repeat as needed.
- 5) Or, click **Find All** to locate all cells containing the search criteria. These cells will be highlighted in the spreadsheet. A small dialog will pop up, listing the cell locations.

Replacing

- 1) In the Find & Replace dialog (Figure 40), enter the search criteria in the *Find* box.
- 2) Enter the replacement contents in the *Replace* box.
- 3) If necessary, click on *Other Options* to increase the number of search filters.
- 4) To step through the cells and choose whether to replace the contents:
 - a) Click **Find Next** to locate the first instance of the search criteria.
 - b) Click **Replace** to replace the search criteria with the contents of the *Replace* box and move to the next instance of the search criteria.

- 5) Or, to locate and replace the first instance of the search criteria:
 - a) Click **Replace**. This does not move to the next instance.
 - b) You can now use either **Find Next** or **Replace** to move to the next instance.
- 6) Or, to locate and replace all instances of the search criteria without stopping at each one, click **Replace All**.



Caution

Use **Replace All** with caution; otherwise, you may end up with some highly embarrassing mistakes. A mistake with **Replace All** might require a manual, word-by-word search to fix, if it is not discovered in time to undo it.

Find & Replace options

The options available to refine your find and replace are as follows:

- **Find** – enter the text that you want to search for, or select a previous search from the list.
- **Match case** – distinguishes between uppercase and lowercase characters.
- **Formatted display** – searches for cell contents in a particular format. For example, if a cell has a currency value, say \$123.45 and another has the same contents but default formatting (123.45), then searching for “\$123.45” will find the currency cell but not the default-formatted cell.
- **Entire cells** – searches for cells with contents that are identical to the search text.
- **All sheets** – Searches through all of the sheets in the current spreadsheet file.
- **Replace** – enter the replacement text, or select a recent replacement text or style from the list.
- **Current selection only** – searches only the selected text or cells.
- **Replace backwards** – search starts at the current cursor position and goes backwards to the beginning of the file.
- **Regular expressions** – select to use wildcards in the search. See LibreOffice Help for more information on the use of regular expressions.
- **Cell Styles** – searches for cell content formatted with the style that you specify. Select this option and then select a style from the **Find** list. To specify a replacement style, select a style from the **Replace** list.
- **Similarity search** – find terms that are similar to the **Find** text. Select this option, and then click the ... button to define the similarity options.
- **Wildcards** – search for a wildcard expression given in the **Find** text.
- **Diacritic-sensitive** – include diacritics and accents in the search.
- **Direction** – determines the *Rows* or *Columns* order for searching the cells.
- **Search in** – select either **Formulas**, **Values**, or **Notes** to search for the characters that you specify in values, in the results of formulas, or in notes.