



**LibreOffice**  
The Document Foundation

## Calc Guide

# *Chapter 2*

## *Entering, Editing, and Formatting Data*

## Copyright

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## Note for Mac users

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

<b>Windows or Linux</b>	<b>Mac equivalent</b>	<b>Effect</b>
<b>Tools &gt; Options</b> menu selection	<b>LibreOffice &gt; Preferences</b>	Access setup options
<i>Right-click</i>	<i>Control+click</i> or <i>right-click</i> depending on computer setup	Opens a context menu
<i>Ctrl (Control)</i>	⌘ ( <i>Command</i> )	Used with other keys
<i>F5</i>	<i>Shift+⌘+F5</i>	Opens the Navigator
<i>F11</i>	⌘+T	Opens the Styles and Formatting window

# Contents

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<b>Copyright</b> .....	<b>2</b>
Contributors.....	2
Feedback.....	2
Acknowledgments.....	2
Publication date and software version.....	2
<b>Note for Mac users</b> .....	<b>2</b>
<b>Introduction</b> .....	<b>6</b>
<b>Using the keyboard</b> .....	<b>6</b>
Numbers.....	6
Negative numbers.....	6
Leading zeroes.....	6
Numbers as text.....	7
Text.....	7
Date and time.....	7
Special characters.....	8
Autocorrection options.....	8
Inserting dashes.....	9
<b>Speeding up data entry</b> .....	<b>10</b>
AutoInput tool.....	10
Fill tool.....	10
Using a fill series.....	11
Defining a fill series.....	12
Selection lists.....	13
<b>Merging and splitting cells</b> .....	<b>13</b>
Merging.....	13
Splitting.....	13
<b>Sharing content between sheets</b> .....	<b>14</b>
<b>Validating cell contents</b> .....	<b>14</b>
Defining validation.....	14
Criteria options.....	15
Input Help options.....	16
Error Alert options.....	17
Calc detective.....	17
<b>Editing data</b> .....	<b>17</b>
Deleting data.....	17
Deleting data only.....	17
Deleting data and formatting.....	17
Replacing data.....	18
Editing data.....	18
Using the keyboard.....	18
Using the mouse.....	18
Paste Special function.....	19

Paste Special dialog.....	19
Paste Special options.....	19
Paste Only options.....	20
Insert cell fields.....	20
<b>Formatting data.....</b>	<b>21</b>
Multiple lines of text.....	21
Automatic wrapping.....	21
Manual line breaks.....	22
Shrinking text to fit a cell.....	22
Formatting numbers.....	22
Formatting fonts.....	22
Font effects.....	23
Text direction.....	24
Formatting cell borders.....	25
Formatting cell backgrounds.....	27
<b>AutoFormat of cells and sheets.....</b>	<b>27</b>
Using AutoFormat.....	27
Defining a new AutoFormat.....	27
<b>Using themes.....</b>	<b>28</b>
<b>Value highlighting.....</b>	<b>29</b>
<b>Using conditional formatting.....</b>	<b>29</b>
Setting up conditional formatting.....	29
Types of conditional formatting.....	31
Condition.....	31
Color scale.....	31
Data bars.....	31
Icon sets.....	31
Conditional formatting management.....	31
Copying cell styles.....	32
Conditional formatting example.....	32
Defining conditions.....	32
Generating number values.....	32
Defining cell styles.....	32
Calculating average.....	33
Applying cell styles.....	33
<b>Hiding and showing data.....</b>	<b>33</b>
Hiding data.....	33
Sheets, rows, and columns.....	33
Cells.....	33
Showing data.....	34
Sheets, rows, and columns.....	34
Cells.....	34
Group and outline.....	35
Grouping.....	35
Hiding details.....	35
Showing details.....	35
Ungrouping.....	36

AutoOutline.....	36
Removing.....	36
Filtering.....	36
Applying a standard filter.....	37
Applying an AutoFilter.....	38
Applying an advanced filter.....	39
<b>Sorting records.....</b>	<b>39</b>
Sort dialog.....	40
Sort options.....	40
Quick sort.....	41
<b>Find and replace.....</b>	<b>41</b>
Find toolbar.....	42
Find & Replace dialog.....	42
Finding.....	43
Replacing.....	43
Find & Replace options.....	43

## Introduction

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

## Using the keyboard

Most data entry in Calc can be accomplished 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 will be the same, for example -1234.

#### Leading zeroes

To retain a minimum number of characters in a cell when entering numbers and retain the number format, for example 1234 and 0012, leading zeroes have to be added as follows:

- 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).

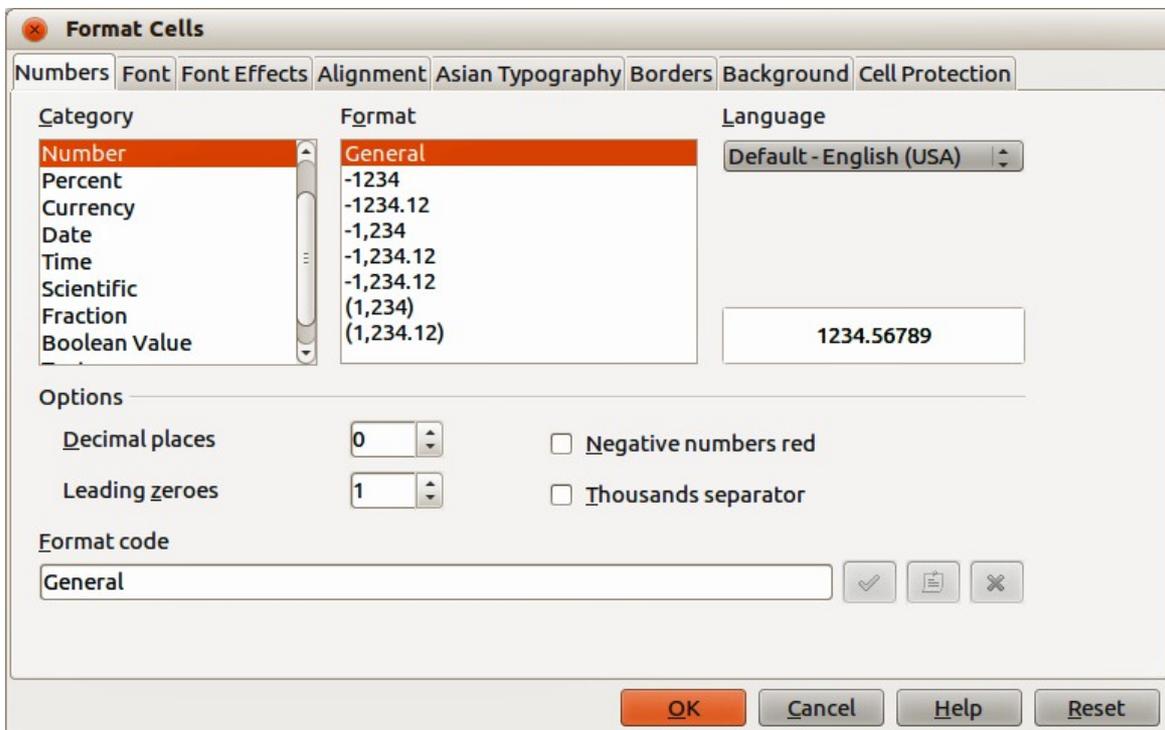


Figure 1: Format Cells dialog – Numbers page

- 2) Make sure the **Numbers** page 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 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.

If a number is entered with leading zeroes, for example 01481, by default Calc will automatically drop the leading 0. To preserve leading zeroes in a number:

- 1) Type an apostrophe (') before the number, for example '01481.
- 2) Move the cell focus to another cell. The apostrophe is automatically removed, the leading zeroes are retained and the number is converted to left-aligned text.

## Numbers as text

Numbers can also be converted to text as follows:

- 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).
- 2) Make sure the **Numbers** page 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 that have been formatted as text in a spreadsheet will be treated as a zero 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.

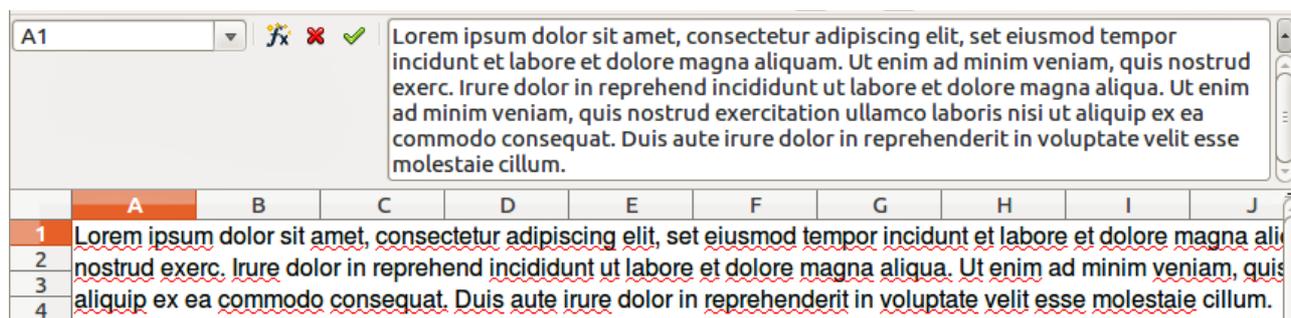


Figure 2: Extended input line on Formula Bar

## 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, right-click on the cell 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).
- 2) Make sure the **Numbers** page 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.

## Special characters

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

- 1) Place the cursor in the cell 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).
- 3) Select in order the special characters you want to insert into the cell. The special characters selected will appear at the bottom left of the Special Characters dialog. The last character selected is shown on the right of the Special Characters dialog along with its numerical code.
- 4) Click **OK** to close the dialog and the special characters are 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.

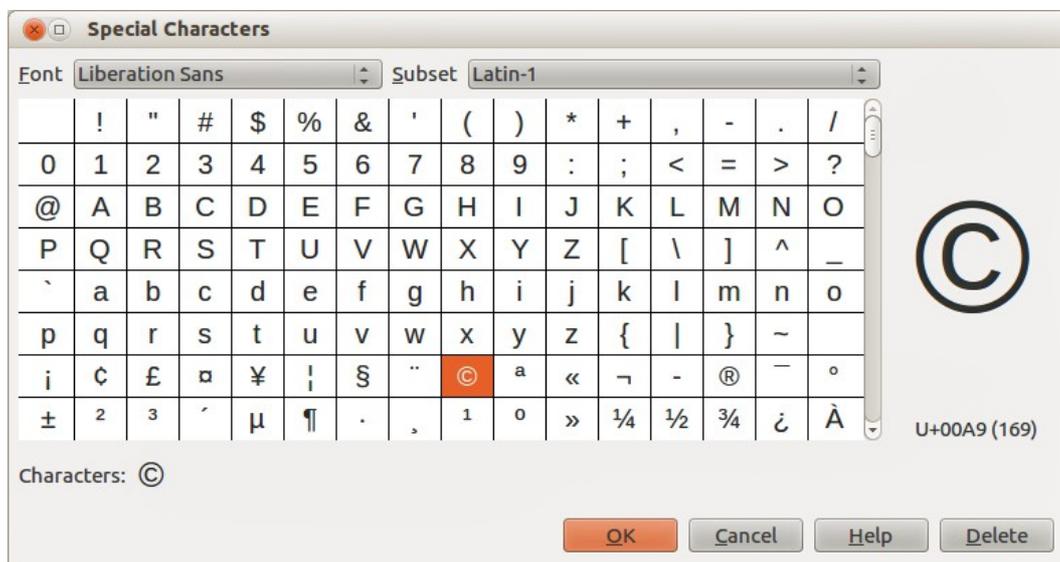


Figure 3: Special Characters dialog

## Autocorrection options

Calc automatically applies many changes during data input using autocorrection, unless you have deactivated any autocorrect changes. You can also undo any autocorrection 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 Options** on the menu bar to open the **AutoCorrect** dialog (Figure 4).

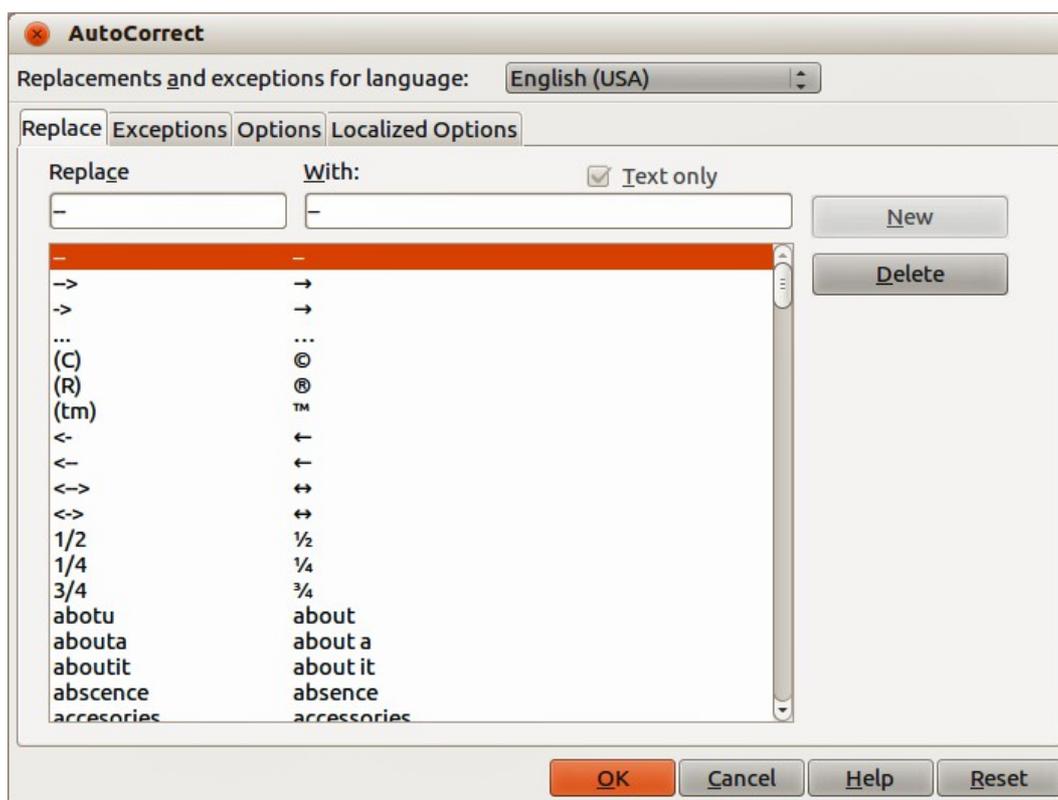


Figure 4: AutoCorrect dialog

- **Replace** – edits the replacement table for automatically correcting or replacing words or abbreviations in your document.
- **Exceptions** – specify the abbreviations or letter combinations that you do not want LibreOffice to correct 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** – resets 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

<b>Text that you type</b>	<b>Result</b>
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 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 off **AutoInput**, go to **Tools > Cell Contents** on the main menu bar and deselect **AutoInput**.

	A	B
1	Original	
2	Original	
3	Original	
4	Original	
5	Original	
6	Original	
7	Original	
8	Original	

Duplicate fill

	A	B
1	1234	
2	1235	
3	1236	
4	1237	
5	1238	
6	1239	
7	1240	
8	1241	

Series fill

Figure 5: Examples of using the Fill tool

### Fill tool

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

- 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 **Edit > Fill** on the main menu bar and select the direction in which you want to copy or create data (**Up, Down, Left Right, Sheet or Series**). 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.

## Note

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.

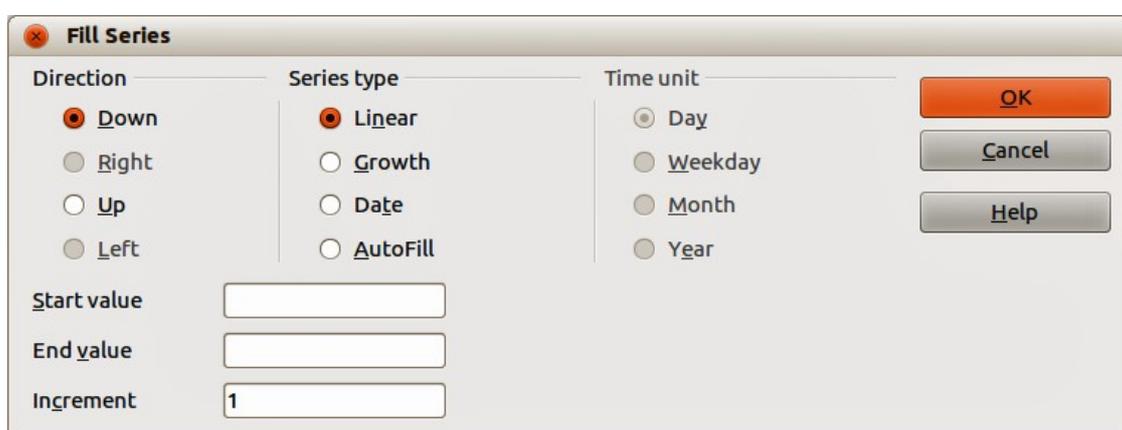


Figure 6: Fill Series dialog

## Using a fill series

When you select a series fill from **Edit > Fill > 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.
- **Series Type** – defines the series type.
  - *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.

- **Unit of Time** – 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**.
  - *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.

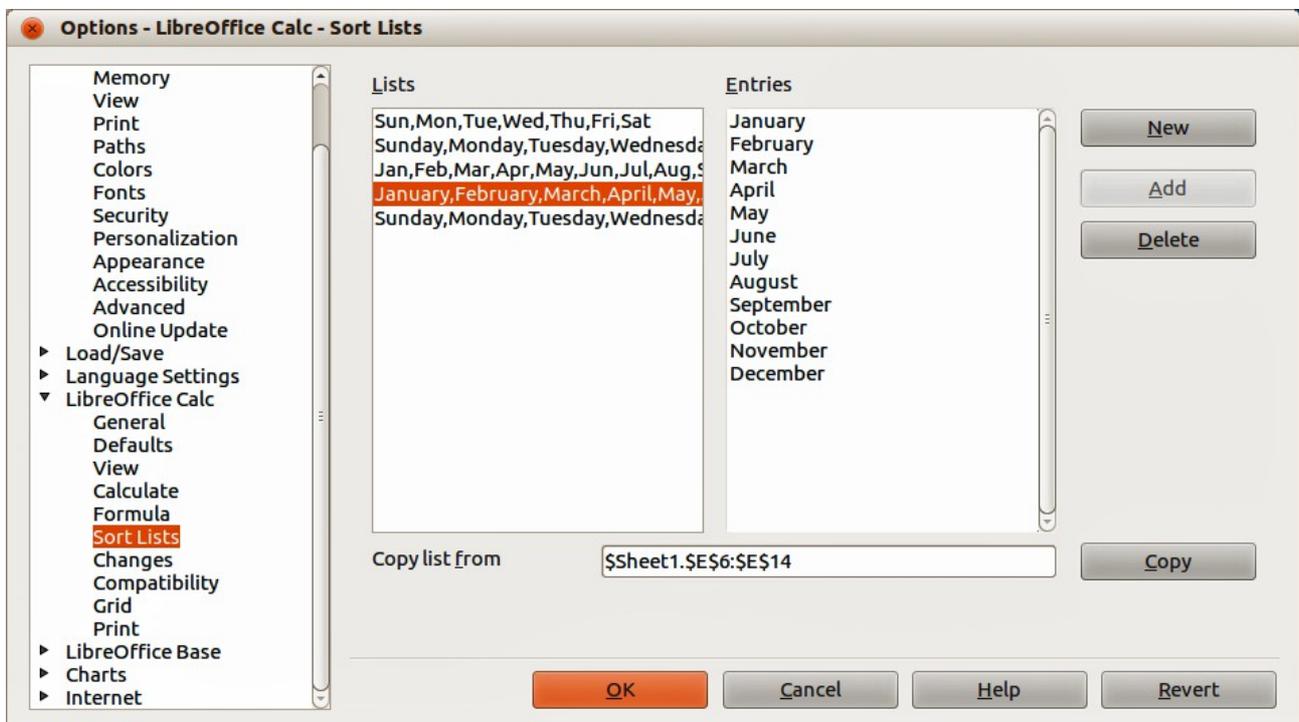


Figure 7: Sort Lists dialog

## 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.

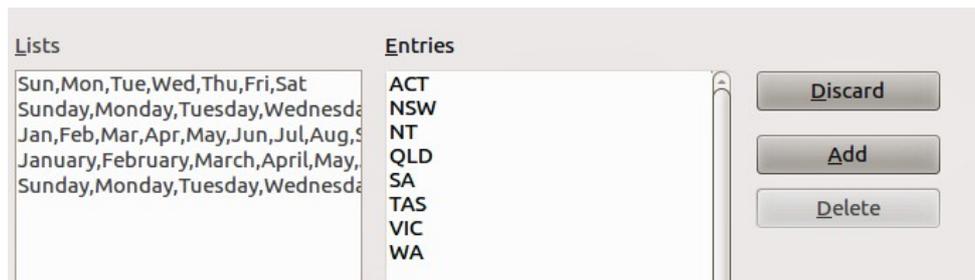


Figure 8: Creating new sort list

## 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

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### 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, click **Yes** on the confirmation dialog that opens to move the data in the hidden cells into the first cell.

#### Note

Merging cells can lead to calculation errors if formulas have 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

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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.

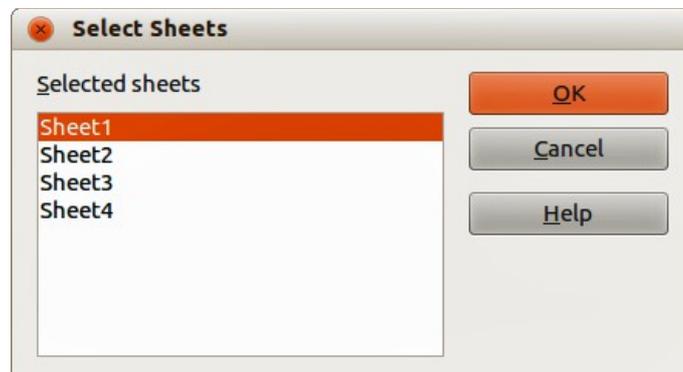


Figure 9: Select Sheets dialog

- 1) Go to **Edit > Sheet > Select** on the menu bar to open the **Select Sheets** dialog (Figure 9).
- 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.

### Note

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 your spreadsheet.

## Validating cell contents

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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.

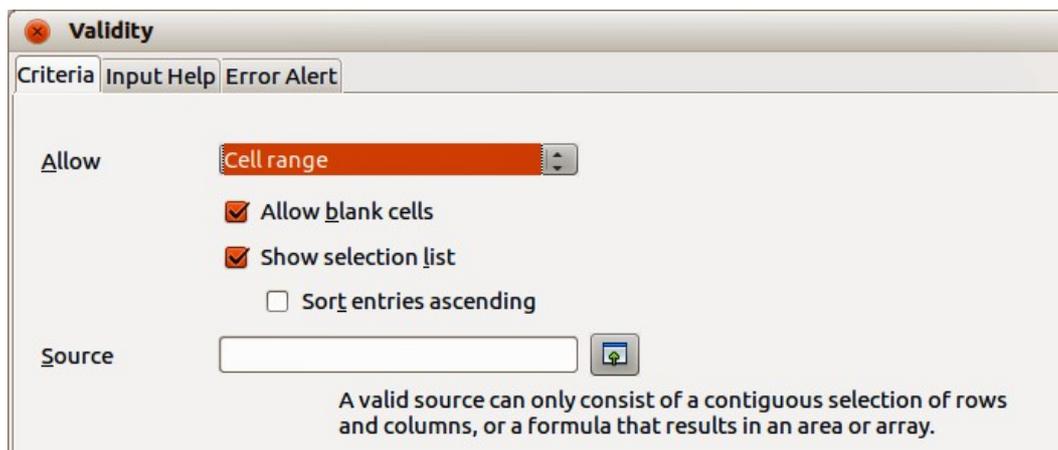


Figure 10: Validity dialog – Criteria page

- 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 available are explained below.

## Criteria options

Specify the validation rules for the selected cells using the **Criteria** page in the Validity dialog as shown in Figure 10. 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* – entries whose length corresponds to the number of characters that have been set.
- **Allow blank 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 11).

- **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.

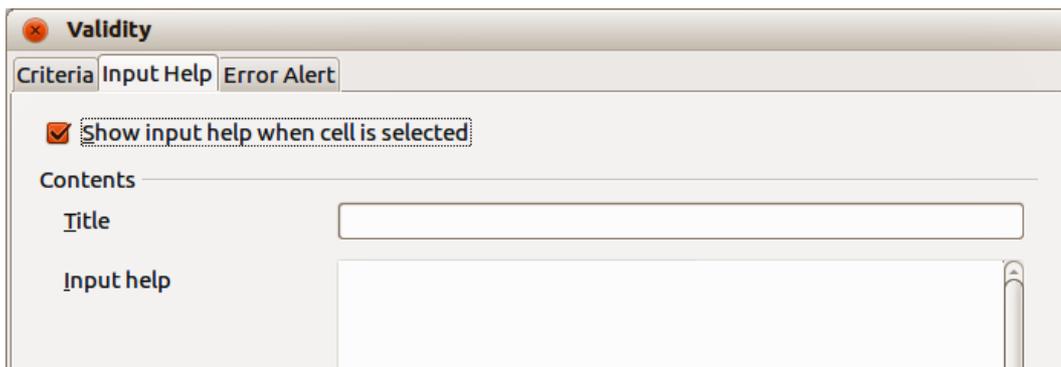


Figure 11: Validity dialog – Input Help page

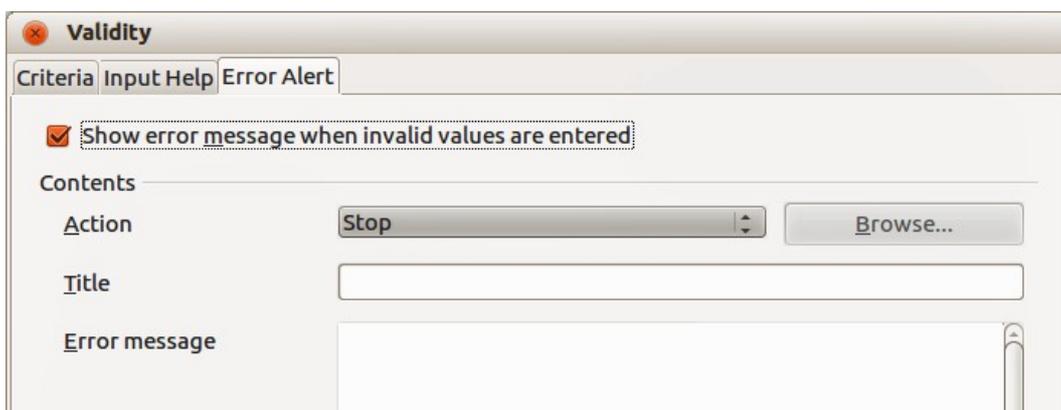


Figure 12: Validity dialog – Error Alert page

## Error Alert options

Define the error message that is displayed when invalid data is entered in a cell (Figure 12).

- **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 13), then it is removed. If you want to copy a validity rule with the rest of the cell, use **Edit > Paste Special > Paste Formats or Paste All**.

## Editing data

---

### Deleting data

#### *Deleting data only*

Data can be deleted from a cell without deleting any of the cell formatting. Click in the cell to select it and then press the *Delete* key.

#### *Deleting data and formatting*

Data and cell formatting can be deleted from a cell at the same time.

- 1) Click in the cell to select it.
- 2) Press the *Backspace* key, or right-click in the cell and select **Delete Contents** from the context menu, or go to **Edit > Delete Contents**) on the menu bar to open the **Delete Contents** dialog (Figure 13). Here you can choose to delete the different aspects of the data in the cell or delete everything in the cell.



Figure 13: Delete Contents dialog

- 3) Select the delete options.
- 4) Click **OK** to delete the contents and close the 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 maybe easier to carry out 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 your 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, right-click and select **Copy** from the context menu.
- 3) Select the target cell or cell range.
- 4) Go to **Edit > Paste Special** from the menu bar, or use the keyboard shortcut *Ctrl+Shift+V*, or right-click and select **Paste Special** from the context menu to open the Paste Special dialog (Figure 14).
- 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.

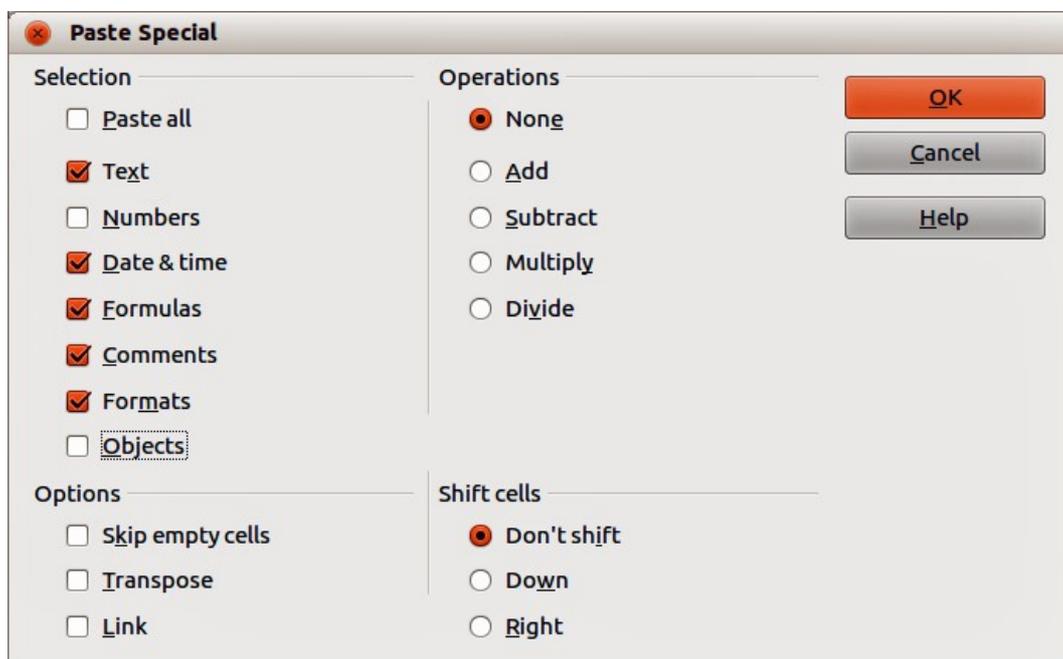


Figure 14: Paste Special dialog

### 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 your 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 the *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** – set 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 your target cell or cell range:

- 1) Select the 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 Only** 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 Fields > Date** or **Sheet Name** or **Title** from the context menu.

#### Note

The **Insert Fields > 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 in Calc* for more information.

The data in Calc can be formatted in several ways. Formatting can either be defined as part of a cell style so that it is automatically applied, or it can be 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.

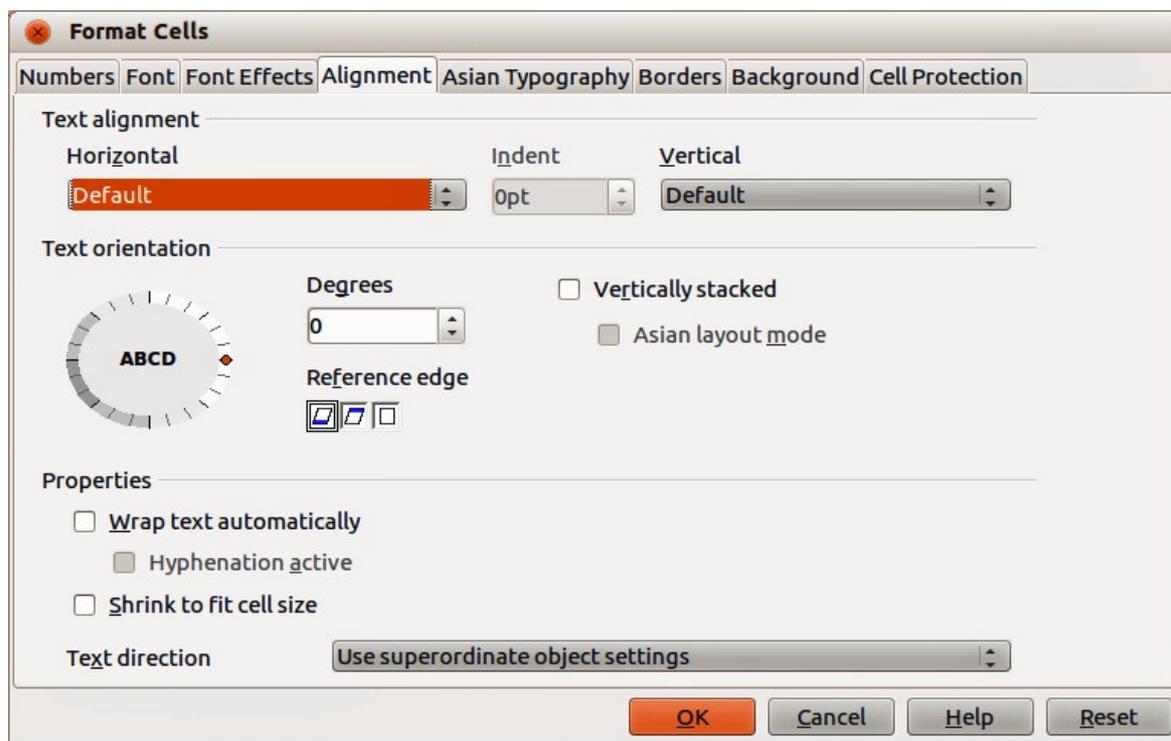


Figure 15: Format Cells dialog – Alignment page

- 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 15).
- 4) Under **Properties**, select *Wrap text automatically* and click **OK**.

## 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 your text may still overlap the end of the cell. You have to change the cell width manually or reposition your line break so that your 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 15).
- 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 16). 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 and “Numbers” 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 16: 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 17) 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, Centre, Right, Justified) .



Figure 17: 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 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 *Font Effects* tab (Figure 18).
- 4) Select the font effect you want to use from the options available. The options available are described below.
- 5) Click **OK** to apply the font effects and close the dialog.

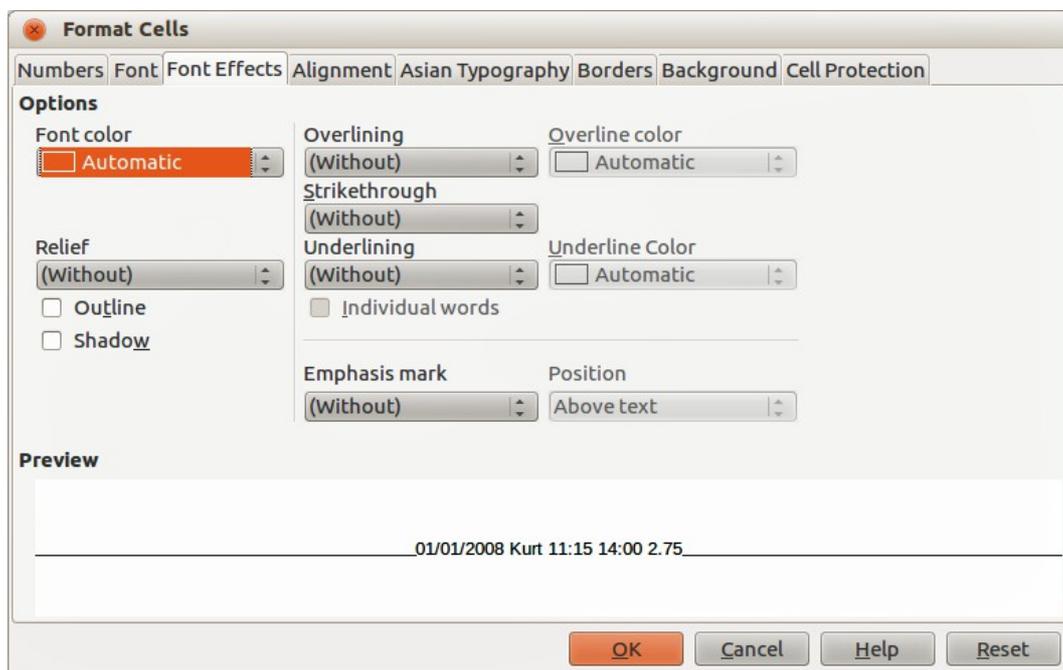


Figure 18: Format Cells dialog – Font Effects page

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.

- **Font Color** – sets the color for the selected text. If you select Automatic, the text color is set to black for light backgrounds and to white for dark backgrounds. Also you can change

the font color by clicking on the triangle to right of the **Font Color** icon  to display the color palette, then select the desired color.

- **Relief** – select a relief effect to apply to the selected text. The embossed relief makes the characters appear as if they are raised above the page. The engraved relief makes the characters appear as if they are pressed into the page.
- **Outline** – displays the outline of the selected characters. This effect does not work with every font.
- **Shadow** – adds a shadow that casts below and to the right of the selected characters.
- **Overlining** – select the overlining style that you want to apply. To apply overlining to words only, select **Individual Words**.
- **Overline color** – select the color for the overlining.
- **Strikethrough** – select a strikethrough style for the selected text. If you save your document in MS Word format, all of the strikethrough styles are converted to the single line style.
- **Underlining** – select the underlining style that you want to apply. To apply the underlining to words only, select **Individual Words**. If you apply underlining to a superscript text, the underlining is raised to the level of the superscript. If the superscript is contained in a word with normal text, the underlining is not raised.
- **Underline color** – select the color for the underlining.
- **Individual words** – applies the selected font effect only to words and ignores spaces.
- **Emphasis mark** – select a character to display over or below the entire length of the selected text.
- **Position** – specify where to display the emphasis marks.
- **Preview** – displays a preview of the current selection.

## Text direction

To change the text direction within a cell, you can use the Alignment page on the Format Cells dialog (Figure 15 on page 21) or the icons on the Formatting toolbar.

- 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. Only select **Asian layout mode** if you are using an Asian language in the cell.
- 5) 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

If the text direction icons are not available on the Formatting toolbar, then right-click in an empty area on the toolbar and select **Visible Buttons** from the context menu. 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 (see *Chapter 4 Using Styles and Templates in Calc* for more information). The border icons on the Formatting toolbar only apply the default styles to borders, but the Format Cells dialog provides greater control over of how the cell borders will look.

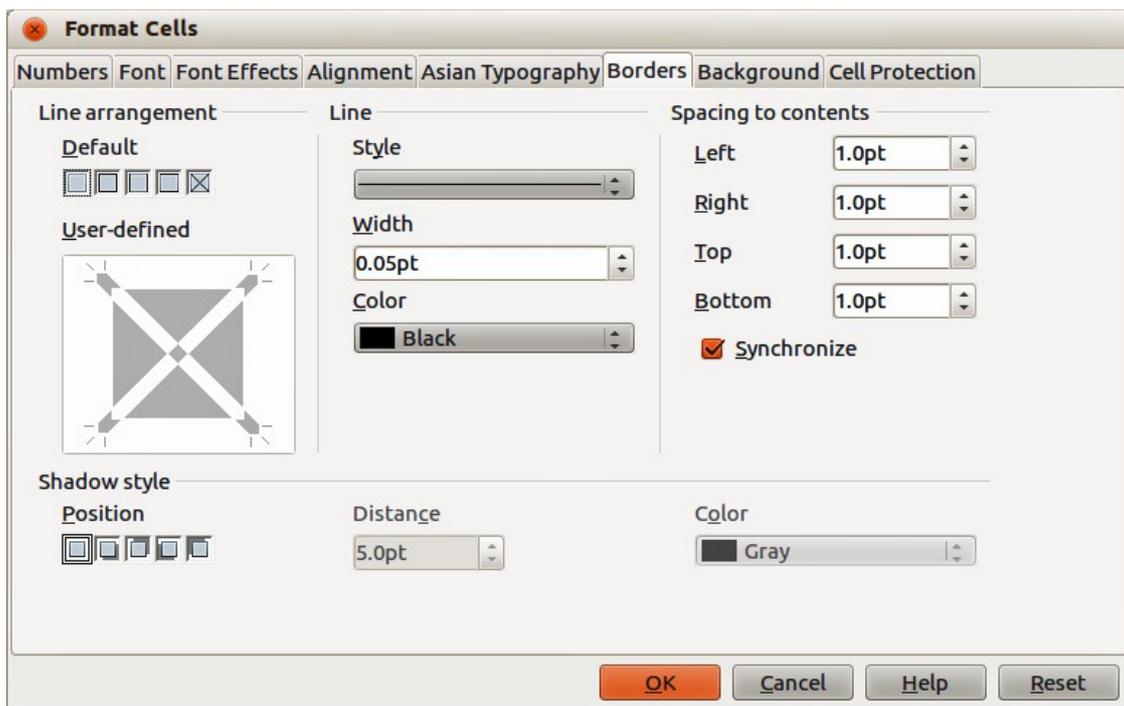


Figure 19: Format Cells dialog – Borders page

- 1) Select a cell or a range of cells.
- 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 *Borders* tab (Figure 19).
- 4) Select the options from the Borders page. The options available are given below.
- 5) Click **OK** to close the dialog and save your changes.

- 6) Alternatively, use the icons on the Formatting to apply default styles to borders.
- Click on the **Borders** icon  and select one of the border options displayed in the Borders palette.
  - Click on the **Border Style** icon  and select one of the line styles from the Border Style palette.
  - Click on the **Line Color** icon  and select a color from Border Color palette.

### 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.

### 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.

The border options available in the Format Cells dialog are as follows.

- **Line arrangement** – select the style of cell borders.
  - *Default* – select a predefined border style to apply.
  - *User defined* – click on the diagram to apply a border to one of the edges or diagonal lines across the cell.
- **Line** – select the line style for the cell borders.
  - *Style* – select the line style to be used for the border.
  - *Width* – enter a width to be used for the border line.
  - *Color* – select a color to be used for the border line.
- **Spacing to contents** – specify the amount of space that you want to leave between the border and the contents of the selection.
  - *Left* – enter the distance between the left border and the contents of the selection.
  - *Right* – enter the distance between the right border and the contents of the selection.
  - *Top* – enter the distance between the top border and the contents of the selection.
  - *Bottom* – enter the distance between the bottom border and the contents of the selection.
  - *Synchronize* – applies the same spacing to contents setting to all four borders when you enter a new distance.
- **Shadow style** – applies a shadow effect to borders. For the best results, only apply this effect when all four borders are visible.
  - *Position* – select a shadow style for the selected borders.
  - *Distance* – enter the width of the shadow.
  - *Color* – select a color for the shadow.

## Formatting cell backgrounds

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

- 1) Select a cell or a range of cells.
- 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 *Background* tab.
- 4) Select a color from the color palette.
- 5) Click **OK** to save your changes and close the dialog.
- 6) 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** on the menu bar to open the **AutoFormat** dialog (Figure 20).
- 3) Select the type of format and format color from the list
- 4) If necessary, click **More** to open **Formatting** if it is not visible.
- 5) Select the formatting properties to be included in the AutoFormat function.
- 6) Click **OK** to apply the changes and close the dialog.

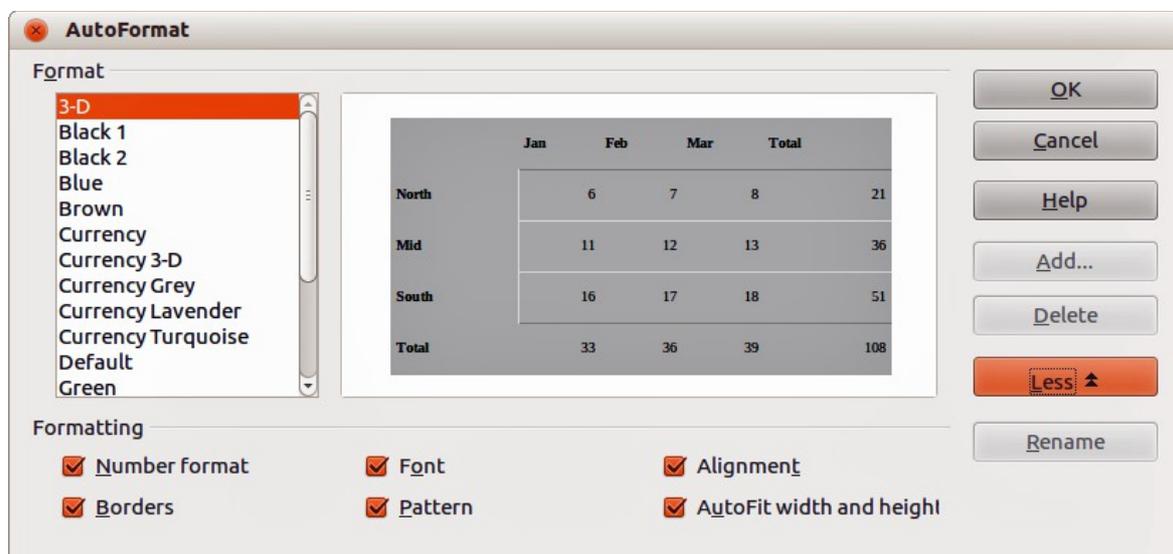


Figure 20: AutoFormat dialog

### 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** to open the AutoFormat dialog and 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

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

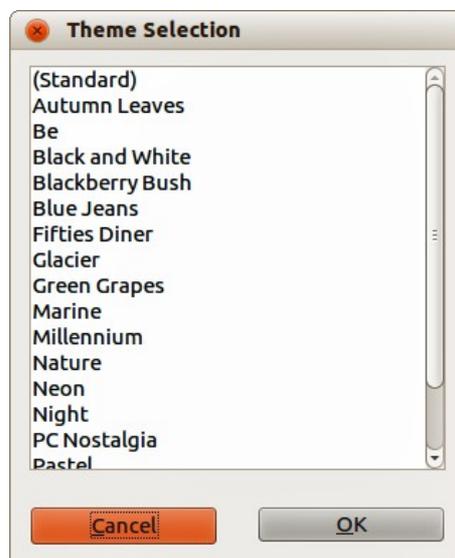


Figure 21: Theme Selection dialog

To apply a theme to a spreadsheet:

- 1) Click the **Choose Themes** icon  in the Tools toolbar to open the Theme Selection dialog (Figure 21). If the Tools toolbar is not visible, go to **View > Toolbars** on the menu bar and select **Tools**. The Theme Selection dialog 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**.
- 4) If you wish, you can now open the Styles and Formatting window to modify specific styles. These modifications do not modify the theme; they only change the appearance of the style in the specific spreadsheet you are creating. For more about modifying styles, see *Chapter 4 Using Styles and Templates in Calc*.

## Value highlighting

The value highlighting function displays cell contents in different colors, depending on the type of content. An example of value highlighting is shown in Figure 22.

- 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 22: 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 the specifications that you have set.

See “Conditional formatting example” on page 32 for an example on 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 in Calc* for more information.

## Setting up conditional formatting

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



Figure 23: Conditional Formatting dialog – Condition

- 3) Go to **Format > Conditional Formatting > Condition** (Figure 23), **Color scale** (Figure 24) or **Data Bar** (Figure 25) 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.
- 6) Alternatively, select **New Style** to open the Cell Style dialog (Figure 26) and create a new cell style. Repeat this step as necessary.
- 7) Click **OK** to save the conditions and close the dialog. The selected cells are now set to apply a result using conditional formatting.

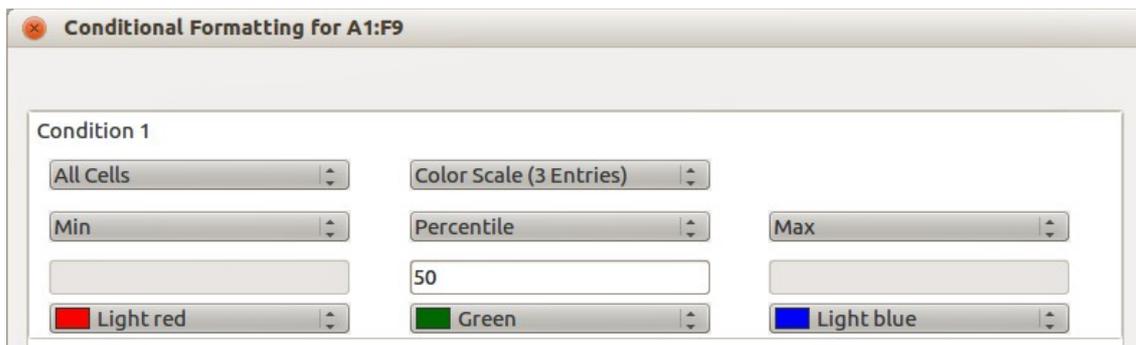


Figure 24: Conditional Formatting dialog – Color Scale



Figure 25: Conditional Formatting dialog – Data Bar

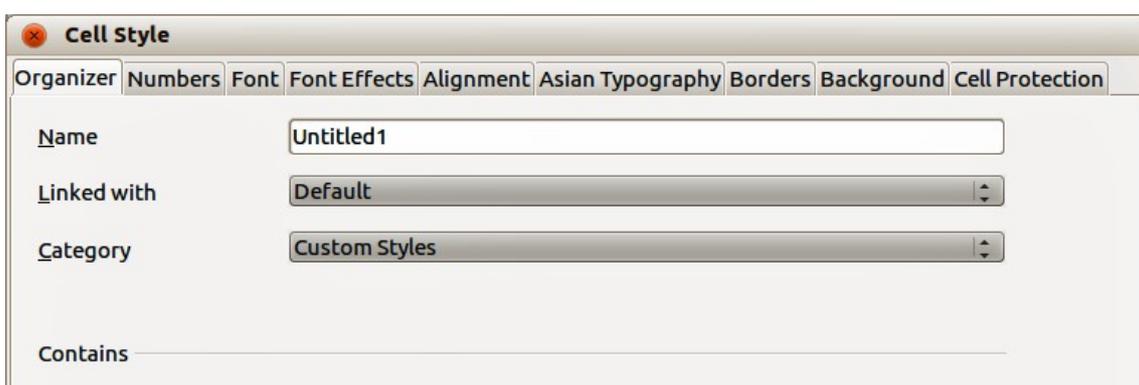


Figure 26: Cell Style dialog

## 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 your 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 your color scale.

### Data bars

Data bars provide a graphical representation of data in your 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 your 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 your 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 your spreadsheet and any styles used:

- 1) Go to **Format > Conditional Formatting > Manage** on the menu bar to open the Manage Conditional Formatting dialog (Figure 27).
- 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 your changes and close the dialog.

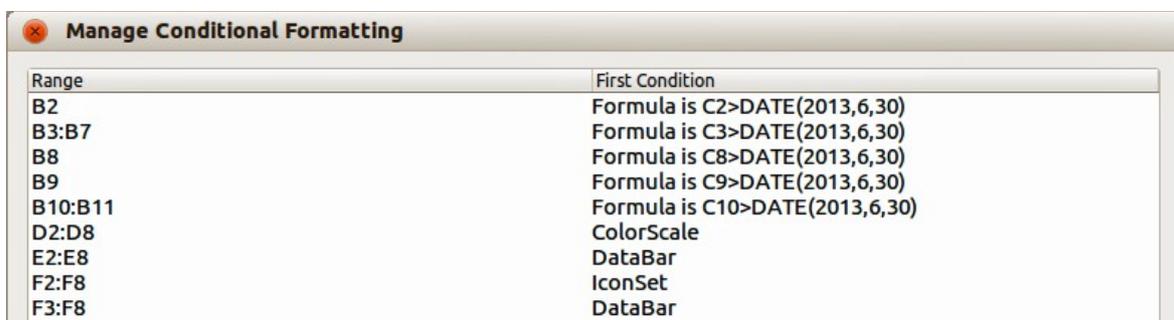


Figure 27: Manage Conditional Formatting dialog

## 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** on the menu bar to open the Paste Special dialog (Figure 14 on page 19).
- 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 and Formatting dialog 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 Formatting > 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 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 Formatting** 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

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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, rows, and columns

- 1) Select the sheet, row, or column you want to hide.
- 2) Go to **Format** on the main menu bar and select **Sheet, Row** or **Column**.
- 3) Select **Hide** from the menu and the sheet, row, or column can no longer viewed or printed. Alternatively, right-click on the sheet tab, row header, or column header and select **Hide** from the context menu.

### Cells

- 1) Go to **Tools > Protect Document > Sheet** on the menu bar to open the **Protect Sheet** dialog dialog (Figure 28).
- 2) Select *Protect this sheet and the contents of protected cells*.
- 3) Create a password and then confirm the password.
- 4) Select or deselect the options for *Allow all users of this sheet to:* so users can select protected or unprotected cells.
- 5) Click **OK** to save the changes and close the dialog.
- 6) Select the cells you want to hide.
- 7) Go to **Format > Cells** on the menu bar, or right-click and select **Format Cells** from the context menu, or use the keyboard shortcut *Ctrl+1* to open the **Format Cells** dialog (Figure 29).
- 8) Click the *Cell Protection* tab and select an option for hiding and printing the cells.
- 9) Click **OK** to save the changes and close the dialog.

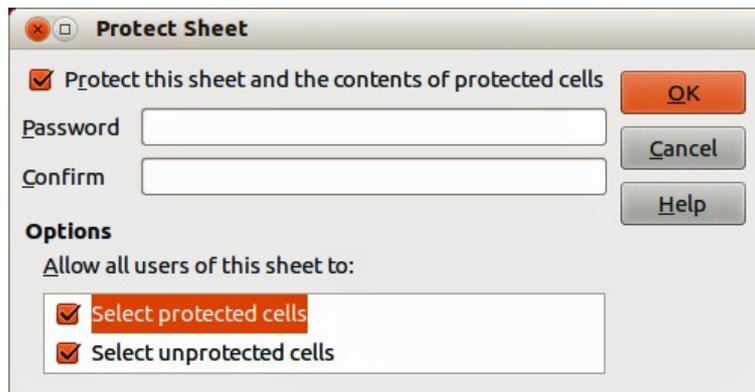


Figure 28: Protect Sheet dialog

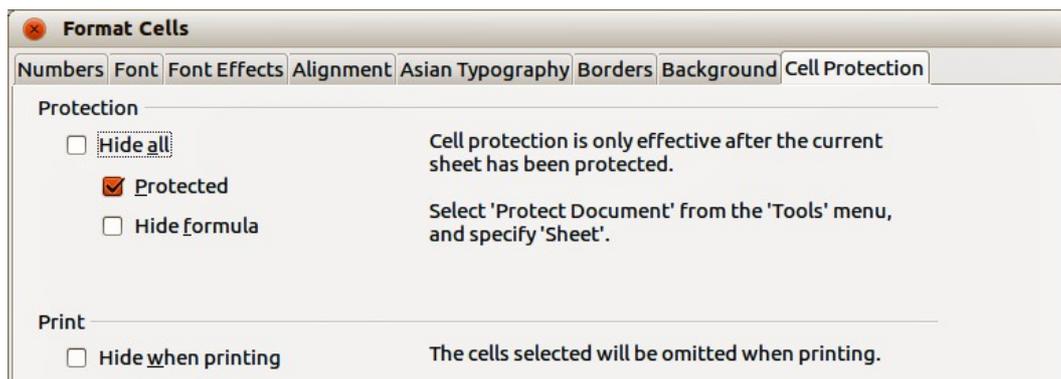


Figure 29: Format Cells dialog – Cell Protection page

### 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.

### 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, rows, and columns

- 1) Select the sheets, rows or columns each side of the hidden sheet, row or column.
- 2) Go to **Format** on the menu bar and select **Sheet**, **Row** or **Column**.
- 3) Select **Show** from the context menu and the sheet, row or column will be displayed and can be printed.
- 4) Alternatively, right-click on the sheet tabs, row headers or column headers and select **Show** from the context menu.

### Cells

- 1) Go to **Tools > Protect Document > Sheet** on the menu bar to open the **Protect Sheet** dialog dialog (Figure 28).
- 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, or use the keyboard shortcut *Ctrl+1* to open the **Format Cells** dialog (Figure 29).
- 4) Click the *Cell Protection* tab and deselect the hide options for the cells.
- 5) 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 your 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 30 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	01/01/2008	Brigitte	10:15	16:15	6.00
3	01/01/2008	Fritz	11:00	18:45	7.00
4	01/01/2008	Hans	8:15	19:00	10.00

Figure 30: 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) 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 your 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 31 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 <sup>st</sup> Quarter	Apr	May	Jun	2 <sup>nd</sup> Quarter
2	100	120	130	350	100	100	200	400

Figure 31: Example of AutoOutline

## Removing

To remove any cell groups of rows or columns, go to **Data > Group and Outline > Remove** 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 your 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 your 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 your spreadsheet.
- 2) Go to **Data > Filter > Standard Filter** on the menu bar to open the Standard Filter dialog (Figure 32).
- 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.

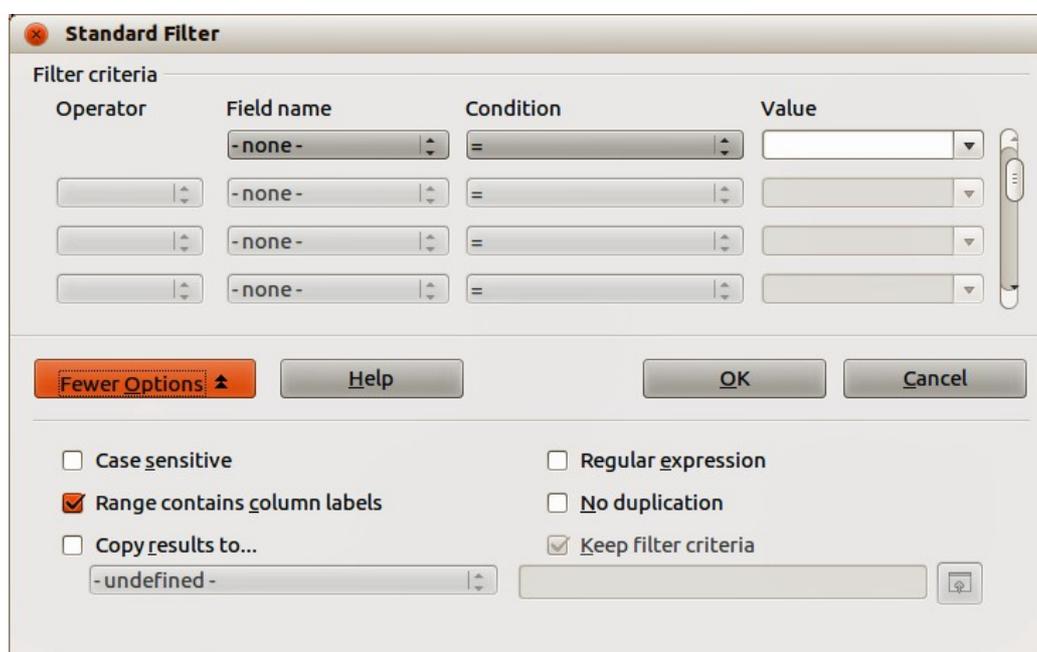


Figure 32: Standard Filter dialog

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 expression** – 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 duplication** – 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**.

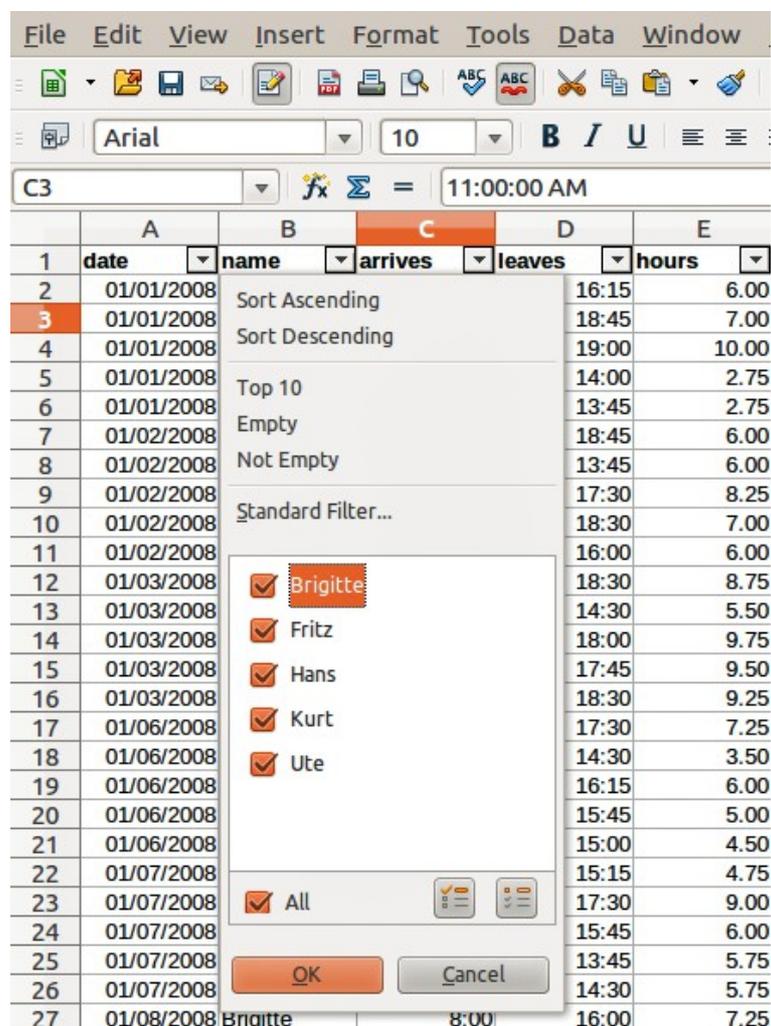


Figure 33: AutoFilter example

### 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 <http://sheepsystems.com/bookdog/HelpBook/LexicalOrder.html> 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 your 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 > Filter > 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 33).
- 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.

### 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 your spreadsheet.
- 2) Go to **Data > Filter > Advanced Filter** on the menu bar to open the Advanced Filter dialog (Figure 34).
- 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.

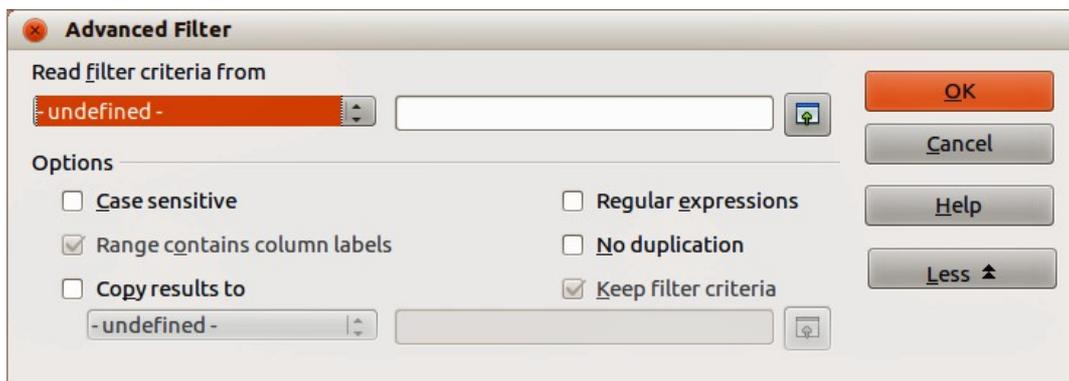


Figure 34: Advanced Filter dialog

#### Note

The options for advanced filtering are the same as those used for standard filtering, see “Applying a standard filter” on page 37 for more information.

## 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 (Figure 35):

- 1) Select the cells to be sorted.
- 2) Go to **Data > Sort** on the menu bar to open the Sort dialog. Make sure the **Sort Criteria** page is open.
- 3) Select the sort criteria from the drop-down lists. The selected lists are populated from the selected cells.
- 4) Select either ascending order (A-Z, 1-9) or descending order (Z-A, 9-1).
- 5) Click **OK** and the sort is carried out on your spreadsheet.

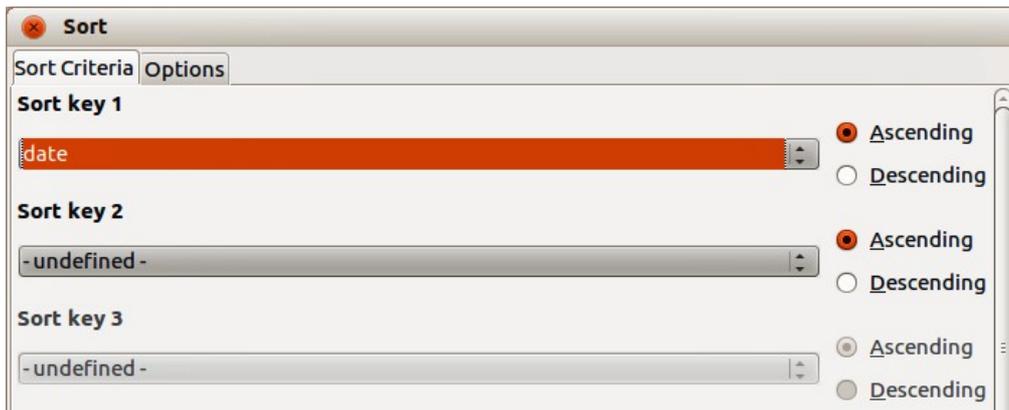


Figure 35: Sort dialog – Sort Criteria page

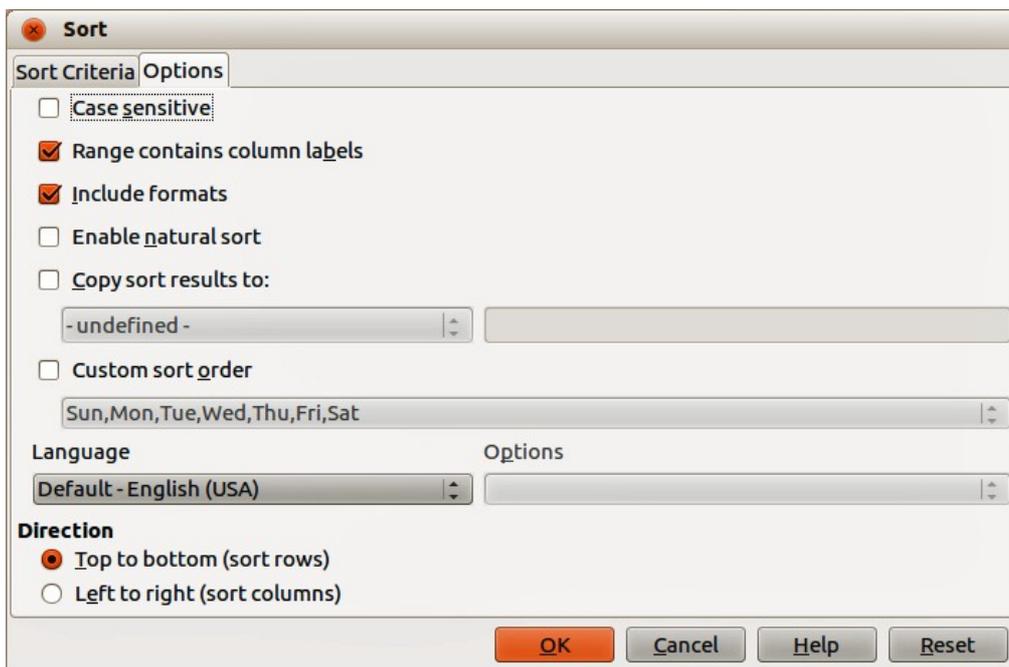


Figure 36: Sort dialog – Options page

## Sort options

On the Options page of the Sort dialog (Figure 36), you can set additional options:

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

## Note

For Asian languages, select Case Sensitivity 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 row or the first column in the selection from the sort. The **Direction** setting at the bottom of the dialog defines the name and function of this check box.
- **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. While this sorting behavior may make sense to those who understand the underlying sorting mechanism, to the rest of the population it seems completely bizarre, if not outright inconvenient. With natural sorting selected, values such as the ones in the above example are sorted correctly, which improves the convenience of sorting operations in general.
- **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. To define a custom sort order, go to **LibreOffice > Preferences > LibreOffice Calc > Sort Lists**.
- **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 your 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**  icons 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.



Figure 37: Find toolbar

## Find toolbar

- 1) Go to **View > Toolbars > Find** on the menu bar, or go to **Edit > Find** on the menu bar, or use the keyboard shortcut *Ctrl+F* to open the Find toolbar (Figure 37). By default the Find toolbar is docked in the lower left-corner of the Calc window. You can undock the toolbar and move it to where you choose.
- 2) Type a search term in the Find box.
- 3) Select **Match Case** to refine your search. For example, *Owner* is your search term and selecting **Match Case** will only find *Owner* and will not find *owner*.
- 4) Click the **Find Next**  or **Find Previous**  icons. To find other occurrences of the same term, continue clicking the icon.

## Find & Replace dialog

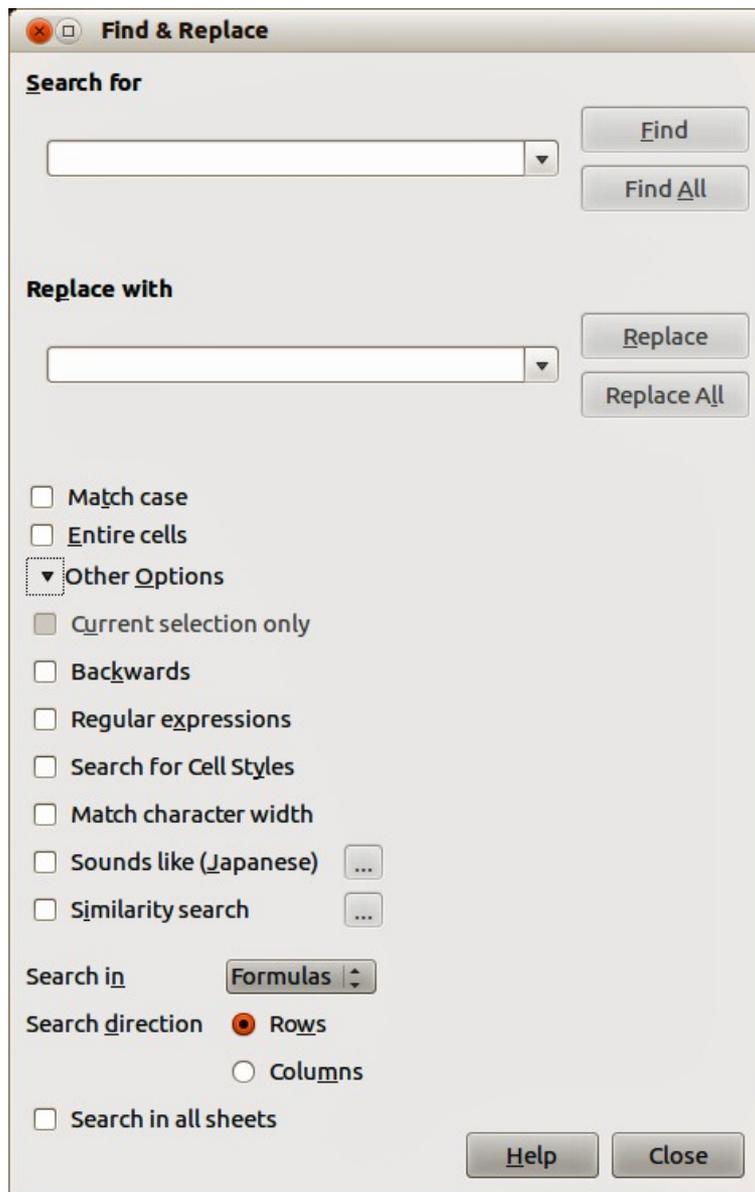


Figure 38: Find & Replace dialog

## Finding

- 1) Go to **Edit > Find & Replace** on the menu bar, or use the keyboard shortcut *Ctrl+H*, or select the **Find & Replace**  icon on the Find toolbar to open the Find & Replace dialog (Figure 38).
- 2) Enter or select the search criteria in the *Search for* box.
- 3) If necessary, click on *Other Options* so that you can increase the number of search filters that you can apply to your search.
- 4) Click **Find** to locate the first instance of the search criteria you entered.
- 5) Click **Find** again to locate the next instance of your search criteria.
- 6) Click **Find All** to locate all instances of your search criteria. The instances of your search criteria will be highlighted in the spreadsheet.

## Replacing

- 1) Go to **Edit > Find & Replace** on the menu bar, or use the keyboard shortcut *Ctrl+H*, or select the **Find & Replace**  icon on the Find toolbar to open the Find & Replace dialog (Figure 38).
- 2) Enter or select the search criteria in the *Search for* box.
- 3) Enter or select the replace criteria in the *Replace with* box.
- 4) If necessary, click on *Other Options* so that you can increase the number of search filters that you can apply to your find and replace.
- 5) Click **Replace** to locate and replace the first instance of the search criteria you entered with your replacement criteria.
- 6) Click **Replace** again to locate and replace the next instance of the search criteria you entered with your replacement criteria.
- 7) Click **Replace All** to locate and replace all instances of the search criteria you entered with your replacement criteria.

### Note

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:

- **Search for** – enter the text that you want to search for, or select a previous search from the list.
- **Replace with** – enter the replacement text, or select a recent replacement text or style from the list.
- **Match case** – distinguishes between uppercase and lowercase characters.
- **Entire Cells** – searches for whole words or cells that are identical to the search text.
- **Current selection only** – searches only the selected text or cells.
- **Backwards** – search starts at the current cursor position and goes backwards to the beginning of the file.
- **Regular expressions** – select to use wildcards in your search. See LibreOffice Help for more information on the use of regular expressions.
- **Similarity Search** – find terms that are similar to the **Search for** text. Select this checkbox, and then click the ... button to define the similarity options.

- **Search for Styles** – searches for text formatted with the style that you specify. Select this option and then select a style from the **Search for** list. To specify a replacement style, select a style from the **Replace with** list.
- **Match character width** – distinguishes between half-width and full-width character forms; only available if Asian languages are enabled.
- **Sounds like (Japanese)** – specify the search options for similar notation used in Japanese text. Select this option, and then click the ... button to specify the search options. This option is only available if Asian languages are enabled.
- **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.
- **Search direction** – determines the order for searching the cells.
- **Search in all sheets** – searches through all of the sheets in the current spreadsheet file.