
SCREENSHOTTING YOUR WAY THROUGH THE CODEBASE

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SCREENSHOTTING YOUR WAY THROUGH THE CODEBASE

- 1. WHY SCREENSHOTS, ANYWAY?**
- 2. WHAT HAVE WE DONE AND HOW?**

1 | 2

WHY SCREENSHOTS, ANYWAY?

IF ALL ELSE FAILS, READ HELP (F1)

The image shows a screenshot of the LibreOffice Help window and a dialog box for importing text. The help window is titled "Importing and Exporting Data in Text Format" and contains instructions on how to import and export data. The dialog box is titled "Text Import - [Samplespreadsheet.csv]" and shows various options for importing a CSV file. The dialog box is tilted and has a large "Better :)" text overlaid on it. The help window also has a "Helpful?" text overlaid on it.

LibreOffice Help - LibreOffice Impress
Mon 16:10

Importing and Exporting Data in Text Format

If you want to exchange data with a database that does not have an ODBC link and does not allow dBASE import and export, you can use the Text CSV format.

Importing Data into LibreOffice

To exchange data in a text format use the LibreOffice Calc import/export filter.

1. Export the desired data from the source database in a text format. The CSV text format is recommended. This format separates columns, and separates records by inserting line breaks.
2. Choose **File > Open** and click the file to import.
3. Select "Text CSV" from the **File type** combo box. Click **Open**.
4. The **Text Import** dialog appears. Decide which data to include from the text document.

Once the data is in a LibreOffice Calc spreadsheet, you can edit it as needed. Save the spreadsheet as a new file. To do this, choose **File > Save As**.

- Save the current LibreOffice Calc spreadsheet in dBASE format in the folder of a dBASE database. To do this, choose **File > Save As**.

Exporting in CSV Text Format

You can export the current LibreOffice spreadsheet in a text format which can be read by many other applications.

1. Choose **File > Save As**.
2. In **File type** select the filter "Text CSV". Enter a file name and click **Save**.
3. This opens the **Export of text files** dialog, in which you can select the character set, field delimiters, and other options.

[Related Topics](#)
[Importing and Exporting Data in Base](#)

without quotation marks.

Tip
Most CSV files come from databases tables, queries, or reports, where further calculations and charting are required. On Microsoft Windows, CSV files often have the XLS file name extension to look like an Excel file, but they are still CSV files internally.

To open a CSV file in Calc:

- 1) Choose **File > Open** on the Menu bar and locate the CSV file that you want to open.
- 2) Select the file and click **Open**. By default, a CSV file has the extension .csv. However, some CSV files may have a .txt extension.
- 3) The **Text Import** dialog (Figure 5) opens. Here you can select the various options available when importing a CSV file into a Calc spreadsheet.
- 4) Click **OK** to open and import the file.

Helpful?

Better :)

Figure 5: Text Import dialog

Column type	Standard	Standard	Standard	Standard	Standard	Standard	Standard
1	Standard	Standard	Standard	Standard	Standard	Standard	Standard
2	Surname	First Name	Address	City	Country		
3	Weber	Jean	PO Box 640	Airlie Beach	Australia		
	Schorfield	Peter	Jankowskiego	Opole	Poland		

IF ALL ELSE FAILS, READ HELP (F1)

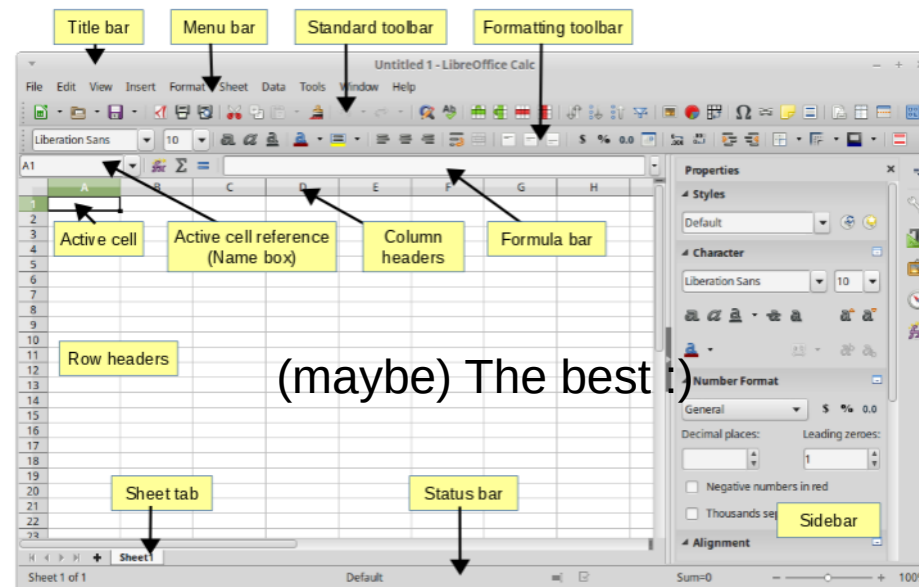


Figure 1: Calc main dialog

Menu bar

When you select an item on the Menu bar, a sub-menu drops down to show commands. You can also customize the Menu bar; see *Chapter 14 Customizing LibreOffice* for more information.

- **File** – contains commands that apply to the entire document; for example, *Open*, *Save*, *Wizards*, *Export as PDF*, *Print*, *Digital Signatures*.
- **Edit** – contains commands for editing the document; for example, *Undo*, *Copy*, *Changes*, *Fill*, *Plug-in*.

JOURNEY THROUGH THE LAYERS OF LEGACY HELP CONTENT

- Help content in „self-invented“ .xhp format
- Tedious, hard-to-maintain and hard-to-extend transformation XHP → XSLT → HTML
- Help-specific images part of icon themes
 - not sustainable for larger amount of graphical content in many languages
- Challenging to insert more complex content (screenshot, image etc.) in an efficient, easily repeatable way
 - for multiple platforms
 - for multiple languages

GENERATING SCREENSHOT MUST BE



- Repeatable
 - Generate an updated set of screenshots with every new release
- Platform- and environment-specific
 - Different sets of screenshots for different platforms (Linux, Win, Mac) ...
 - ... and different icon sets, themes
- Localizable
 - Screenshots to match the locale of the help text

2 | 2

WHAT HAVE WE DONE AND HOW?

OPEN THAT DIALOG!

WAIT - THERE IS A FRAMEWORK OPENING DIALOGS ALREADY ...

- UI-testing framework based on PyUNO (by Markus Mohrhard)
 - Opens dialogs (by dispatching corresponding UNO commands)
 - Simulates mouse/keyboard events on misc widgets
 - But ...
 - performance issues
 - verbose, fragile code
 - challenging to debug PyUNO
-

SOLUTION: USE ABSTRACT DIALOG FACTORY



- Open an empty document from cppunit test
 - Instantiate abstract dialog factory (contained in Writer/Calc/Impress docshell already)
 - Create any (fake) objects the dialog requires in order to open – SfxItems, strings etc.
 - Open the dialog
 - Use OutputDevice to take a screenshot in .png format
-

... BUT IT WAS MORE WORK THAN WE EXPECTED

- Fallback to ui-previewer (small C++ binary for previewing LibreOffice .ui files)
 - To some extent usable screenshots, but ...
 - Not coping with some custom widgets so well
 - No way to specify input data
 - Some dialogs blacklisted, crash with no input
-

STORE THE SCREENSHOTS



- Results in `/workdir/screenshots` directory
 - Directory structure to copy storage of .ui files
 - `/workdir/screenshots/cui/ui/areatabpage/AreaTabPage.png`
 - Make them all: `'make screenshot'`
 - a separate gbuild target
-

ENHANCE THE HELP TEXTS

GET 'EM IN



- Copy generated screenshots from *workdir* to a dedicated folder in help repository
 - Extend Perl scripts packaging the images to collect content also from help repository
 - previously only possible for *icon-themes* folder
 - Embed images into help files
 - I ♥ HelpAuthoring extension :P
 - Images implemented as *vnd.libreoffice.image://* URL
 - localization for free (with matching directory structure)
-

HIGHLIGHT AND ANNOTATE

LIVE DEMO

NEXT STEPS

WHAT'S NEXT?



- Improve the annotation process and markup
 - Possibly HelpAuthoring integration
- Automate updating the screenshots
 - for multiple languages
 - for multiple platforms

**THANK YOU THE DOCUMENT FOUNDATION
AND ITS DONORS
FOR FUNDING OUR WORK ON THIS**

THANK YOU!

