

Base Handbook

Copyright

This document is Copyright © 2013–2015 by the LibreOffice Documentation Team. Contributors are listed below. You may distribute or modify it under the terms of either the GNU General Public License (http://www.gnu.org/licenses/gpl.html), version 3 or later, or the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), version 4.0 or later.

All trademarks within this guide belong to their legitimate owners.

Contributors

Jean Hollis Weber Peter Schofield

Feedback

Please direct any comments or suggestions about this document to the Documentation Team's mailing list: documentation@global.libreoffice.org

Note: Everything you send to a mailing list, including your email address and any other personal information that is written in the message, is publicly archived and cannot be deleted.

Publication date and software version

Published 24 December 2015. Based on LibreOffice 5.0.

Contents

Copyright	2
Contributors	2
Feedback	2
Publication date and software version	2
Who is this book for?	4
What's in this book?	4
Sample databases	4
Where to get more help	5
Help system	
Free online support	
Paid support and training	6
What you see may be different	6
Illustrations	
Icons	6
Using LibreOffice on a Mac	6
What are all these things called?	7
Who wrote this book?	8
Acknowledgements	8
Frequently asked questions	8

Who is this book for?

Anyone who wants to get up to speed quickly with LibreOffice Base will find this book valuable. Whether you have never worked with databases before, or have worked with them in a DBMS (Database Management System), or you are used to another database system from an office suite or a stand-alone database system such as MySOL, this book is for you.

What's in this book?

This book introduces Base, the database component of LibreOffice. Base uses the HSQLDB¹ database engine to create database documents. It can access databases created by many database programs, including Microsoft Access, MySQL, Oracle, and PostgreSQL. Base includes additional functionality that allows you to create full data-driven applications.

This book introduces the features and functions of Base, using a set of sample databases.

- Creating a database
- Accessing external databases
- Creating and using tables in relational databases
- Creating and using forms for data entry
- Using queries to bring together data from different tables, calculate results where necessary, and quickly filter a specific record from a mass of data
- Creating reports using the Report Builder
- Linking databases to other documents and external forms, including use in mail merge
- Filtering and searching data
- Using macros to prevent input errors, simplify tasks, and improve usability of forms
- Maintaining databases

Sample databases

A set of sample databases has been created to accompany this book. You can find them here: https://wiki.documentfoundation.org/images/5/52/Sample-databases.zip

- Example Sport.odb (Chapter 1, "Introduction to Base")
- Example CSV included.odb (Chapter 2, "Creating a Database")
- Example jump Cursor Subform Mainform.odb (Chapter 4, "Forms")
- Example_Report_conditional_Overlay_Graphics.odb (Chapter 6, "Reports")
- Example Report Bill.odb (Chapter 6, "Reports")
- Example Report Rows Color change Columns.odb (Chapter 6, "Reports")
- Example PDFForm Import.odb (Chapter 7, "Linking to Databases")
- Example Autotext Searchmark Spelling.odb (Chapter 8, "Database tasks")
- Example_Documents_Import_Export.odb (Chapter 8, "Database tasks")
- Example Search and Filter.odb (Chapter 9, "Macros")
- Example direct Calculation Form.odb (Chapter 9, "Macros")
- Example Combobox Listfield.odb (Chapter 9, "Macros")
- Example serial Number Year.odb (Chapter 9, "Macros")

¹ An internal Firebird database is also available, under "experimental features".

- Example Database Formletter direct.odb (Chapter 9, "Macros")
- Example_Mail_File_activate.odb (Chapter 9, "Macros")
- Example Dialogs.odb (Chapter 9, "Macros")

Where to get more help

This book, the other LibreOffice user guides, the built-in Help system, and user support systems assume that you are familiar with your computer and basic functions such as starting a program, opening and saving files.

Help system

LibreOffice comes with an extensive Help system. This is your first line of support for using LibreOffice. To display the full Help system, press F1 or select **LibreOffice Help** from the Help menu. In addition, you can choose whether to activate Tips, Extended Tips, and the Help Agent (using **Tools > Options > LibreOffice > General**).

If Tips are enabled, place the mouse pointer over any of the icons to see a small box ("tooltip") with a brief explanation of the icon's function. For a more detailed explanation, select **Help > What's This?** and hold the pointer over the icon.

Free online support

The LibreOffice community not only develops software, but provides free, volunteer-based support. See Table 1 and this web page: http://www.libreoffice.org/get-help/

You can get comprehensive online support from the community through mailing lists and the Ask LibreOffice website. Other websites run by users also offer free tips and tutorials. This forum provides community support for LibreOffice: http://en.libreofficeforum.org/

This site provides support for LibreOffice, among other programs: http://forum.openoffice.org/en/forum/

Table 1: Free support for LibreOffice users

Free LibreOffice support		
Questions and answers from the LibreOffice community http://ask.libreoffice.org/en/questions/		
User guides, how-tos, and other documentation. http://www.libreoffice.org/get-help/documentation/ https://wiki.documentfoundation.org/Documentation/Publications		
Answers to frequently asked questions http://wiki.documentfoundation.org/Faq		
Free community support is provided by a network of experienced users http://www.libreoffice.org/get-help/mailing-lists/		
The LibreOffice website in your language. http://www.libreoffice.org/international-sites/		
International mailing lists http://wiki.documentfoundation.org/Local_Mailing_Lists		
Information about available accessibility options. http://www.libreoffice.org/get-help/accessibility/		

Paid support and training

Alternatively, you can pay for support services. Service contracts can be purchased from a vendor or consulting firm specializing in LibreOffice.

What you see may be different

Illustrations

LibreOffice runs on Windows, Linux, and Mac OS X operating systems, each of which has several versions and can be customized by users (fonts, colors, themes, window managers). The illustrations in this guide were taken from a variety of computers and operating systems. Therefore, some illustrations will not look exactly like what you see on your computer display.

Also, some of the dialogs may be differ because of the settings selected in LibreOffice. You can either use dialogs from your computer system (default) or dialogs provided by LibreOffice. To change to using LibreOffice dialogs:

- 1) On Linux and Windows operating systems, go to **Tools > Options > LibreOffice > General** on the menu bar to open the dialog for general options.
- 2) On a Mac operating system, go to **LibreOffice > Preferences > General** on the menu bar to open the dialog for general options.
- 3) Select Use LibreOffice dialogs in Open/Save dialogs to display the LibreOffice dialogs.
- 4) Click **OK** to save your settings and close the dialog.

Icons

The icons used to illustrate some of the many tools available in LibreOffice may differ from the ones used in this guide. The icons in this guide have been taken from a LibreOffice installation that has been set to display the Galaxy set of icons.

If you wish, you can change your LibreOffice software package to display Galaxy icons as follows:

- 1) On Linux and Windows operating systems, go to **Tools > Options > LibreOffice > View** on the menu bar to open the dialog for view options.
- 2) On a Mac operating system, go to **LibreOffice > Preferences > View** on the menu bar to open the dialog for view options.
- 3) In *User interface > Icon size and style* select *Galaxy* from the options available in the drop-down list.
- 4) Click **OK** to save your settings and close the dialog.

Note

Some Linux operating systems include LibreOffice as part of the installation and may not include the Galaxy set of icons. You should be able to download the Galaxy icon set from the software repository for your Linux operating system.

Using LibreOffice on a Mac

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.

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

What are all these things called?

The terms used in LibreOffice for most parts of the *user interface* (the parts of the program you see and use, in contrast to the behind-the-scenes code that actually makes it work) are the same as for most other programs.

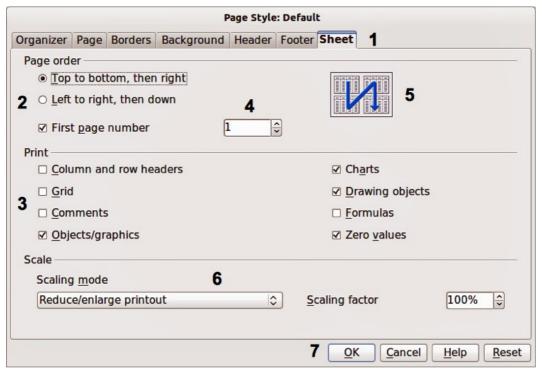


Figure 1: Dialog showing common controls

- 1) Tabbed page (not strictly speaking a control).
- 2) Radio buttons (only one can be selected at a time).
- 3) Checkbox (more than one can be selected at a time).
- 4) Spin box (click the up and down arrows to change the number shown in the text box next to it, or type in the text box).
- 5) Thumbnail or preview.
- 6) Drop-down list from which to select an item.
- 7) Push buttons.

A *dialog* is a special type of window. Its purpose is to inform you of something, or request input from you, or both. It provides controls for you to use to specify how to carry out an action. The technical names for common controls are shown in Figure 1. In most cases we do not use the

technical terms in this book, but it is useful to know them because the Help and other sources of information often use them.

In most cases, you can interact only with the dialog (not the document itself) as long as the dialog remains open. When you close the dialog after use (usually, clicking **OK** or another button saves your changes and closes the dialog), then you can again work with your document.

Some dialogs can be left open as you work, so you can switch back and forth between the dialog and your document. An example of this type is the Find & Replace dialog.

Who wrote this book?

This book was written by volunteers from the LibreOffice community. Profits from sales of the printed edition will be used to benefit the community.

Acknowledgements

This book is based on an original German document (*Base Handbuch*) and was translated by Martin Fox, Robert Großkopf, and Hazel Russman.

Frequently asked questions

How is LibreOffice licensed?

LibreOffice is distributed under the Open Source Initiative (OSI) approved Lesser General Public License (LGPL). The LGPL license is available from the LibreOffice website: http://www.libreoffice.org/download/license/

May I distribute LibreOffice to anyone? May I sell it? May I use it in my business? Yes.

How many computers may I install it on?

As many as you like.

Is LibreOffice available in my language?

LibreOffice has been translated (localized) into over 40 languages, so your language probably is supported. Additionally, there are over 70 *spelling*, *hyphenation*, and *thesaurus* dictionaries available for languages, and dialects that do not have a localized program interface. The dictionaries are available from the LibreOffice website at: www.libreoffice.org.

Why do I need Java to run LibreOffice? Is it written in Java?

LibreOffice is not written in Java; it is written in the C++ language. Java is one of several languages that can be used to extend the software. The Java JDK/JRE is only required for some features; the most notable one is the HSOLDB relational database engine.

How can I contribute to LibreOffice?

You can help with the development and user support of LibreOffice in many ways, and you do not need to be a programmer. To start, check out this webpage: http://www.documentfoundation.org/contribution/

May I distribute the PDF of this book, or print and sell copies?

Yes, as long as you meet the requirements of one of the licenses in the copyright statement at the beginning of this book. You do not have to request special permission. In addition, we request that you share with the project some of the profits you make from sales of books, in consideration of all the work we have put into producing them.