

# LibreOffice - Bug fixing

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# What does LibreOffice offer?

- OpenSource office suite (Writer, Calc, Impress, Draw, Math and Base)
- Cross-platform
- Number of languages: 104 including Czech
- Available on [www.libreoffice.org](http://www.libreoffice.org)
- LibreOffice Online has not yet been released.

# History

- September 2010
- The Document Foundation vs Oracle corporation
- October 2010 – 33 OpenOffice developers left and join to The Document Foundation

**OpenOffice developers + project Go-oo = LibreOffice**

# Under cover

- Number of programming languages: 30, mostly written in C++ (82%)
- LOC 7.3 Milion (19. 3. 2014)
- LGPLv3 with new contributions dual-licensed under MPL

# Project organization

- The Document Foundation (Developers and volunteers)
- New version are released every six months. Than follow 6 or 7 patches.
- Bug Submission Assistant
- Mailinglist, IRC

# IRC

- [irc.freenode.net](https://irc.freenode.net) in the `#libreoffice-dev` channel (one chat for everyone – translators, developers, testers...)

# My contribution

## EasyHacks

- great starting points for new developers on the project
- useful code pointers as well as at least one expert who will be available to help you if you have questions.

### Selected EasyHack:

- [https://bugs.freedesktop.org/show\\_bug.cgi?id=39631](https://bugs.freedesktop.org/show_bug.cgi?id=39631) (add optimisation helpers)
- Translations from English to Czech

# Bug 39631 - add optimisation helpers

- Goal: facilitate profiling of code
- GCC higher than version 2 provides following functions:

`__builtin_expect(x, y)`

- usage of profilers for branch prediction optimisation

`__attribute__((hot))` and `__attribute__((cold))`

Hint that the marked function is "hot" and should be optimized more aggressively and/or placed near other "hot" functions (for cache locality).

Hint that the marked function is "cold" and should be optimized for size, predicted as unlikely for branch prediction, and/or placed near other "cold" functions (so other functions can have improved cache locality).



# Bug 39631 - add optimization helpers

```
#ifndef SAL_STRINGIFY
#   define SAL_STRINGIFY_ARG(x) #x
#   define SAL_STRINGIFY(x) SAL_STRINGIFY_ARG(x)
#endif

#endif

#define LIKELY(x) __builtin_expect((x),1)

#define UNLIKELY(x) __builtin_expect((x),0)

#ifndef SAL_HOT
#   define SAL_HOT __attribute__((hot))
#endif

#ifndef SAL_COLD
#   define SAL_COLD __attribute__((cold))
#endif

/* vim:set shiftwidth=4 softtabstop=4 expandtab: */
"./include/sal/macros.h" 78L, 2560C written
```

# Final push to the repository

- Gerrit ( code review system, tightly integrated with git.)
  - Registration, username, email address and SSH key!

```
debuggercz-T420 libreoffice # ./logerrit test
The authenticity of host '[gerrit.libreoffice.org]:29418 ([144.76.139.237]:29418)'
RSA key fingerprint is f5:a8:13:af:a0:d8:2d:4b:db:6c:c6:fd:c1:03:b6:87.
Are you sure you want to continue connecting (yes/no)? yes
Your gerrit setup was successful!
```

```
debuggercz-T420 libreoffice # git push origin prepush:refs/for/master
Counting objects: 9, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (5/5), done.
Writing objects: 100% (5/5), 625 bytes | 0 bytes/s, done.
Total 5 (delta 4), reused 0 (delta 0)
remote: Resolving deltas: 100% (4/4)
remote: Processing changes: new: 1, refs: 1, done
remote:
remote: New Changes:
remote:   https://gerrit.libreoffice.org/9358
remote:
To ssh://logerrit/core
* [new branch]       prepush -> refs/for/master
```

# Translations

- Translations from English to Czech
- Pootle server - online translation portal
- Or working offline (zip contains PO file(s))
  
- Important mailing lists:
  - [lokalizace@cz.libreoffice.org](mailto:lokalizace@cz.libreoffice.org)
  - [l10n+subscribe@global.libreoffice.org](mailto:l10n+subscribe@global.libreoffice.org)

# Communication with translators

...

Důležitá věc k překladu 4.3 - většina řetězců není nových, ale jen se nachází v dialogích, které byly převedeny na formát .ui (adresáře ui, uiconfig apod.). Ty se bohužel musí zadat znovu. Je dobré najít dialog ve staré verzi/starém překladu a zadat nový podle něj (+ doplnit akcelerátory, ty často v původním překladu nejsou).

Pokud by bylo cokoliv nejasného, neváhej se zeptat, ať už mě, nebo na konferenci...

Zdraví

Standa

# Translation using Pottle

The Document Foundation – Pottle server debuggercz Odhlásit – T +

čeština x ▾ / LibreOffice 4.3 – UI x ▾

Přehled Novinky **Přeložit**

C~lose  
~Continue  
Sending E-mail messages  
Task  
Status  
Sending to: %1  
Successfully sent  
Sending failed

čeština / LibreOffice 4.3 – UI / sw/source/core/ui/base/dbui.po Řetězec 60775447

Kontext: **mailmergechildwindow.src ST\_TERMINATEQUERY string.text** angličtina

Komentář: GJB95

Terminologie: **e-mail E-mail** **message Zpráva**  
**box Okraj** **box pole** **exit Konec**

There are still e-mail messages in your %PRODUCTNAME Outbox.\nWould you like to exit anyway?

**Navrhnout**

Vyhledat   Filtr: **Vše**  **Exportovat pohled** **Předchozí**  / 21 **Následující**

# Translation using Pottle - detail



čeština / LibreOffice 4.3 - UI / sw/source/core/uiibase/dbui.po

Kontext: mailmergechildwindow.src ST\_TERMINATEQUERY string.text

Komentář: GJB95

Terminologie: e-mail E-mail message Zpráva

box Okraj box pole exit Konec

angličtina

There are still e-mail messages in your %PRODUCTNAME Outbox.\nWould you like to exit anyway?

Navrhnout

Vyhledat

Filtr:

Vše

Exportovat pohled

Předchozí

21

/ 21

Následující

# Offline translation

```
helper.po (~/.cache/fr-6
File Edit View Search Tools Documents Help
Open Save Undo
helper.po x
#. extracted from accessibility/source/helper
msgid ""
msgstr ""
"Project-Id-Version: PACKAGE VERSION\n"
"Report-Msgid-Bugs-To: https://bugs.libreoffice.org/enter\_bug.cgi?product=LibreOffice&bug\_status=UNCONFIRMED&component=UI\n"
"POT-Creation-Date: 2014-05-02 00:06+0200\n"
"PO-Revision-Date: 2012-11-15 15:12+0000\n"
"Last-Translator: Jindřich <khagaroth@gmail.com>\n"
"Language-Team: LANGUAGE <LL@li.org>\n"
"Language: cs\n"
"MIME-Version: 1.0\n"
"Content-Type: text/plain; charset=UTF-8\n"
"Content-Transfer-Encoding: 8bit\n"
"Plural-Forms: nplurals=3; plural=(n==1) ? 0 : (n>=2 && n<=4) ? 1 : 2;\n"
"X-Generator: LibreOffice\n"
"X-Accelerator-Marker: ~\n"
"X-POOTLE-MTIME: 1352992326.0\n"

#. 9LgFW
#: accessiblestrings.src
msgctxt ""
"accessiblestrings.src\n"
"RID_STR_ACC_NAME_BROWSEBUTTON\n"
"string.text"
msgid "Browse"
msgstr "Procházet"
```

# Translated

- Modules
  - LibreOffice 4.x – Help
  - LibreOffice 4.x – UI

## čeština

### Terminology

pawell

Stanislav Horáček

### Website

Jindřich Šesták

kendy

Stanislav Horáček

### Impress Remote (Android)

Stanislav Horáček

### LibreOffice 4.1 – Help

Stanislav Horáček

### LibreOffice 4.1 – UI

Stanislav Horáček

### Impress Remote (iOS)

Stanislav Horáček

### LibreOffice 4.3 – UI

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Stanislav Horáček

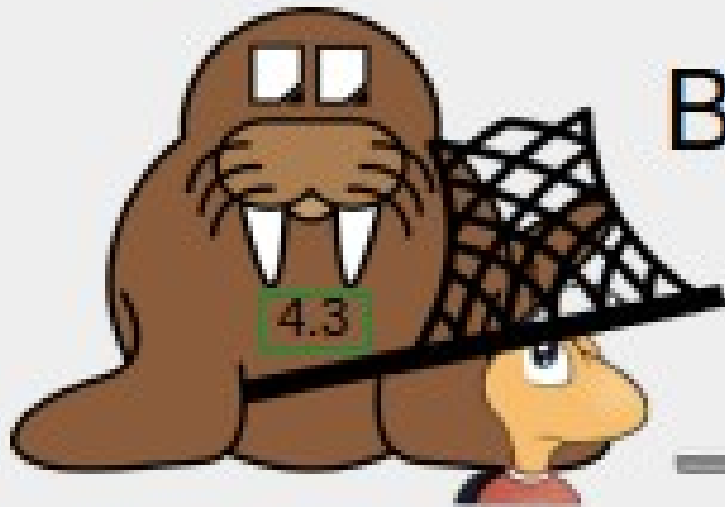
### LibreOffice 4.3 – Help

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# Bug Hunting Session



## Bug Hunting Session

23-25 May 2014

irc: #libreoffice-qa

- \* Download LibreOffice 4.3.0. beta1
- \* Test what you want
- \* Found a bug? Mention at irc / write an issue



Thank you for your attention!