# 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
- 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 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 (add optimisation helpers)
- Translations from English to Czech


## Bug 39631 - add optimisation helpers

- Goal: facilitate profiling of code
- GCC higher then 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).

Thank you for your attention!

