

LibreOffice

The Document Foundation



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The Next Generation Free Desktop



Hacking

LibreOffice

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Disclaimer: These are my individual views and not of any organization's

Agenda

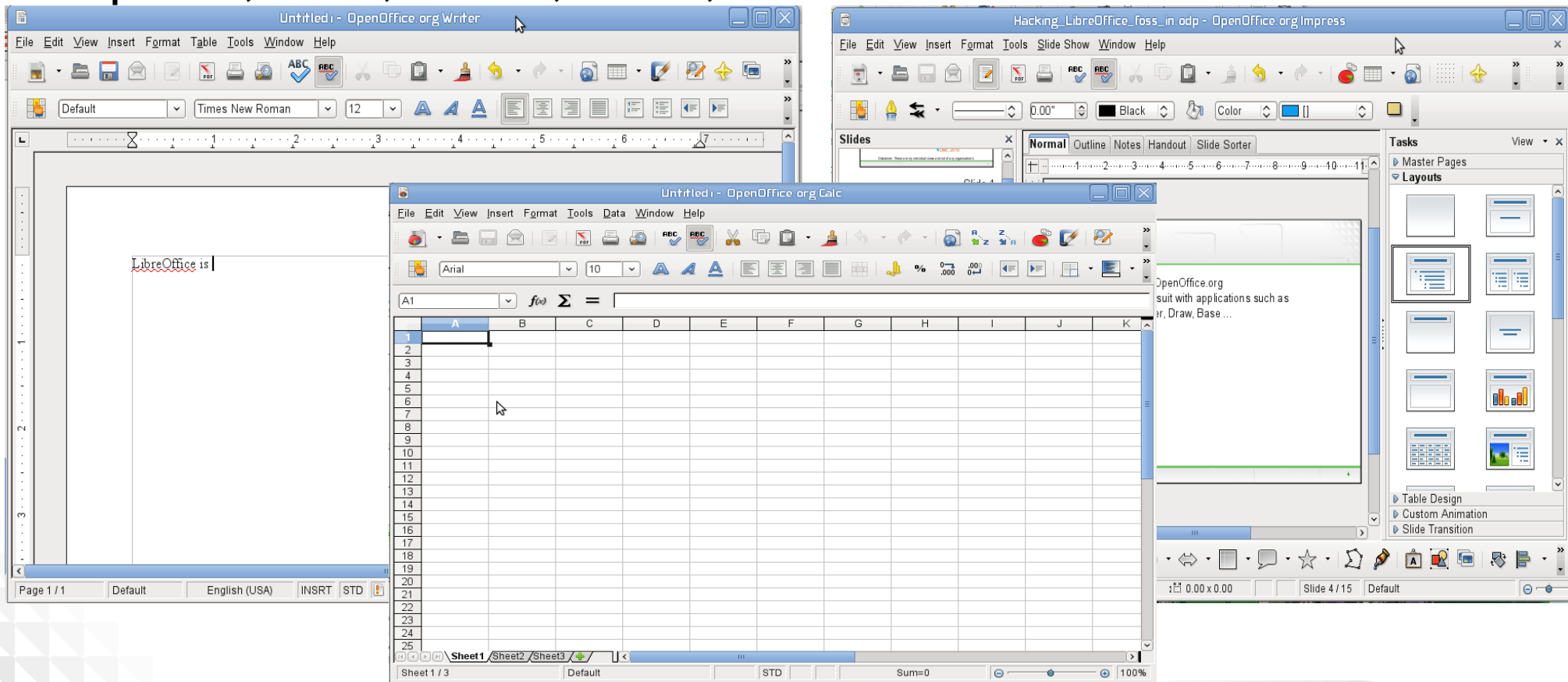
- About LibreOffice
- Building LibreOffice
- Contributing: Quick Start Guide
- Debugging Tips
- Contributing: Quick Demonstration
- Q/A



LibreOffice

LibreOffice

- Community fork of OpenOffice.org
- Open source office suit with applications such as Impress, Calc, Writer, Draw, Base ...



The Document Foundation

- ▶ Vendor Neutrality (like that of Mozilla Foundation)
- ▶ LGPLv3+/MPL (no JCA's, copyright assignments, etc...)
- ▶ Currently supported by (organizations):
 - ▶ Novell
 - ▶ RedHat
 - ▶ Debian
 - ▶ And more...

Few happenings...

- ▶ Over 133 new hackers & 55 new localize-rs AND we are looking forward to many more!
- ▶ Lots of code cleanups, removal of unwanted comment, german comments translations, etc
- ▶ LO help to wiki based help
- ▶ Easier build
- ▶ Smaller (Smarter?) download footprint
 - ▶ Saves mirror space
- ▶ LibreOffice 3.3.2 release with lots of nice (little) features

Building LibreOffice

Building LibreOffice (from git repos)

- ▶ Get the dependencies (or skip for doing this later)
- ▶ Check out
git clone git://anongit.freedesktop.org/git/libreoffice/bootstrap libo
- ▶ Building [Linux – for other platforms refer the wiki page]
cd libo
./autogen.sh
make
make dev-install
- ▶ Updating Sources
./g pull -r
- ▶ Ref http://wiki.documentfoundation.org/Development/Native_Build

Optional (useful) parameters
--with-gcc-speedup=icecream,ccache
--with-num-cpus=2

Quick Start Guide

Quick Start

- ▶ Re-compiling a single module
cd <build directory>
source Linux*Env.Set.sh (similarly for other platforms)
cd <module>
build
deliver
- ▶ Re-compiling the module and its dependent ones
(source ...)
cd packimages
build --all:<module>
- ▶ Object files are stored in module/*.pro directory
Eg. <builddir>/sc/unxlngx6.pro/

Extended Quick Start

▾ General Directory structure

- ▾ sc/ → Star Calc
- ▾ sw/ → Star Writer
- ▾ impress/ → Impress
- ▾ ...
- ▾ clone/ → cloned git repos
- ▾ install/ → binary dev-install
- ▾ ./ and bin/ → build/helper scripts

Extended Quick Start

▾ Few file types

▾ *.cxx

→ C++ source files

▾ *.hxx

→ C++ header files

▾ *.src

→ Strings, Dialogs, etc Resource files

▾ *.hrc

→ Corresponding headers for .src

▾ *.idl

→ UNO API definitions

generally in *offapi/com/sun/star/*

▾ *.mk

→ Build scripts/makefiles

Debugging Tips

Debugging Tips

- Getting a Debug Build

- touch or remove object files
- build debug=true

- printf'ing OUString contents

```
OUString aSomeStr;
```

```
printf("String: %s \n", ::rtl::OUStringToOString( aSomeStr,  
RTL_TEXTENCODING_UTF8).getStr() );
```

- Using GDB

- Debug build
- Multi-threaded, so probably: thread apply all backtrace

Through a Hacking Demonstration



Welcome to the LibreOffice community

Welcome !!!

- ▼ VirtualBox image path: [path to be announced]
- ▼ Pick something from http://wiki.documentfoundation.org/Easy_Hacks
- ▼ And start hacking....
- ▼ Need Help?
 - ▼ Contact me or mail/query the mailing list (preferred): <http://lists.freedesktop.org/mailman/listinfo/libreoffice>

Specifically for students

- ▼ Don't forget to apply for GSOC – LibreOffice
- ▼ Google search keywords: **gsoc libreoffice**
- ▼ <http://wiki.documentfoundation.org/Development/Gsoc/Ideas>
- ▼ <http://www.google-melange.com/gsoc/org/show/google/gsoc2011/libreoffice>

Thank you!



References

- ▶ Michael Meeks' presentation
- ▶ <http://www.documentfoundation.org>
- ▶ <http://wiki.documentfoundation.org>
- ▶ <http://wiki.services.openoffice.org/wiki/>
- ▶ LibreOffice mailing lists



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