

MinGW-64 & Wine:

Developing LibreOffice for Windows... without Windows

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on the behalf of the best Kendy ever.



Why bother with cross-compilation?

- Widely usable
 - For tinderboxes, development or testing of Windows-specific parts of the codebase, etc.
- Easy
 - Easier to setup than native Windows build
- Familiar environment for development
 - When you are a Linux user, you just do everything the way you are used to when developing the Linux version
- No excuses for anyone
 - No more “I cannot test it on Windows”

First things first: Setup

- Install MinGW packages from your distro
 - Check <http://cgit.freedesktop.org/libreoffice/core/tree/README.cross> for details
 - eg. on openSUSE, it is as easy as running the 'zypper' command twice
 - Once to add the repository
 - 2nd time to install the packages themselves
 - Read the README.cross, you'll get a complete list there, and should there be anything missing, you will be warned during ./configure

Building it

- In your LibreOffice clone, modify autogen.lastrun to look like this:

```
CC=ccache i686-w64-mingw32-gcc  
CXX=ccache i686-w64-mingw32-g++  
CC_FOR_BUILD=ccache gcc  
CXX_FOR_BUILD=ccache g++  
--with-distro=LibreOfficeMinGW
```

- Then the normal ./autogen.sh
 - Watch out for problems, install the missing packages if necessary
- And normal make
 - The result is a tarball you can untar on Windows & run



Running it

- You can unpack the resulting tarball on Windows
 - & run it
- But that is not convenient
 - You have to transfer files here and there, set up a Windows virtual machine, or use another computer
 - Worse when you want to develop – you have to remember if you have transferred the files you wanted etc.
- Best is just to use Wine
 - This way, you can continue developing on Linux, including debugging

Running the resulting build with Wine

- Untar the result of the build:

```
cd /tmp
tar xf <your-build-dir>/instsetoo_native/wntgccci.pro/
  LibreOffice_Dev/archive/install/en-US/
  LibO-Dev_4.1.0.0.alpha0_Win_x86_install-
  arc_en-US.tar.gz
cd LibO-Dev_4.1.0.0.alpha0_Win_x86_install-
  arc_en-US/LOdev\ 4.1/program/
```

- And run it
 - **wine soffice.exe**

Debugging with Wine

- You can debug ~everything with Wine
 - Even Windows theming – in that case copy luna.msstyles from your Windows installation to your Linux box, and
 - run winecfg
 - Choose “Desktop Integration”, and install luna.msstyles there
 - There is also many free alternative .msstyles files on the net, if you don't have Windows
- Don't forget to use linkoo
 - Symlinks just do the right thing, like make dev-install on Linux
- Better experience with printf / SAL_DEBUG
 - Winedbg usable, but it is just a very basic debugger

More details in

<http://cgit.freedesktop.org/libreoffice/core/tree/README.cross>

Just try it & no excuses! :-)

Thank you.

