Building OpenOffice.org

What, how and even more...

Pavel Janík

September 12, 2006

Building – software build

Software build is a process of converting source code to executable code.

Wikipedia

Two questions...

What to build (where to get it, ...)? How to build it (preparation, configure, ...)?

OpenOffice.org development model

Typical (small) free software

developing on HEAD stabilization before release

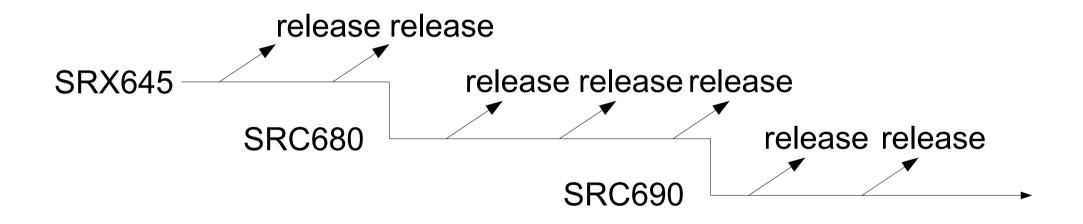
 developers are waiting with their developments on their disks, can't share

tagging the released sources

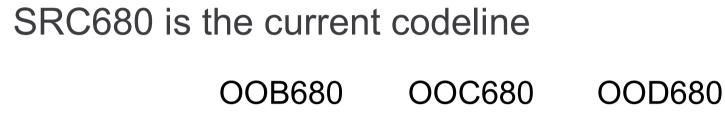


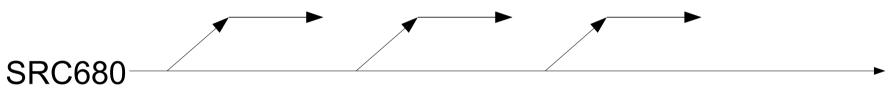


codelines



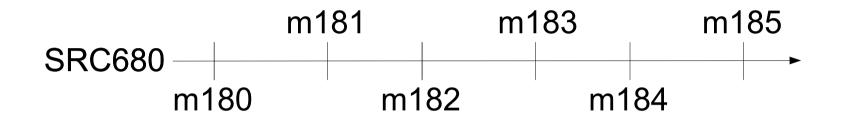
Detail of OpenOffice.org codeline





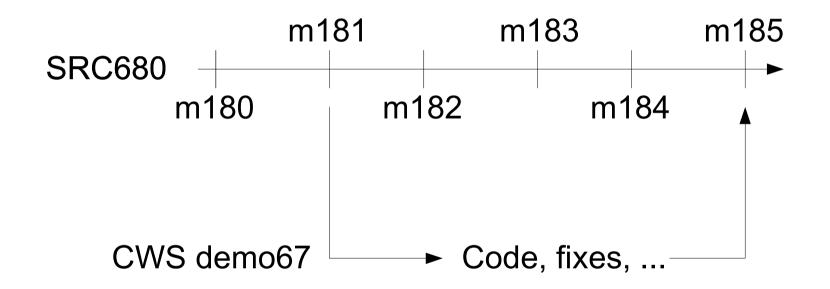
OOD680 is the current release branch (for 2.0.4) OOD680_m2 OOD680_m1 OOD680_m3

Even more detailed view of codeline



And what happens between m182 and m183? The real development gets integrated – child workspaces

Child workspace



CWS name, base milestone, resync, integration

9 OOoCon 2006, Lyon, France

What to build?

Depends on you! Released versions Milestones Base milestone + CWS

Get it from

- download sites (released source tarballs)
- anoncvs
- developers' CVS

Build overview

preparing build environment configure bootstrap dmake/build installation sets packing

Build environment preparation

Common part

ant

unowinreg.dll for SDK

gpc

mozilla – source or prebuilt

Archive::Zip for perl

...

Operating system specific parts ccache compiler and misc tools/SDKs

Configure

cd config_office; configure --help configure with many arguments...

Build guides

http://tools.openoffice.org/dev_docs/build_linux.html http://tools.openoffice.org/dev_docs/build_windows_tcsh.html

Bootstrap phase

OOo is using dmake ./bootstrap



dmake builds according to makefile.mk build builds according to \$(PRJ)/prj/build.lst

Installation sets packing

One of the slowest part of the build proces Especially on Windows...

.EXE, .rpm, .deb, .dmg preparation

Random thoughts

Source/RE related

Early tagging of not yet ready milestone can help to identify potential problems – use buildbots to test!

Uploading **all** source tarballs to one common place is a standard!



Crown for ccache for Windows! 2nd crown for **fast** helpcontent2 building.

Questions, discussion

About Pavel Janík http://blog.janik.cz/

OpenOffice.org

member of Community Council, ESC

co-lead L10N

lead CS Native-Lang project

regular I10n builder (many languages)

random hacker - I do what I like

Other life

independent consultant, solutions architect