

OpenOffice.org
Project :

Mac OS X port



Summary

- Introduction
- Mac port in the Project
- Mac porting project objectives
- Todo and roadmap
- Connect With the OOo Developer Teams



Introduction

Speaker introduction :

Eric Bachard,

Professor of Applied Physics, UTBM (France)

Developer

Porting project Co-Lead

OpenOffice.org Project

... a brief history

First working version of OpenOffice.org 2.0
on Mac OS X: [january 2005](#)

Mac Intel port : [january 2006](#)

Work in progress : [Aqua port](#) (sched : 2007)
(no X11 / Aqua Look and feel)

OpenOffice.org Project is ...

A Community Project

(LGPL for code , PDL for documentation)

- **Multi OS** (Linux , Windows, Mac OS X, Solaris, FreeBSD, OpenBSD, OpenVMS)
- **Multi architectures** (Intel, PowerPC, ARM, Alpha ...including 32, 64bits)

Everything is project in OpenOffice.org

- **Accepted** projects : framework, gsl, **porting** ... (24)
- **Native Lang Community** (72)
- **Incubator** projects (14)
- **WebWork** (5)

Languages used in OpenOffice.org :

C++ : ~ 90 %
Java : <4,5%
Ansi C : ~ 2,5 %
Perl : 1%
Other (11) < 2 %

Source : <http://blogs.linux.ie/caolan/2007/01/>

Mac port in the project

- Sources are common, organized in 150 modules (supposed independant)
- OpenOffice.org is a framework
- the code is old
- nothing was existing for Mac OS X port (only an Unix port , including X Windows server, aka X11)

Mac Intel port :

- works since January 2006
- Available for both PowerPC and Intel (two separate binaries)
- Official since 2.0.3 on X11 version



Mac porting project objectives

- Provide a real Mac Application
- get rid of X11
- respect the Aqua Look
- respect Aqua Human Interface Guidelines

Programming Requirements :

- Good C/C++ knowledge (important)
- basic knowledge of the UNIX command line
- Know the Carbon API
- Own a Mac ...

What do we have to do?

Implement :

direct access to Apple graphical engine, using Apple API: Quartz2D/CoreGraphics (and replacing Xlib use)

native events management, using CarbonEventManager (replacing Xlib management)

Implement :

- **native font use**, using Apple Type Server and ATSUI (for Unicode Imagery) (replacing X11 management)
- **native Drag and drop**,
- **native sound**, using QuickTime (replacing Java Media Framework):
- **Native Filepicker**
- **Native Printing**: current uses cups, but native printing is mandatory

Where is located the code to be modified?

Most of the changes are located in vcl (Visual Class Layer), for everything graphical, events, fonts, rendering and printing.

Other, for sound and movies will be in **avmedia** (where the player is implemented in OpenOffice.org sources).

For drag and drop, **dtrans** is concerned (Pasteboard Manager implementation)

Filepicker : **fpicker**, **sfx2**, **scp2**, **vcl**

How will the new implementation be tested?

In vcl module", **a toy called svdem** is built at buildtime.
This binary is **linked to libvcl*** and so all new stuff can be tested.

e.g. : draw anti-aliased lines works well.

Everything implemented in aqua vcl code :

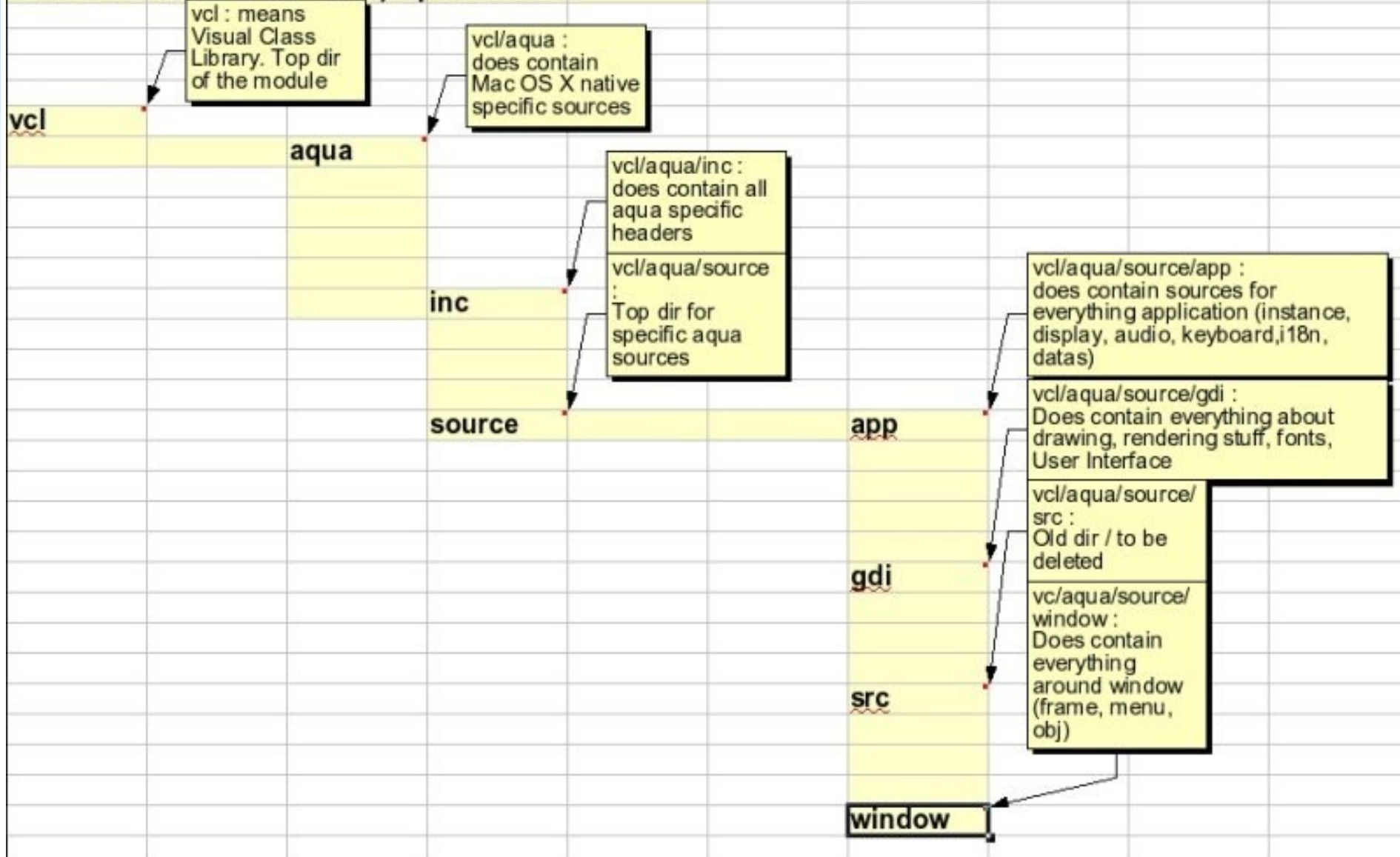
- will be included in libvclplug_aqua,
- svdem source code will contain a specific part to proceed tests.

The magic is:

When all needed features will work with svdem, it will work in the new version of OpenOffice.org !!

vcl	inc		
	prj		
	source	app	
		control	
		ex	
		gdi	
		glyphs	
		helper	
		src	
		unotypes	
		window	
aqua	inc		
	source	app	
		gdi	
		src	
win	inc		
	source	app	
		gdi	
		src	
		window	
unx	inc		
	dummy		
	gtk	app	
		gdi	
		source	
	kde		
	source	app	
		gdi	
		inc	
		plugadapt	
test		src	
		window	
qa	complex		
	testdocuments		
workben			

Mac OS X native (no X11) specific tree



Todo and roadmap

Step 1 :

Fix Top 10 of issues, to provide a public version : proof of concept

concerned: crashes, windows refresh, missing functions for fonts, cursor .. to make the aqua version usable (not for production)

Step 2

Code review

Integrate aquavcl01 cws

Start basic QA (manual tests first, feedback from users ..)

Implement missing parts :

- filepicker, sound , drag and drop, printing ...

Step 3

Beta

Complete QA

Step 4

Complete integration

First Aqua version (1.0)

Connect With the OOo Developer Teams

- **IRC Channels :**
- server : irc.freenode.net
- channel : [#ooo_macport](http://irc.freenode.net/#ooo_macport)
- **Site :**
<http://porting.openoffice.org/mac>

Mailing lists :

- **dev@openoffice.org**: general developers mailing list
- **mac@porting.openoffice.org**: mac porting specific list
- **dev@gsl.openoffice.org**: vcl specific list (more on vcl later)



WE NEED YOU

Design : Ben Bois ben@hooboo.com