

Quick Overview of

Enlightenment Foundation Libraries and E17

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Evolution

ProfUSION embedded systems

- e 0.1 1997
- e 0.13 1997
- e 0.16 2000
- e 0.17 2004 (officially started)

The Quest For Enlightenment



- window manager was not enough
- desktop shell was the future
- fancy file manager
- integrated shelfs (panels) and gadgets
- efficiency as usual

Evas (stateful canvas) - 2000



- introduction of windowless concept
- hardware acceleration
- I/O abstraction (not bound to X11 anymore)
- based on imlib2/imlib experience

Ecore (system abstraction) - 2000



- main loop (timers, idlers, animators, fd-handlers)
- x11, fb, opengl, directfb, win32...
- touchscreen (tslib)
- input method framework (IMF)
- threads

Edje (Theme Abilities) - 2004



- based on ebits experience (2001-2003)
- eet: easy all-in-one distribution, efficient reading
- embryo: dynamic scripted behavior
- relative and absolute positioning
- scalable yet pixel-perfect elements
- states and animated transitions
- designer-friendly

Eina (data types) - 2008



- originally spread into Ecore_Data and Evas_Data
- initial work by turran, cedric and myself
- first Igpl code to reach svn
- highlights: lists, stringshare, log, module SPEED!

Elementary - 2008



- new concept, replacing EWL, ETK and E17's widgets
- aggregate every EFL technology into a toolkit
- focused on mobile/touch
- innovative separation of finger-size and reading-size (dpi)

WebKit-EFL - 2009



- officially announced and proposed to WebKit
- maintained since then by Samsung and ProFUSION
- depends on Edje, Evas and Ecore
- not bound to toolkit (Elementary) or X11

EFL 1.0 - 2010

ProfUSION embedded systems

E17 - NOW

- core EFL released as 1.0 in 2010
- official statement "it's ready!"
- API/ABI stability
- preparation for E17

What's next?

ProfUSION embedded systems

E17 - FUTURE

- e17 release (ASAP)
- e18 to use elementary
- get back to short release cycle
- rewrite everything yet again, endlessly? :-)



in E

ProfUSION embedded systems

FreeDesktop.Org - ADOPTION

- slowly but improving
- menus
- desktop entries
- icon theme
- systray
- ... slow due too many specification problems!

FreeDesktop.Org



FreeDesktop.Org - PROBLEMS

- standards try to fit the lowest common denominator
- performance is neglected
- xml being overused
- everyone have to work around problems (caches, etc)
- specifications designed in "works for me" basis

Examples

ProfUSION embedded systems

FreeDesktop.Org - PROBLEMS

- thumbnail
- xembed
- systray
- desktop entry and menus
- icon theme

Suggestions



FreeDesktop.Org

- efficiency should be considered from beginning:
- optimize for common case (memory, disk and cpu)
- mmap()able binary formats
- .desktop/menu should be pre-processed
- reduce daemons and IPC

Community



FreeDesktop.Org

- small but brave community
- lack of high-level development tools (languages, editors)
- lack of releases and packages blocked our user base growth
- poor press releases, marketing and media coverage
- we welcome your help! :-)

