EFL Introduction

Openmoko
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Agenda

- EFL library introduction
- Edje
- E_dbus
- Example
- Discussion
- Reference
EFL stack diagram
EFL library

- Each Can be installed independently
- Each library can be used by itself
- Some Low level libraries are not graphical
- Some other libraries add value to Evas
- So it should be more like ........
EFL network diagram
EFL list

- Evas
- Edje
- Ecore
- Eet
- Embryo
- Epeg
- Epsilon
- Esmart
- EWL
- Imlib2
- .......
- ....
Evas

- powerful canvas
- image based, not vector based
- not resolution independent, but has imlib2
- State-aware / Keep track of what is rendered
- can run on X11, OpenGL, Xrender, framebuffer
- No need to deal with redraw or repaint
- makes why EFL speed is fast
Edje

- unique
- split into UI and logic part
- makes Animation, effect
- like CSS and content
- MVC spirit
Ecore

- Like Glib, provide all the low-level stuffs
  - data structure
  - IPC
  - helper class
  - network
  - ....
- glue together other libs
- not graphical
- main()
Eet

- single theme compressed file
- no need to uncompressed and install to a directory
- On the fly
Embryo

- Script language
- Script the interface (Edje theme)
- add power to Edje
Epeg & Epsilon

- Thumbnail libraries
- Epeg
  - help search Jpeg image only
- Epsilon
  - not only Jpeg but also PNG, all other supported by imlib 2
  - even take advantages of Epeg for Jpeg images
Esmart

- Container
- Transparent Ap
- helper lib for Edje
EWL

- like GTK+, Qt
- a widget set
- based on X protocol
Imlib2

- Image loading
- Image convert, create, setColor, text draw.
- Image handling
- .....
Emotion

- video lib
- based on xine
Edje
Edje

- a layout engine
- Server all the purpose of visual elements for E17
- Animation/Effects library
- an IDL
- Logic and Appearance separator
- Theming framework
Edje Concept
Some samples
E_dbus

- dbus wrapper, like glib-dbus
- dbus
  - raw library – libdbus
  - dbus daemon as a router
  - IPC, freedesktop project
- purpose:
  - Session wide
  - System wide
- Used with Ecore and E applications
Usage (for client)

- Active poll
  - get connection
  - get proxy
  - create message
  - Send message / call method (marshal)
  - get args of reply message (get return value)
  - unrefer msg, proxy, connection.....

- Callback
  - receive signal and handle
Discussion

- Questions?
Reference

- EFL
  - Doc/API
  - Wiki
    - http://wiki.enlightenment.org/index.php/Main_Page