

# Towards a better FreeDesktop.org platform

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April 25, 2008

Outline

Why?

Historical View

Before

Now

Future

The plan

Questions and debate

# GNOME/KDE

- ▶ Both desktops deserve respect for their achievements
- ▶ Both desktops following the same goal, with different visions
- ▶ Lots of duplicated functionality
- ▶ Competition vs co-operation

# Principles of software engineering

- ▶ Code duplication sucks
- ▶ 3rd parties have a hard time deciding which desktop they support...leading them to just support one, while others see the Linux desktop as a disperse development platform, thus not supporting it
- ▶ Lots of software engineering issues
  - ▶ a11y, l10n, power management, security, remote management, lock down, translations, performance, hardware support, ABI management, scripting bindings, documentation, documentation translations...
  - ▶ Release scheduling, bug tracking, maintenance, code review, consistency
- ▶ Data duplication/incompatibility is the worst for users

# What we used to have

- ▶ GNOME 2.low.x:
  - ▶ GTK+, esd, gnome-vfs, CORBA, gnome-keyring, gconf
- ▶ KDE 3.x:
  - ▶ QT, arts, KIO, D-COP, kwallet, kconfig
- ▶ Shared bits:
  - ▶ Menu/WM specs, .desktop

# The world today: increased sharing

- ▶ GNOME 2.high.x:
  - ▶ GTK+, GIO, gnome-keyring, gconf
- ▶ KDE-4.x:
  - ▶ QT, KIO, kwallet, kconfig
- ▶ Shared bits:
  - ▶ Menu/WM/icon theme/MIME specs, .desktop, systray, scim, fontconfig, D-Bus, HAL, poppler, gstreamer, pulseaudio, PackageKit

# The future?

- ▶ GNOME FUTURE.x.x:
  - ▶ GTK+
- ▶ KDE FUTURE.x.x:
  - ▶ QT
- ▶ Shared bits:
  - ▶ Menu/WM/icon theme/MIME specs, .desktop, systray, scim, fontconfig, D-Bus, HAL, poppler, gstreamer, pulseaudio, PackageKit, SharedConf, SharedIO, SharedKeyManager, SharedSessionManager, Shared\*

# What to do?

- ▶ Do we agree sharing more is needed?
- ▶ We need ways to get over:
  - ▶ Political issues
  - ▶ Religious issues
  - ▶ Technical issues



## Phase I - Sharing ideas

- ▶ Create the infrastructure to make more sharing possible
- ▶ Attempt to synchronize desktop release schedules/roadmaps:
  - ▶ Ubuntu/Fedora releases slaved from GNOME ATM, they could include KDE also at the same time
  - ▶ Necessary for true, deep cross-desktop sharing
  - ▶ Requires political initiative
- ▶ Or at least shared release/roadmap for shared bits for a good start

## Phase II - Sharing data

Sharing data between KDE and GNOME applications is sometimes very hard:

- ▶ Define well known places to store specific data (Music, Desktop)
- ▶ Define standard formats to use for data, so that any Free Desktop-app can use it
- ▶ Icon themes, web browser caches, metadata

## Phase III - Code sharing

Wins when sharing implementations:

- ▶ Quicker development for new features
- ▶ More people to look at bugs
- ▶ Increased trust
- ▶ A Free desktop platform for 3rd parties, regardless of desktop environment
- ▶ Bring each other's features

## Phase III - What to share? (1)

- ▶ gnome-keyring / kwallet - KeyWallet credential store
- ▶ KIO / GIO - SharedIO
- ▶ GConf / kconfig - SharedConfig
- ▶ KDM/GDM (very little GUI but lots of (security, etc) concerns - SharedDM
- ▶ gnome-session / ksmsserver - SharedSM
- ▶ ConsoleKit, PackageKit, PolicyKit

## Phase III - What to share? (2)

- ▶ Telepathy, shared help
- ▶ Thumbnail cleanup, .desktop file caching
- ▶ Hot plug / volume management, power management / screensaver core
- ▶ Open With file selector service
- ▶ Shared system monitor core
- ▶ Shared complex file formats handlers
- ▶ PIM pieces

# Problems with sharing implementations

Religious problems:

- ▶ "I don't want to use that g\* library"
- ▶ "No way I'm using that C++ thing"
- ▶ These should really not influence technical decisions at all

Technical problems:

- ▶ Only real issue is the GUI part, that cannot be shared, but this is easily fixable with signals trapped by each desktop environment to show the GUI parts (like "battery critical" notifications, password dialogs, etc)
- ▶ ...and sharing implementations means quicker development for all

# Questions and debate

- ▶ Who do we need to convince to start this rolling on each desktop?
- ▶ Are we, as free software developers who like sharing code, going to be able to share a free desktop platform?