

openSUSE 11: Switching a Distribution to KDE4

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Novell's Support for KDE

Patron of KDE e.V

Sponsoring of Akademy (and other events)

Server-Hosting (svn.kde.org)

Dashboard powered by SUSE build farm

Build Service (Devel snapshots, application projects)

Work Force

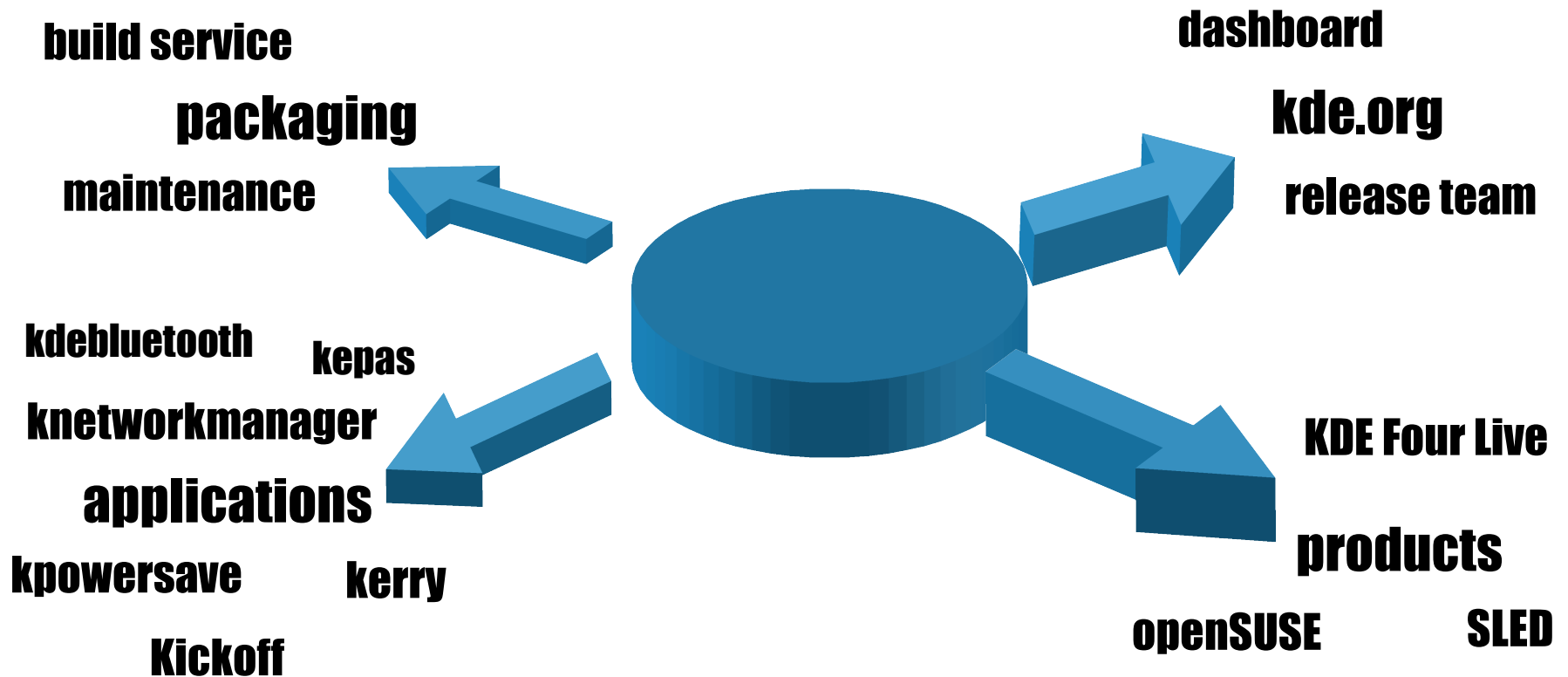
- 4 full time developers in KDE team

- many member / friends in other teams



KDE Team at SUSE

What do we do?





We Are Hiring!

“Software Engineer” (ID #1158)

<http://novell.com/company/careers/>

Inquire us during Akademy for benefits/details.



A Quick Poll

Bruce Byfield: *“Everyone agrees now that KDE 4.0 was a mistake. However, what the mistake was -- and whose -- is a matter of opinion. **KDE developers blame distributions for rushing to include a release that was never intended for everyday use, while users blame developers for changing everything.**”*



A Quick Poll

Bruce Byfield: *“Everyone agrees now that KDE 4.0 was a mistake. However, what the mistake was -- and whose -- is a matter of opinion. KDE developers blame distributions for rushing to include a release that was never intended for everyday use, while users blame developers for changing everything.”*

KDE 4.1 Dot announcement: *“Lots of feedback from people trying out KDE 4.0 has gone into KDE 4.1, filling most of the gaps people experienced with the 4.0 releases.”*



openSUSE Build Service

KDE:KDE4:STABLE:

Packages as in last openSUSE release, KDE 4.0.4

KDE:KDE4:Factory:

Packages as worked on for next openSUSE release, KDE 4.1.x

KDE:KDE4:UNSTABLE:

Packages following KDE trunk development, KDE 4.1.60

KDE:KDE4:Community:*

Packages by the community against each of above targets

“One-Click Install” for basic/default desktops possible



Time Line

SUSE Linux 5.2, 1998: KDE “beta 3”

...

SUSE Linux 10.1

-> SLE Desktop 10, 2006: KDE 3.5.1

openSUSE 10.3, October 2007

KDE 3.5.7 with some KDE4 games installed by default

KDE 4.0 Beta 2 Preview

KDE 4.0 Release, January 2008



Time Line (cont.)

KDE 4.0 Release, January 2008

openSUSE 11.0 Feature Freeze, April 2008

openSUSE 11.0, Juni 2008

- KDE 3.5.9 (on DVD only, community produced Live-CD)

- KDE 4.0.4, Qt 4.4, kde pim 4.1 Beta (DVD and Live-CD)

KDE 4.1 Release, July 2008

openSUSE 11.1, December 2008

- KDE 4.1.1+

- What to do with KDE 3.5.10? BuildService/FTP only?

- > SLE Desktop 11, “First half year of 2009”



How far did we succeed in porting?

Ported for openSUSE 11.0

- YaST Qt frontend

- YaST Qt package manager

- SaX2

- Updater applet

Not Ported for openSUSE 11.0

- KNetworkManager

- KPowersave

- Kerry

- YaST Qt control center



DVD Installation Desktop Selection

openSUSE 11.0

Preparation

- ✓ Welcome
- ✓ System Analysis
- ✓ Time Zone
- ▶ **Desktop Selection**
- Disk
- User Settings

Installation

- Installation Overview
- Perform Installation

Configuration

- Automatic Configuration

Desktop Selection

openSUSE offers you a choice of user interfaces. The two major complete desktops are KDE and GNOME. Both provide an easy-to-use desktop with a full suite of applications including email, a file manager, games and utilities.

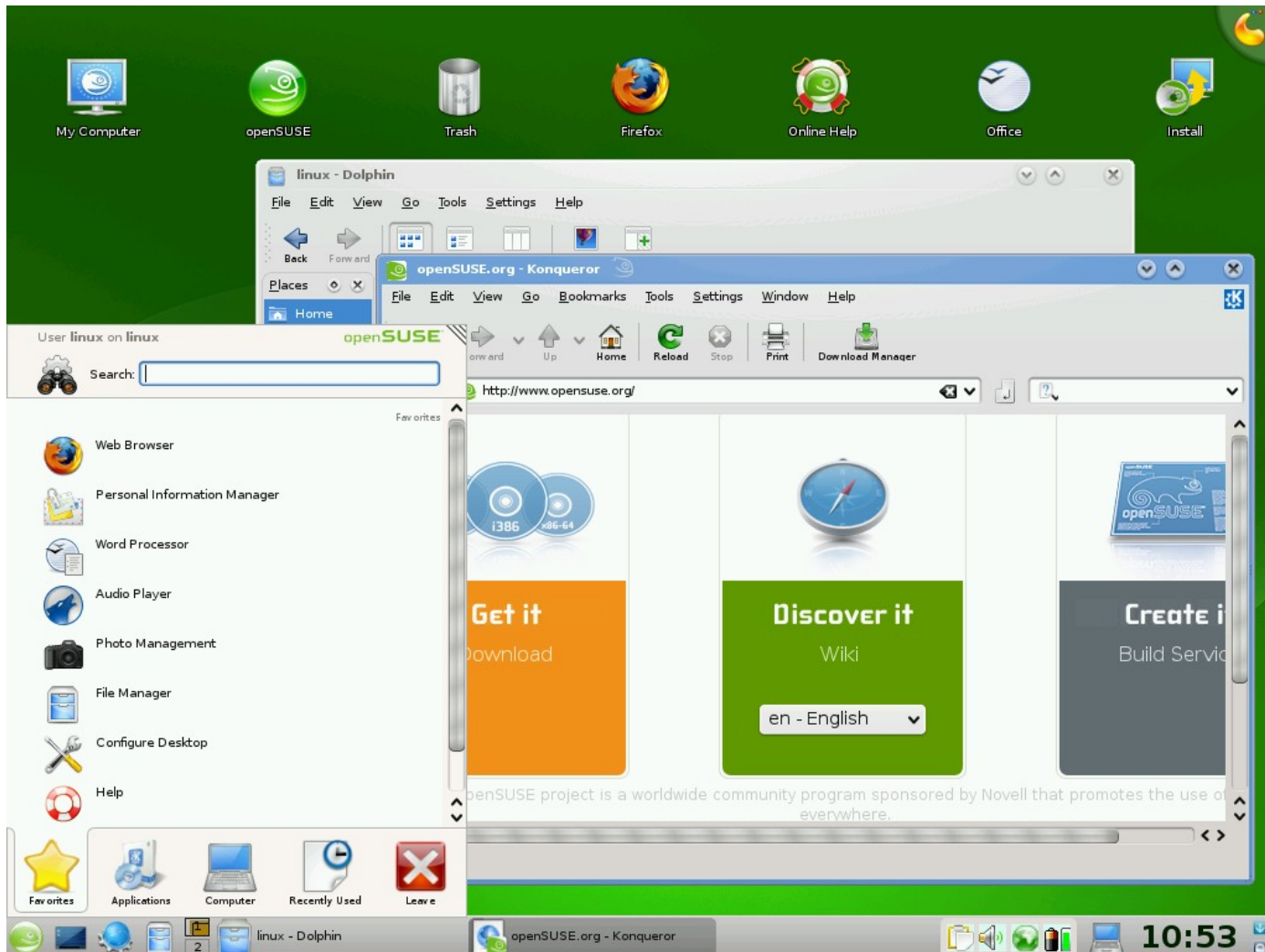
As desktop selection is a matter of taste, we do not give a recommendation.

- **GNOME**
GNOME 2.22 is the latest desktop from the GNOME Project. It combines stability and maturity with incremental innovations. 
- **KDE 4.0**
KDE 4.0 is the most recent evolution of KDE. It comes with many new KDE technologies, but it is less mature than the other desktops. 
- **KDE 3.5**
KDE 3.5 is the previous generation of the KDE Desktop Environment. It is mature and stable. 
- **Other**

[Help](#) [Abort](#) [Back](#) [Next](#)

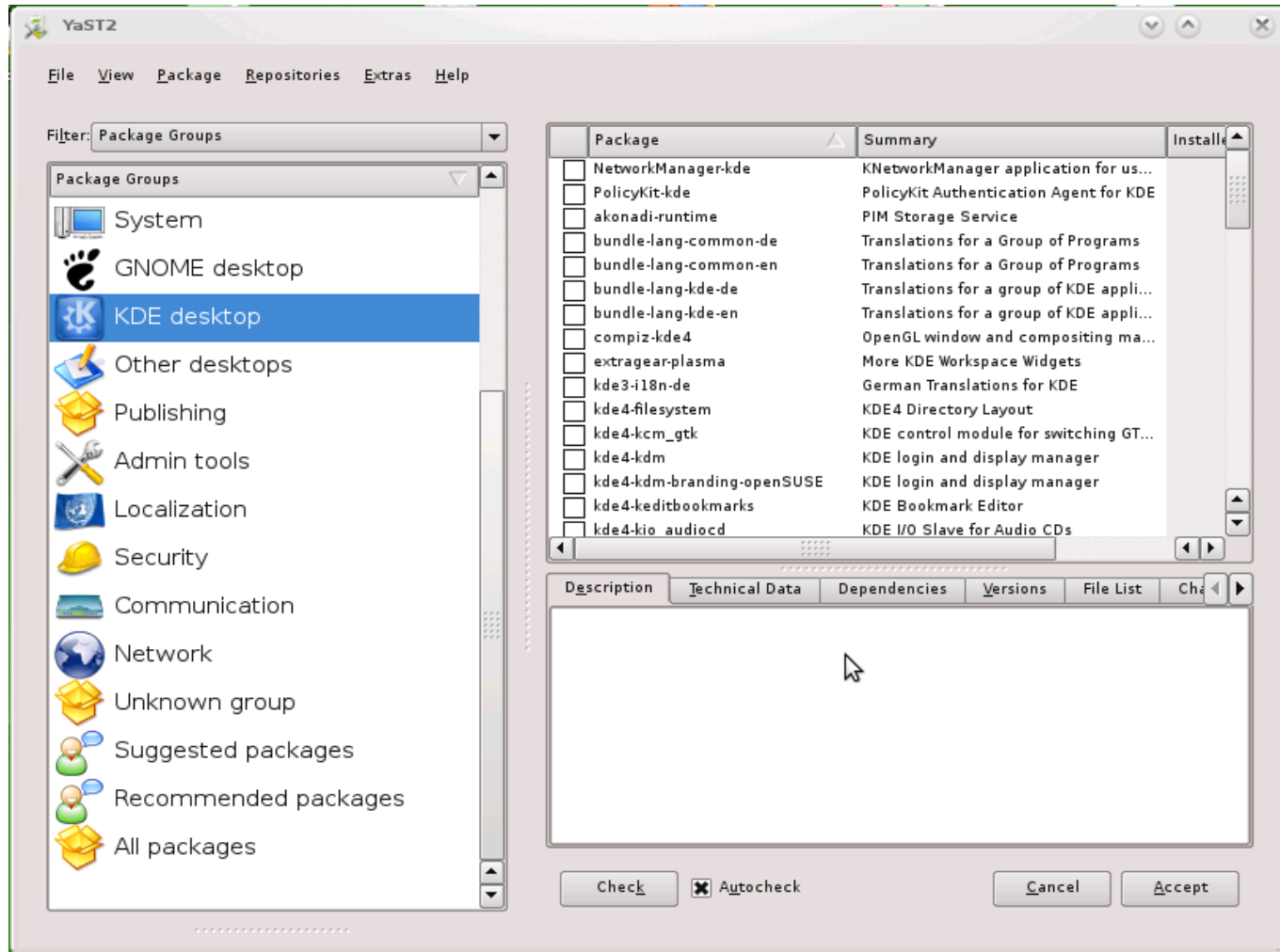


openSUSE 11.0 KDE4 Screenshot



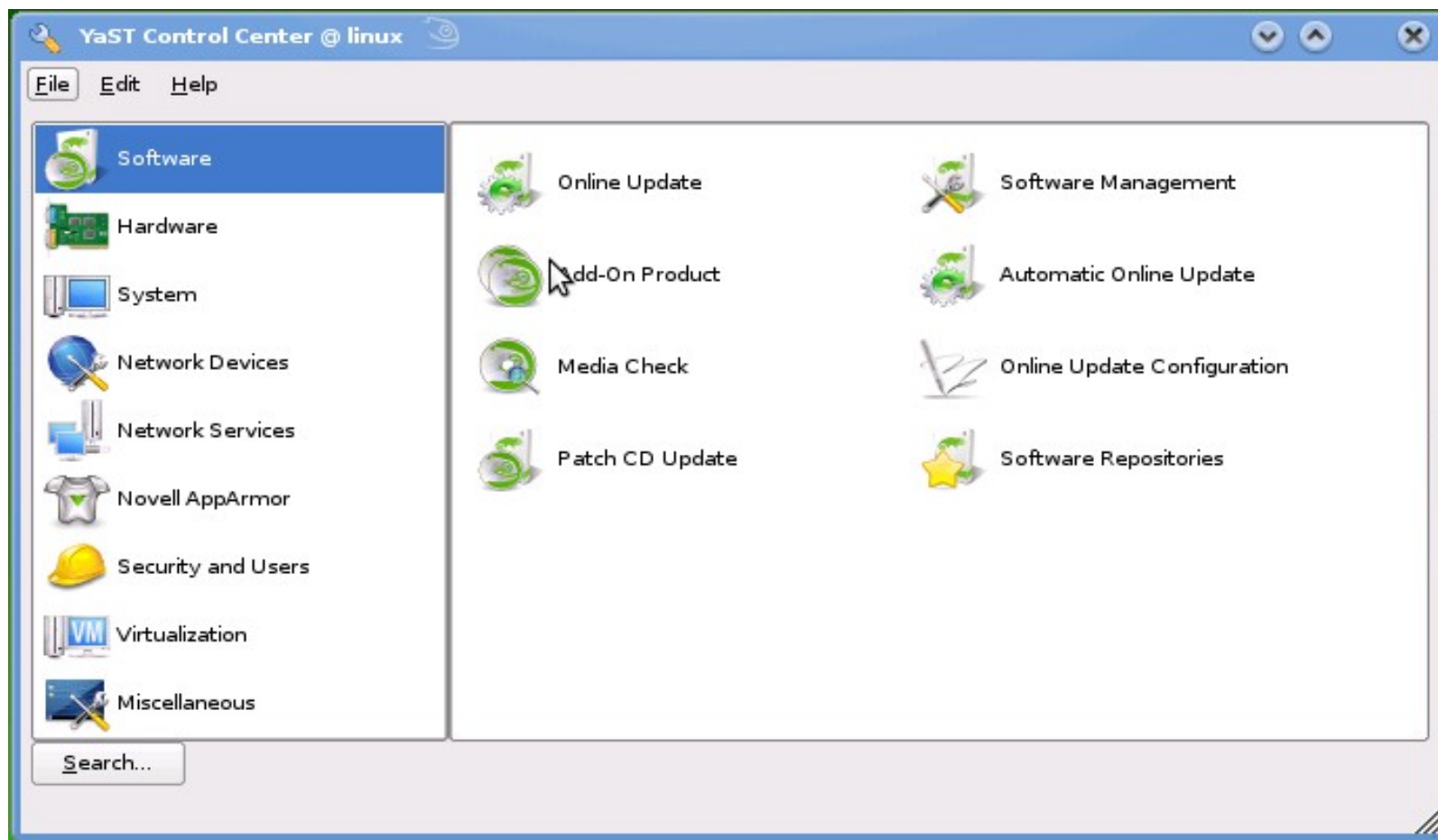


YaST Qt Package Manager



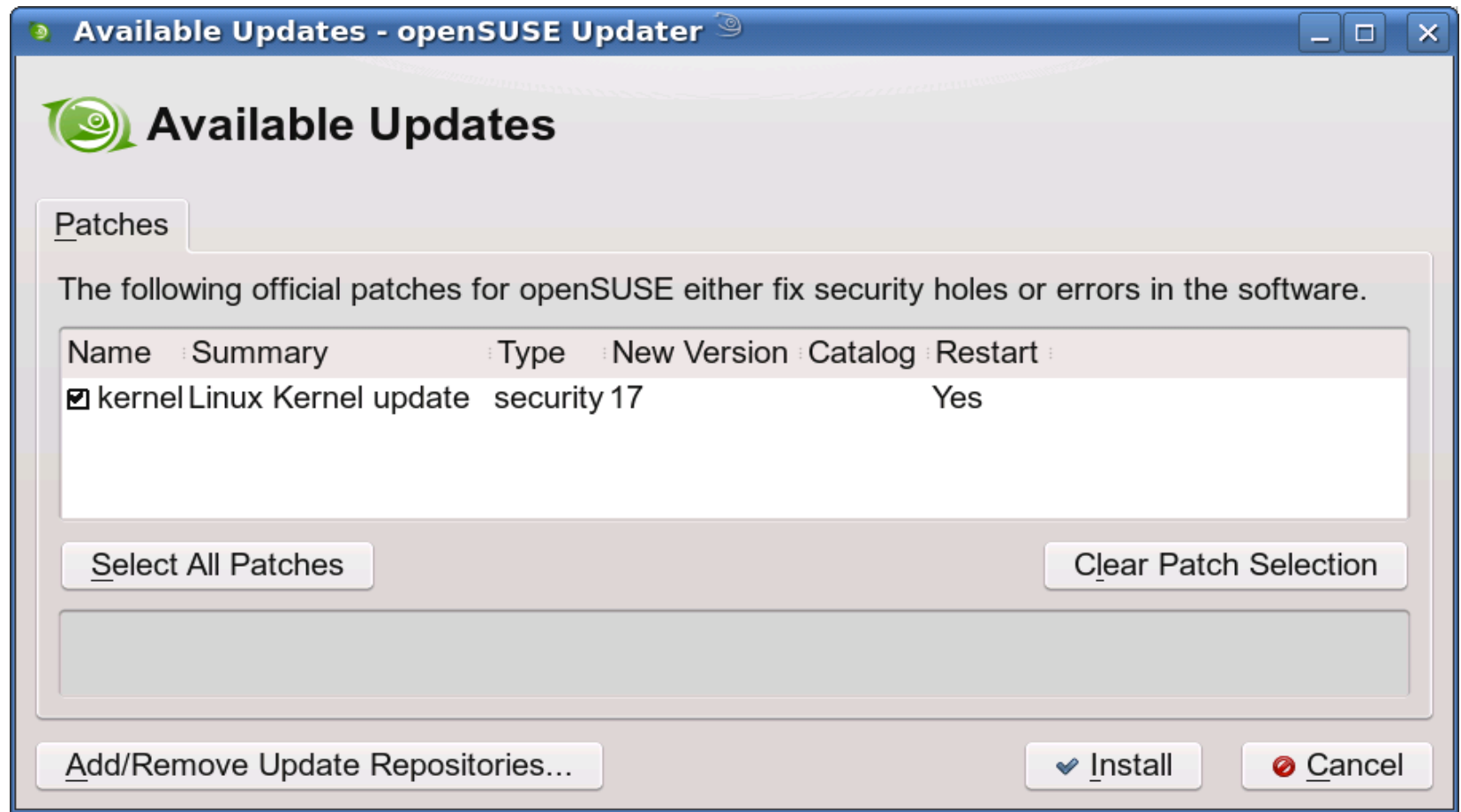


YaST Oxygen Iconset





KDE Online Update Applet





KDE 4 Packaging on openSUSE

More granulary packaging

KDE3: kdbase3, kdeutils3 (contains ark, kcalc, ...)

creation of kdbase3-runtime (incl. more icons)

KDE4: kdbase4-runtime, kdbase4-workspace, kde4-ark

Most applications are named kde4-<appname>

gwenview v kde4-gwenview, yakuake v kde4-yakuake

There are always exceptions to the rule :-)...

dragonplayer, kepas, ksystemlog, ktorrent, okteta



KDE 3 and KDE 4 parallel

Parallel installable

KDE 3: /opt/kde3

KDE 4: /usr

PATH

/opt/kde3/bin:/usr/bin

/usr/bin:/opt/kde3/bin

Selection of session in login manager

Configuration directory

KDE 3: ~/.kde

KDE 4: ~/.kde4

Silent migration of some options at first start. Upstream?

Distinguishability in start menu from other version

eg under KDE3: “Konsole” & “Konsole/KDE4”

Several integration patches: Autostart, Mime-types, ...



Plasma

- One of most obvious and criticized parts of KDE 4.0
- Plasma 4.0 quickly considered Abandonware
- Amateurish backports for KDE 4.0.2 and KDE 4.0.3
- openSUSE 11.0 recognized for working on Plasma:
 - Backports & features until sprint and Review Board died
- Change of Plasma API between KDE 4.0 and KDE 4.1
 - Plasmoids don't work anymore but no version check?
- Icons on desktop mess
 - Only a communication problem?
 - Also a KDE 4.0 to 4.1 update problem!



How to continue with Plasma?

Aaron Seigo: *“generally we don't add any new features to patch level releases [...] another approach, which is likely more sane for things like panel hiding, is to provide patches for some of these features that can be applied by downstreams to 4.1.x but don't include them in official kde releases until 4.2.”*

panel hiding / windows covering panel
full-featured folder view (background support, ...)
desktop containment switch (non-Cashew, folder view)
different wallpapers on virtual desktops
working ZUI

...



Missing KDE4 Applications

Amarok

Digikam

K3b

Kaffeine

Konversation

Many more not by default installed applications...

http://techbase.kde.org/Schedules/KDE4/Application_Porting_Status



Areas in Which KDE is Lacking Behind

Lockdown (KDE4 additions, profile generation, GUI editor)

Desktop search (supported formats, integration into KDE)

Configuration possibilities (eg branding without patching)

PolicyKit integration

PulseAudio KDE integration / front-end

Accessibility

...



What we would like to see...

More cross-desktop specifications (freedesktop.org):

“Why can't I shutdown from KDE? I am using GDM.”

“Why can't I set my KDE wallpaper from Firefox?”

“Where can I configure the fonts for all my applications?”

“Why do my applications have different 'Recent Files'?”

...

More Code-Sharing:

Shared GDM/KDM backend

Common shared wallet / certificate storage (based on NSS)

...



Advices From Daily Distributors' Life

Think twice before introducing new dependencies (eg Java, Ruby) for essential functionality

Don't add “Any reproduction is strictly prohibited without prior written permission” or alike documentation etc.

Always provide sources (also for .DLLs, PDFs)

Use system libraries / document why fork really necessary

Use proven, hard and certified libs (esp. for encryption)



Advices From Daily Distributors' Life

Be careful with licenses from copied source codes

Think twice what license to use, esp don't use blindly GPLv3 only, see FSF License Compatibility Matrix

Implement support for controversial functionality as plugins or configurable (eg MP3, DHT, Subpixel Hinting)

Maintain NEWS or ChangeLog files, mention runtime deps

Configure warnings about missing optional dependencies



Invitation to Participate

<http://en.opensuse.org/KDE>

opensuse-kde mailing list

#opensuse-kde IRC channel

Every 2 weeks team meeting

Build Service Repositories

KDE:Community

KDE:KDE4:Community



Questions?

en.opensuse.org/KDE

build service

packaging

maintenance

kdebluetooth

kepas

knetworkmanager

applications

kpowersave

kerry

Kickoff



dashboard

kde.org

release team

KDE Four Live

products

openSUSE

SLED

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Most importantly keep the area under the logo clear

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R 0 G 149 B 48	R 232 G 128 B 0	R 157 G 176 B 41	R 100 G 132 B 164	R 107 G 108 B 105	R 224 G 0 B 0
R 0 G 98 B 90	R 201 G 86 B 22	R 115 G 126 B 31	R 77 G 68 B 102	R 46 G 52 B 54	R 204 G 0 B 0
SUSE Palette	Yellow Palette	Green Palette	Blue Palette	Gray Palette	Misc