One Click Install

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Contents

• What it is
• Uses
• How to utilise it.
• Problems
• Related Issues
What is One Click Install?
The problem

Overwhelming Terminology

• Package
• Resolvable
• Zypper
• Repository
• Service
• Mirror
• URI
• Alias

...
The problem

Complex User Interfaces

[Image of a form with fields for Repository Name, Protocol (FTP, HTTP, HTTPS, SMB/CIFS), Server Name, Port, Directory on Server, Authentication (Anonymous), User Name, Password]
The problem

Interrupted Workflow
  • Add Repository
  • Wait
  • Select Package
  • Wait
The problem

Use Cases

• Visit vendor website -> Install Software
• Receive CD -> Install Software
• How-Tos
The Solution

Automate

• Repository Addition
• Package Installation
The Solution

![Software installation dialog box]

**Software installation**

**Welcome**

This wizard will install **KDE 4 Default** onto your computer.

**Summary**

KDE 4.0 Desktop Environment

**Description**

The applications a KDE 4 installation would contain if it would be the default desktop.

- Advanced mode with ability to change settings.
The Solution

Software installation

The following repositories will be subscribed to:

http://download.opensuse.org/repositories/KDE:/KDE4:/STABLE:/Desktop/openSUSE_10.3/
(KDE:/KDE4:/STABLE:/Desktop)
http://download.opensuse.org/repositories/KDE:/KDE4:/STABLE:/Extra-Apps/openSUSE_10.3/
(KDE:/KDE4:/STABLE:/Extra-Apps)

Note:
You will remain subscribed to these repositories after installation.

The following software items will be installed:

kde4-dolphin
kde4-gwenview
kde4-kate
kde4-kcalc
kde4-kdepassword
kde4-kdesssh
How it works

XML Description
- Specify Required Repositories
- Specify Required Software

Mime-type
- Link to file of that mime
- data: trick for blogs

Hander
- Converts instructions to package manager functions
- Runs as limited user, until installation
Why Not…

RPMs that enable repositories
  • Difficult to create
  • Multiple Distributions

Protocol handler
  • apt:// Limited flexibility
  • Browser compatibility
How is One Click Install Used?
Blogs

For openSUSE 10.3 you can use 1-Click-Install:

![Install](image)

Firefox 3.081 via 1-click

This entry is filed under KDE, Software. You can follow any responses to this entry through the RSS 2.0 feed.

Friday, January 11, 2008

**Tomboy Oneclick Install for openSUSE 10.3**

If you've got openSUSE 10.3, you've got to give Tomboy's new Notebooking feature a shot!

![1click install]

Thanks jimmac and abock for the 1click button idea! :)
ISV Media

[Image of a file browser window with files and a gear icon]

- Setup
- data_file001.file
- data_file002.file
Web Software Catalogues

Amarok is a media player for all kinds of media, supported by aRts, GStreamer or Xine (depending on the packages you install). This includes MP3, Ogg Vorbis, audio CDs and streams. It also supports audio effects of all kinds that are provided by aRts. Playlists can be stored in .m3u or .pls files.

Amarok also provides audio file collection management, by using either an embedded sqlite3, a MySQL or a PostgreSQL database.

Search results:

Results from http://download.opensuse.org/distribution/10.3/repo/oss/suse

kdenetwork3-InstantMessenger (3.5.7)
Chat applications for KDE
contains /opt/kde3/bin/kopete
“Community Repositories”

Here you can see default online repositories downloaded from Internet. Click on the repository to see its details.

If you want one or more online repositories to be used, select those you want and click Finish.

To remove a used repository, just deselect it.

List of Online Repositories

- Main Repository (Sources)
- Main Update Repository
- NVIDIA Repository
- Packman Repository
- VideoLan Repository
- openSUSE BuildService - Database
- openSUSE BuildService - Drivers for Wireless LAN
- openSUSE BuildService - Drivers for webcams

Repository Description

URL: http://download.opensuse.org/repositories/drivers:nn/wlan/SUSE_Linux_Factory/
Linked from: http://download.opensuse.org/YaST/Repos/_openSUSE_103_Additional.xml
Summary: Recent drivers for wlan
Description: Contains up-to-date drivers for Wireless LAN.
How To Utilise One Click Install
Publish Your Software

0) Package the Software
1) Create a Repository
2) Create a .ymp file
3) Distribute Repository & YMP

• openSUSE build service can build & host
Creating a YMP

<metapackage
  xmlns:os="http://opensuse.org/Standards/One_Click_Install"
  xmlns="http://opensuse.org/Standards/One_Click_Install">
  <group>
    <name>My Package Bundle</name>
    <summary>This is a software bundle</summary>
    <description>This is the summary</description>
    <repositories>
      <repository>
        <name>MyRepository</name>
        <summary>This repository...</summary>
        <description>[Description]</description>
        <url>http://example.com/MyRepository</url>
      </repository>
    </repositories>
    <software>
      <item>
        <name>MyPackage</name>
        <summary>This is a my package.</summary>
        <description>[Description]</description>
      </item>
    </software>
  </group>
</metapackage>
Creating a YMP

Strings are Translatable

<description>Base description</description>
<description lang="pt_BR">....</description>

Multiple Distributions

<group>
<!--fallback group if no distversion matches-->
</group>
<group distversion="openSUSE 10.2">
<!--What to install on 10.2-->
</group>
<group distversion="openSUSE 10.3">
<!--What to install on 10.3-->
</group>
<group distversion="Fedora 7">
<!--What to install on Fedora 7-->
</group>
Add support to your distribution

Doesn't have to be limited to openSUSE
  • Implement Handler for x-suse-ymp
  • Talk to your own package manager
  • XML structure can be tweaked

Uses
  • Support Debian/Fedora... etc
  • Fall back to Klik for limited users
Problems/Challenges
Missing Features

Large upgrade suitability
  • “Install if newer version available”

Install from specific repository

User Interface for creating YMPs

Support for other distributions
Too easy?

How can user evaluate quality/risk?

- Easy to install malicious or unstable packages
- Currently only accept/reject key.
- Build Service Trust/Rating
Related Issues
Codec Installation

Easier in 10.3 – makes use of one click install
Codec Installation

Users still have to google for HowTos, ask for help
  • Could be a lot easier
  • Should not be limited to mp3

The software they require should “find them”
Software Discovery

“Open With” - search for software
• Look in local software management cache
• Send MimeType to web-service
• Receive List of Programmes which can handle it

“New Hardware Found” - search for drivers
• Send pci-id to web-service?
• Receive List of drivers
Software Discovery

Examples
Software Discovery

Windows does do this already
Software Discovery

Legal issues

• Problems with even pointing to mp3, nvidia ...
• Lots of software is not problematic
• “community repositories” trick
Questions?
Reference Material

About One Click Install
- http://en.opensuse.org/Meta_Packages
- http://en.opensuse.org/Meta_Packages/ISV
- http://en.opensuse.org/Standards/One_Click_Insta

Sites Featured
- http://packman.links2linux.org/
- http://software.opensuse.org/search
- http://packages.opensuse-community.org/

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