Linux Desktop Innovation and Novell

A few slides, and a bunch of demos

Ted Haeger
Director of User
Communities
Novell

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Novell.

Session Overview

- Open Source at Novell

- Desktop Linux

  - Why is Novell involved?

  - How is Novell is involved?

- Show some cool stuff

Open Source
How Much is Novell Involved?

Novell's Open Source Participation

- Apache
- **AppArmor**
- **BetterDesktop**
- Eclipse
- **Evolution**
- **GNOME**
- **Hula**
- **iFolder**
- KDE

- **Linux Kernel**
- **Mono**
- Mozilla
- MySQL
- OpenLDAP
- **OpenOffice.org**
- OpenSSL
- **openSUSE**
- Openswan

- PHP
- Perl
- PostgreSQL
- Reiser
- rsync
- Tomcat
- **XEN**
- **YaST**

openSUSE

openSUSE
Goals

1 Make SUSE Linux the easiest Linux distribution to obtain.

2 Make SUSE Linux the easiest Linux desktop to use for both new and experienced Linux users.

3 Make developing and packaging code for SUSE Linux the easiest of any Linux distribution for application developers and the hacker community.

openSUSE
Achievements

1 7,000 verified installations every day (every 12 seconds); 20K registered members at openSUSE.org

2 Betterdesktop usability work; AppArmor now in open source; numerous Distro awards for excellence in quality and usability

3 Over 1000 community reported bugs;
openSUSE wiki has grown more than 15x since launch
Build Service launched this year

From Community to Enterprise
openSUSE feeds Novell enterprise Linux offerings

openSUSE

Novell.

Various open source projects	SL10.1	Linux for enthusiasts and individual end users	Enterprise Desktop	Hardened, Secure, Supported

Various open source projects

Rapidly growing in number of projects and their capabilities

Isolated, uncoordinated efforts

- SL10.1
- SL10.0
- SL9.3
- SL9.2
- SL9.1

Linux for enthusiasts and individual end users

Technical previews and leading edge applications

Enterprise Desktop

Enterprise Server

Hardened, Secure, Supported

Certified for leading hardware and software platforms

7-year code maintenance guarantee

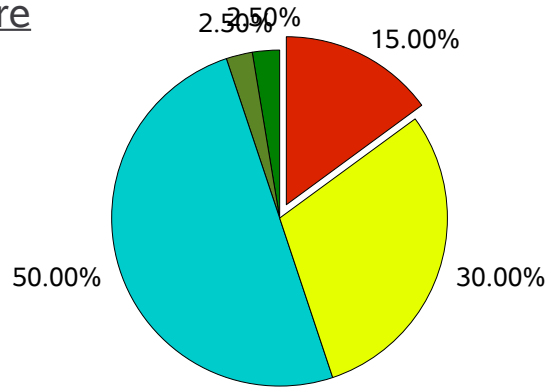# Desktop Linux
Why is Novell Involved?

Desktop Linux:
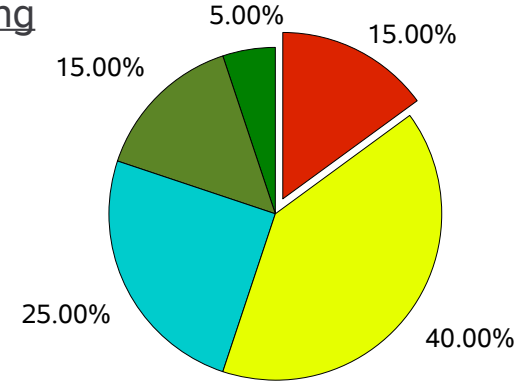## Why is Novell Involved?

- Only Linux has the potential to provide a viable alternative as a general purpose desktop

- Novell aims to help make this happen
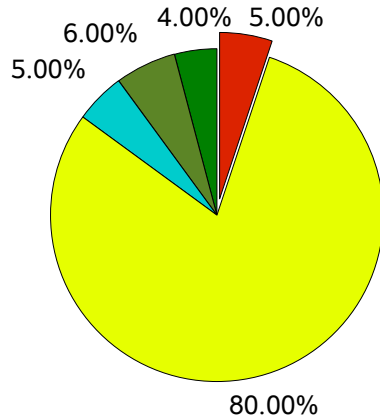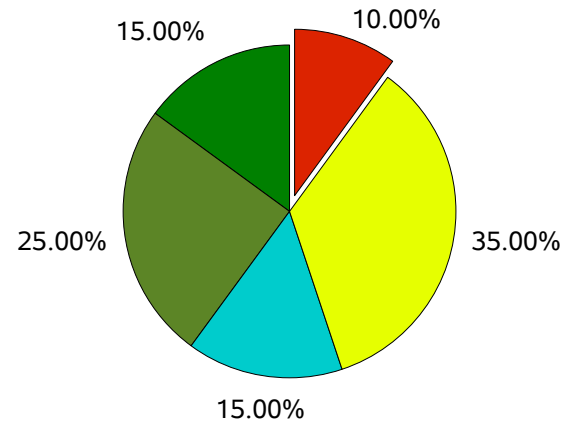
Typical Desktop Mixes
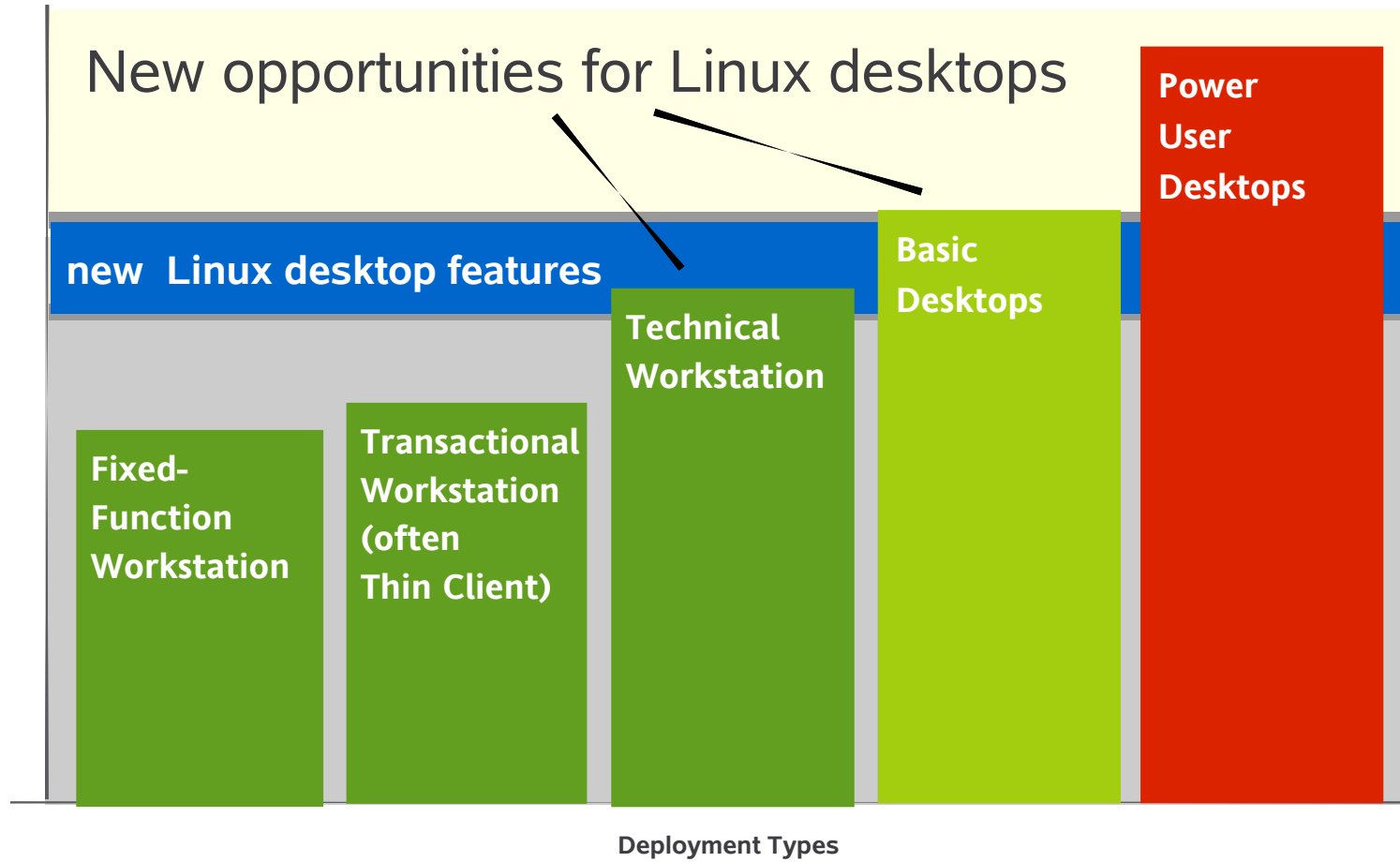

Software

Manufacturing

Government

Retail

Fixed Function   Transactional   Technical WS   Basic Desktop   Power User

Novell Expanding the Desktop Target

New opportunities for Linux desktops

Power User Desktops

new Linux desktop features

Basic Desktops

Technical Workstation

Fixed-Function Workstation

Transactional Workstation (often Thin Client)

Deployment Types

Desktop Linux
How is Novell Involved?

Linux Desktop
Innovation Areas

- Cool New Features
  - Simplified interface
  - Banshee, Beagle, f-spot, Tomboy, etc.

- Multi-Media Support
  - More audio/video formats
  - Clean intellectual property

- Supports New Hardware, Plug-n-Play
  - iPod, Cameras, USB Storage
  - Power Management
  - Video Acceleration

Linux Desktop
Innovation Areas

- Plays Well with Others
  - OpenOffice.org 2.0 **Novell Edition**
    - Interoperates better with Microsoft Office
    - Supports VB Macros
    - Performs better
  - Integrates with Microsoft Active Directory
  - Simplified file sharing
-

- Deployment and Management
  - Thin Client including Diskless
  - Central Management & Deployment
  - Desktop Lockdown

- Shared code base with SUSE Linux Enterprise Server

Linux Desktop
Environments

Environments

Do you have to choose?

What is the Tango Desktop Project?

The Tango Desktop Project exists to create a consistent user experience for free and Open Source software with graphical user interfaces.

http://tango-project.org/

...

Linux Desktop
Usability Testing

Linux Desktop
Usability Testing

- Usability labs
  - Fixed usability labs in Boston and Utah
  - Portable usability lab for roaming
-
- Methodology
  - Continuous, iterative testing
  - 15-20 tests per week
-
- Subjects
  - Dedicated usability test recruiter

Usability Testing
Who Do We Test?

- Test subjects came from the following industries:
  - Education
  - Medical
  - Government
  - Finance/Insurance
  - Commercial Construction
  - Technology

- Computer experience:
  - Mostly intermediate-level Windows users
  - Looked for people without any Linux experience, and without "techy" jobs

- Why do usability testing?
  - Linux must be easier to use and easier to learn
  - It lets us measure how well each interface design meets our goals

- We share research through http://www.betterdesktop.org

Login to the Computer

This task was performed using Suse 9.3 in a Portable Lab on the GNOME desktop. The test was administered in English. The following is a description of the task:

"Please log in to the computer."

17 subjects passed this task successfully.
0 subjects failed to complete the task.

The subjects distribution is as follows:

Total Subjects	17
Male Subjects	3
Female Subjects	14

The subject age breakdown is as follows;

Age Group	# of Subjects
0-18	0
18-30	3
30-40	13
40-55	1
55-70	0
70+	0

Subjects are asked to rate their experience (Exp Level) with computers on a scale from 1 to 10, with 10 being very experienced and 1 being no experience. The breakdown of the subjects responses according experience is below:

Exp Level	# of Subjects
2	5

Linux Desktop
Innovation in Open Source

- **OpenOffice.org**

- **Beagle:** personal information search

- **Novell AppArmor:** secures any Linux application

- **Banshee:** desktop audio player (and rights)

- **F-Spot:** photo library management

- **Tomboy:** note taking application

- **Xgl:** oh-so-sexy desktop graphics

OpenOffice.org 2.0

- Re-designed toolbar

- Uses the theme of host OS

  › Gnome, KDE, and Microsoft Windows

- Supports digital signatures and encryption enhancement

  › Also supports password protected Microsoft Office documents

- Adds support for Xforms

- Calc now supports up to 65,000 rows and columns

  › Same as Microsoft Excel

- Impress has completely new presentation engine

- New database application

OpenOffice.org
Novell is OpenOffice.org's second largest contributor.

Novell AppArmor

AppArmor intrusion prevention

- Creates "firewall" around applications
- Protects against unknown application vulnerabilities
- Comprehensive wizard-based tool set, integrated in YaST
- No security expertise required
- Low performance impact (typical: < 0.2 %, worst case: 2%)

Beagle

Quickly find the stuff you care about.

Beagle is a search tool that ransacks your *personal information space* to find whatever you're looking for. Beagle can search in many different domains.
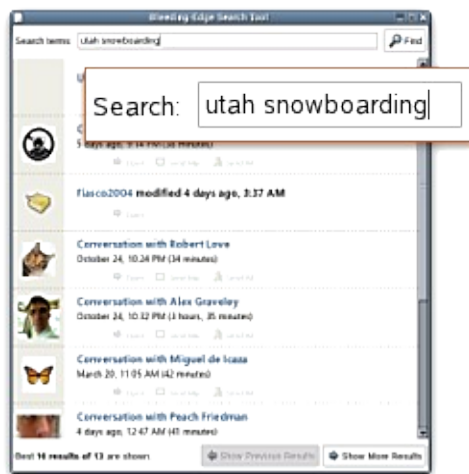
Find everything fast

Using Beagle, you can easily find:

- 📄 documents
- ✉️ emails
- 🌐 web history
- 📄 IM/IRC conversations
- 📇 source code
- 🖼️ images
- 🎵 music files
- 📄 applications
- ... and much more

http://beaglewiki.org

What does Banshee do?

- Easily manage your music collection
- Synchronize your iPod with your Linux desktop
- Play music directly from your iPod
- Import CDs
- Create audio and MP3 CDs from your music collection

Why is Banshee important?

- It's all legal and indemnified by Novell for our users
- Uses the Helix engine and licenses from Real Network

http://banshee-project.org/
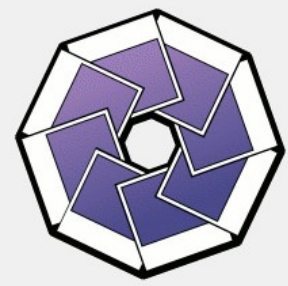
f-spot

F-Spot provides personal photo management on the Linux desktop.

Features include import, export, printing and advanced sorting of digital images

www.gnome.org/projects/f-spot

Xgl and Compiz

Xgl provides the X Window System with access to OpenGL hardware functions

Description not sexy enough?

That's because no mere mortal should have to know anything about "OpenGL hardware functions"

(Yes, Xgl has been submitted for inclusion into the X Window source tree.)

www.opensuse.org/xgl

Linux Desktop
Conclusion

· **OpenOffice.org**

· **Beagle:** personal information search

· **Novell AppArmor:** secures any Linux application

· **Banshee:** desktop audio player (and rights)

· **F-Spot:** photo library management

· **Tomboy:** note taking application

· **Xgl:** oh-so-sexy desktop graphics

OpenOffice.org

Beagle

Novell AppArmor

banshee

f-spot

Tomboy
Simple note-taking. Powerful ideas.

X.Org Foundation