openSUSE 10.3

Contents:

- Introducing the openSUSE distribution
- Highlighting major planned new functionality
openSUSE 10.3 Distribution
Building a Distribution Together

- Software selection
- Filling gaps (own development or help)
- Fixing, stabilization, porting of packages (*various build service talks this weekend*)
- Integrating
- Documentation (*LfL talk Sunday*)
- Installation
- System administration and management
- Testing, qa, certification (*testing talk Saturday*)
- Support
- Maintenance / security updates
The openSUSE Distribution

- Backed and shaped by the openSUSE community
- 3000+ packages
- Use on desktops and servers and use as your development platform
- 2 years of security updates
- Over 1000 pages of manuals
- Available freely via Internet and as boxed product
- Box product contains media, printed manuals and has installation support
- Architectures: i386, x86-64, ppc (not in box), ia64 (only as FTP tree)
Release Early, Release Often

• Factory trees are synced out daily to show current state
  • Factory might be broken at times
  • Factory should be kept stable
  • opensuse-factory mailing list – also for generic discussions on next distribution
  • opensuse-packaging mailing list – for package building
• Alphas: Public releases, QA to ensure stable environment
• Freezes:
  • Toolchain freeze
  • Base system freeze
• Betas
• Release Candidate
• Goldmaster
openSUSE Build Service Integration

• Integration of external repositories in a comfortable way during installation
• Empower users to build their own add-on CDs (via YaST CD-Creator)
• LiveDVD build in Build Service with configurable scripts
• Building distribution in Build Service
• Getting external packages into distribution
Planned openSUSE 10.3 Features
openSUSE 10.3+ – The Big Picture?

• What areas should we focus on?
• Where to invest the most effort?
• Which area needs a real effort?
Installing the openSUSE Distribution

Challenges:

- Far too many packages for media and for normal installation:
  - 3000+ SRC RPMs lead to 4200 i586 RPMs (4.5GB) and 955 noarch RPMs (2.2 GB)
- Not everybody needs the same packages
- Not everybody installs the same languages

Idea:

- One-CD install with minimal base system (English + localized YaST)
- Network is set up automatically
- Full openSUSE FTP tree is added automatically at start
- Alternative media (as now): 5 CDs, DVD
Installing the openSUSE Distribution: Localization

Challenges:

• Languages need translations and support files:
  - Fonts
  - Dictionary
• Languages need space on media
• Currently 50+ languages for YaST translation, some package have more, some less..

Idea:

• One-CD install with minimal base system (English + localized YaST)
• Tier 1 languages on media
• All additional languages via download
• Add-on CD(s) as with 10.2?
Performance Improvements

• Faster boot
  • We have parallel boot already
  • Check that all running services should really run
  • Check that no single service is a bottle-neck
  • Change boot concept?
• Faster runtime linking (ld hash-style=both)
Security Enhancements

- Fingerprint sensors support *(talk Sunday)*
- Distribution building with `-fstack-protector`
- LUKS supported, automatic password dialog under GNOME/KDE
- Splitting AppArmor profiles into packages, adding more profiles
YaST and Package Management

- Package management speed-ups: *(talk Sunday)*
  - Use database for each repository
  - Only parse metadata when data changes
- zmd not installed by default
- GNOME version of opensuse-updater
- New YaST server modules: autosfs, kerberos
- Usability improvements: Consistency between different modules
Improved Laptop Support

- Suspend to disk and RAM (*talk Sunday*)
- Improved support for:
  - docking station and media bay
  - FN-key
- Less power usage (kernel will power down unused devices)
- Fingerprint sensor support (*talk Sunday*)
- New wireless stack “devicescape” with additional hardware support
- Syncronization with mobile devices, e.g. mobile phones (*talk Sunday*)
- UMTS cards
  - NetworkManager with PPP support
Desktop Environments

• GNOME 2.18/2.20
• YaST with native look under GNOME
• Early KDE 4 adoption
  • Stable KDE 3.5.x as fallback
• OpenOffice.org with OpenXML support (*talk Sunday*)
Various Smaller Planned Features

• Installation under Windows (instlux) *(lightning talk parallel to this one)*
• TeX Live instead of teTeX
• Using libata stack for IDE devices
• Virtualization further enhanced:
  - KVM as an option?
  - Improved performance for Xen
• Minimal installation pattern
• Updated packages like Linux Kernel 2.6.21+, Java 1.6, ...
Summing Up: Major Planned Features

- One CD network installation
- UMTS support
- Package management improvements
- OpenOffice.org with OpenXML
- Better integration with openSUSE Build Service
Questions?
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