openSUSE 10.3

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openSUSE™

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openSUSE 10.3

Contents:

- Introducing the openSUSE distribution
- Highlighting major planned new functionality

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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

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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)

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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

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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

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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?

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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

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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?

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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)

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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

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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: autofs, kerberos
- Usability improvements: Consistency between different modules

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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

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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)*

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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, ...

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Summing Up: Major Planned Features

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

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Questions?

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