

Testing the openSUSE Distribution

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Overview Testing

Internal Testing Teams at SUSE

Alphas

- Validation

Betas & Release Candidates

- Component
- Stress & Kernel

Community

- The Community Contribution
- Support the Community

SUSE Quality Assurance (QA)





Internal Testing Teams at SUSE

Automation

- Component (Packages & Areas)
- System (Networking/Apps)
- Virtualization
- Feature Coverage (without Kernel)

Kernel

- All Kernel Related (System Level & Driver)
- Certification
- Infrastructure
- Feature Coverage (Kernel only)



Alphas - Validation

Different Types of Installs

- Patterns
(Default KDE / GNOME, All Patterns)
- Methods
(CD / DVD Media Kit, Network)
- Architectures (x86, x86-64, ...)

Upgrades

- From Last Released Version
(e.a. openSUSE 10.2 → openSUSE 10.3 Alpha *)



Alphas - Validation

Product Registration

- Registration During Installation
- Adding Update Source During Installation

Special Request Tests

- Test Special New Parts
(e.a. GNOME at New Location After Update)



Alphas - Validation

Basic Application:

- YaST2
- Konqueror
- Kontact
- Nautilus
- Evolution
- OpenOffice
- Firefox

Kernel:

- LTP



Alphas - Validation

Consider Results:

- Determine if Build will become Alpha

If Alpha:

- Create list of the “Most Annoying Bugs”
- “Ship” Alpha



Betas & RCs - Component

Area

Update from FTP

Action:

- Start the Update by Booting From CD/DVD
- Use FTP Install Server As Source for Update

Expected Results:

- Update Process Succeeds Without Any Problems
- All Packages Are Updated to New Version / Release Number



Betas & RCs - Component

Package

Perl-Bootloader: Primary & Logical Partition

Action:

- Install **/boot** on a Primary Partition
- Install / on a Logical Partition

Expected Results:

- Check that Bootloader gets installed correctly into the **/boot** Partition



Betas & RCs - Stress & Kernel

- Bonnie
- Buildcrunch
- DBench
- FTPload
- File System Stress
- LMbench
- LTP
- Memeater
- Memtester
- Module Loading
- Newburn
- Netperf
- NIC Bonding
- Process Stress
- Sched Stress
- Reaim
- Tiobench



Community - Contribution

Test Cases:

- Test Cases from Projects
- Automatic Tests from Projects

Testing:

- Test on Various Hardware
- Tests from internal Testplan (Testopia)
- Tests That Are Not Covered by SUSE QA
- Report Bugs via Bugzilla



Community - Support

Publish Test Plans and Test Cases

- Show What Will be Tested Internally
- Avenue for feedback to Improve Tests

Test Automation:

- Assistance With Automated Test Scripts
- Provide Tools to Develop and Run External Tests and Scripts



Community - Support

SUSE Tools For Automation:

- HAMSTA
“**H**ardware **M**aintenance and **S**hared **T**est **A**utomation”

Enable Networking and Tracking of Local Test Automation by

- Grouping Several Machines
 - Installing Them via Autoyast
 - Running the Special Test Cases
 - Collecting the Results
- Library / Basic API with Common Used Functions



Community - Support

Get in Touch:

- openSUSE Testing Mailing List
testing@opensuse.org
- QA Team Page
http://en.opensuse.org/QA_Team

Questions?

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