News from IT and Linux

Yves Kemp, Frank Schluenzen 13.04.2012





- Disclaimer: Many news since last Linux User Meeting (June 2009)
- Not everything will/can be treated in this presentation
- More a random selection of items more or less closely related to Linux, Linux usage and Linux users (we hope)



Status of supported SL versions

- https://access.redhat.com/support/policy/updates/errata/
- No updates for SL 4 after 29.2.2012 -> Not supported at DESY anymore
- RHEL 5 and RHEL 6: Prolonged their "Phase 3" support until 31.3.2017 and 30.11.2020 resp.. Probably SL will follow this timescale
 - Phase 1 ends Q4 2012 for RHEL 5: New hardware might not be easily installable after that period with RHEL 5 / SL 5
- SL 6 in production at DESY
 - Currently minor version SL 6.2 used for new installations
 - Only 64-bit SL 6 (with all relevant 32-bit compatibility packages)
 - DESY specifica: https://dvinfo.ifh.de/SL6_User_Information
- > Should I use SL 5 or SL 6? Currently, you have the choice.
 - Are your applications SL 5 bound? SL 6 bound?
 - Newer hardware might run better / only with SL 6
 - SL 6 clearly is the more modern system



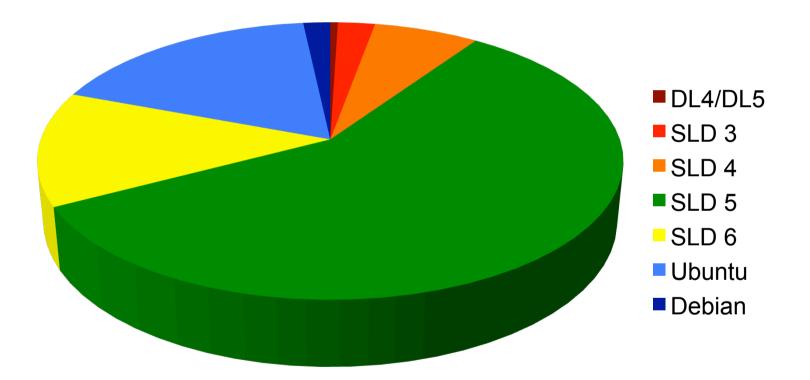
Status of Ubuntu at DESY

- Desktop and Server: Current LTS version is 10.04 used for installation
- Next LTS 12.04 to be expected soon
 - Actively preparing its deployment at DESY
 - Will replace 10.04 for new installations once ready at DESY
 - Upgrade 10.04 -> 12.04: We recommend reinstallation
- Laptops: Using current version for installation
 - Currently 11.10





Linux Installations (1854 tot)





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Linux and Hardware

- New server procurement
 - Tender finished, last steps currently been taken
 - Contract should be in place beginning of May
- Intel and AMD have introduced new CPUs in the last month
 - #cores is growing, while performance/core only slowly growing if at all.
- > GPUs are there since quite some time
- Intel MIC (Many Integrated Core Architecture) End of 2012/Beginning 2013
- > IT will always try to have Linux based test systems available
 - Partially available in BIRD/Batch, or via other methods
 - Contact us if you want to test new systems!



HPC cluster

Need for HPC system

- Reuse of old hardware: 512 core / 64 boxes cluster with InfiniBand interconnection
- Currently used by FLA and XFEL
- > Planning for replacement
 - Probably based on AMD Interlagos technology with 64-core boxes QDR Infiniband interconnection
 - Hardware replacement planned for end May/beginning June
 - OS: SL 6
- Scheduling model still under discussion
 - Scheduler and integration into BIRD?
 - "Paper-based"-scheduling?
- Contact us if you are interested!



Green Computing: Linux System Updates with AnaCron

Regular Updates with Cron

- No Upgrades, no Reboot (Done only with hands on)
- As Background Task
- Hourly, daily, nightly, weekly, monthly maintenance
- Essential for security and housekeeping
- > Green Computing
 - Shut off (desktop) systems during night, weekends or holydays
 - Check/Make missing updates and security directly after next boot
 - Combine "non installation boots" with AnaCron

1st Version with "wait" (Login after Update)

2nd Version without "wait" (Login during Update)

