

Supported Linux Distributions.

Numbers, Support Lifecycle and Status

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Linux User Meeting
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Agenda

- > Overview of IT supported Linux distributions
- > Support Lifecycle
- > IT Support Policy
- > Upcoming Distributions



Overview of IT Supported Linux Distributions

- > Currently supporting distributions from the 2 big families
 - Debian family: Ubuntu on x86_64
 - Red Hat family: Scientific Linux & CentOS on x86_64
- > Limited support for Red Hat Enterprise Linux
 - Required by software vendor (Zimbra, IBM, LDAP, ...) for support reasons
 - No general availability of Red Hat Enterprise Linux
- > No or limited support for other distributions or architectures
 - Package repository mirror on <http://nims.desy.de>
 - A package mirror for Raspbian is available on NIMS!
 - Need a mirror or own repository on NIMS? Contact linux@desy.de

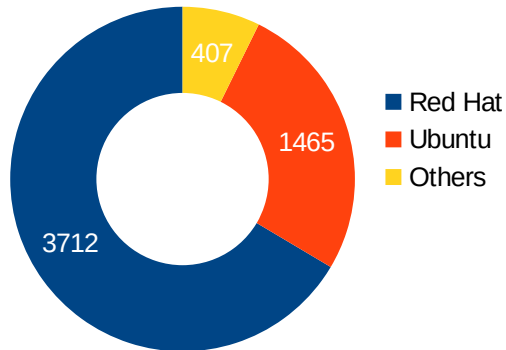


Distributions in Numbers

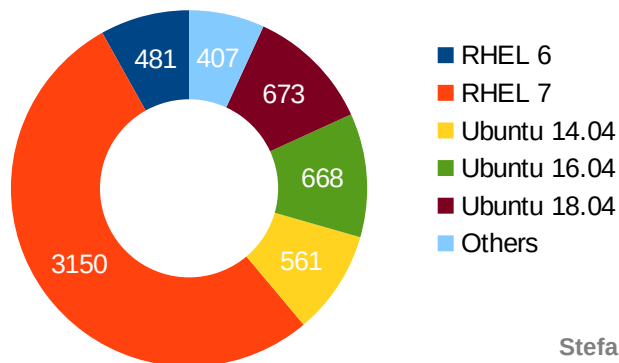
> Currently ~5600 nodes managed by Foreman & Puppet

- All plots use number of nodes as value

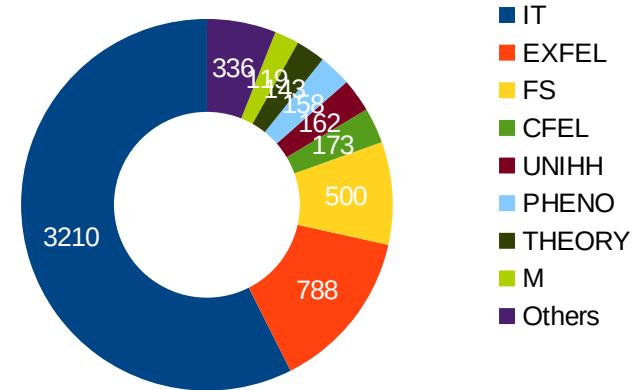
Operating System family



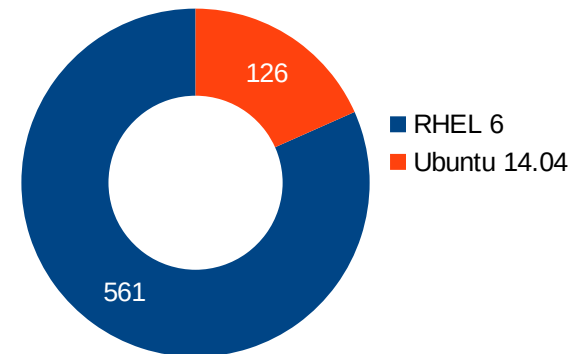
Operating System Release



Nodes by DESY Groups

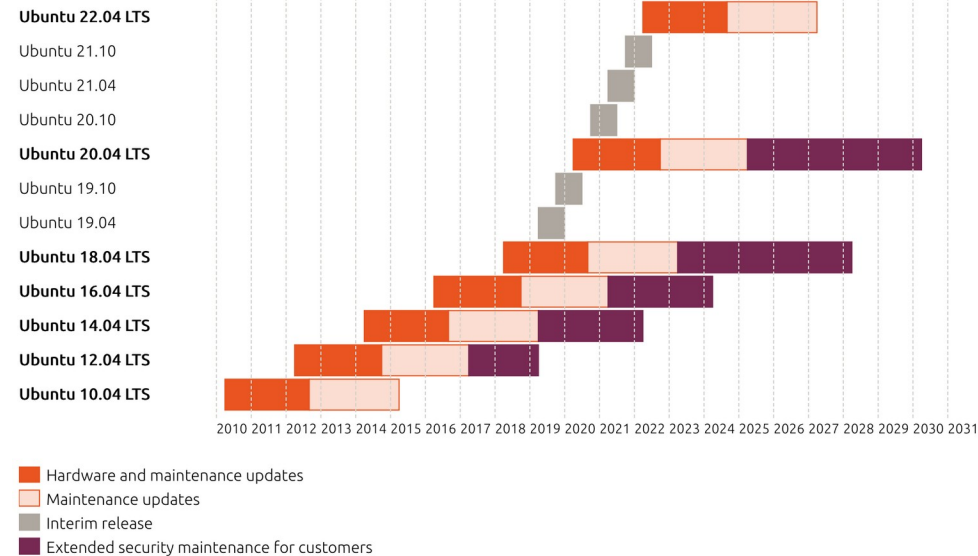


EOL or soon EOL



Support Lifecycle: Ubuntu

- > Every 2 years LTS release available
- > Support for 5 years
 - Extended Security Maintenance for paid customers (+3/5 years)
- > Only base system will receive 5 years of support
 - Packages from **main** or **restricted**, not **universe** or **multiverse**
- > Skipping 1 LTS release possible
- > HWE stack
 - Support for new hardware
 - Kernel from LTS release for LTS-1 available
- > IT only supports LTS releases
 - Upgrade only with reinstall
- > <https://ubuntu.com/about/release-cycle>



Support Lifecycle: Red Hat

- > New major release every ~5 years, minor releases every ~6-9 months
 - Beginning with RHEL 8, new minor release every ~6 months
- > Major release is supported for ~10 years
 - Extended support for paid customers of Red Hat Enterprise Linux
- > Source code used by clones (CentOS & Scientific Linux) for rebuild
 - Binary compatible with RHEL, no support from Red Hat
- > Release of new minor release → old minor release EOL
- > Current EOL dates:
 - Scientific Linux 6: 2020-11-30
 - CentOS 7: 2024-06-24
 - CentOS 8: ~2029-05



- > New hardware usually only tested with current distributions
 - e.g. Desktop PCs only tested with 18.04, no tests with 16.04
 - Same applies for server hardware
 - Older distribution no longer runs on hardware?
 - IT provides also a service for virtual machines, might be an option!
- > For Red Hat, we try to follow closely the minor releases
 - No support for installation of older minor releases
 - External dependencies (EPEL) only support latest minor release
 - Minor release rollout controlled centrally, announced ~1 week in advance
- > HWE stacks on Ubuntu
 - Due to kernel dependencies on OpenAFS/Auristor, no general rollout
 - Installation with HWE stack available, but no further support by IT



Upcoming Distributions

> Ubuntu 20.04 LTS

- Next LTS release of Ubuntu, expected in April in 2020
- Limited support for 32-bit applications, only selected packages built for i386:
<https://ubuntu.com/blog/statement-on-32-bit-i386-packages-for-ubuntu-19-10-and-20-04-lts>
- If you depend on 32-bit (commercial) applications, test early before 16.04 or 18.04 become EOL!

> CentOS 8

- Rebuilt of Red Hat Enterprise Linux 8, which has been released in 2019-05-07
- CentOS 8.0 released in 2019-09-25, 8.1 currently build by community
- DESY EL 8.0 release in preparation, will most likely start with EL 8.1
- Many changes (Application Streams, dnf, podman vs. docker)



Summary & Questions

- > Keep an eye on the support lifecycles of the different distributions
 - Try to migrate early before the distribution will be EOL
- > Regular updates **and** reboots are required to keep a system safe!
- > Many changes with upcoming CentOS 8
- > Questions?

