

SUSE® Linux Enterprise Server 12 SP1 – What's New?

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Agenda

- Lifecycle
- SLES 12 SP1 Scope
- New and Improved Pieces of SP1
- Outlook: SLES 12 SP2

Lifecycle and Schedule

SUSE Linux Enterprise Server 12

Life Cycle and Policies

	General Support			Extended Support
	Years 1-5	Years 6-7	Years 8-10	Years 11-13
Self Support	Yes	Yes	Yes	Yes
Maintenance Patches	Yes	Yes	Yes	Ltd. ¹ , LTSS ²
Technical Support	Yes	Yes	Yes	Ltd. ³ , LTSS ⁴
Security Patches	Yes	Yes	Yes	LTSS ⁵
Defect Resolution	Yes	Yes	Ltd. ⁶	LTSS ⁷
Service Packs	Yes	Yes	No	No
Additional Hardware Enablement and Software Enhancements	Yes	Ltd. ⁸	No	No

Source: <https://www.suse.com/support/policy.html>

¹ Access to previously released patches with an active subscription.

² Access to patches for earlier product versions possible with optional Long Term Service Pack Support (LTSS).

³ Limited migration and configuration assistance provided with standard or priority subscription.

⁴ More comprehensive installation, migration, configuration and break fix technical support available with optional LTSS.

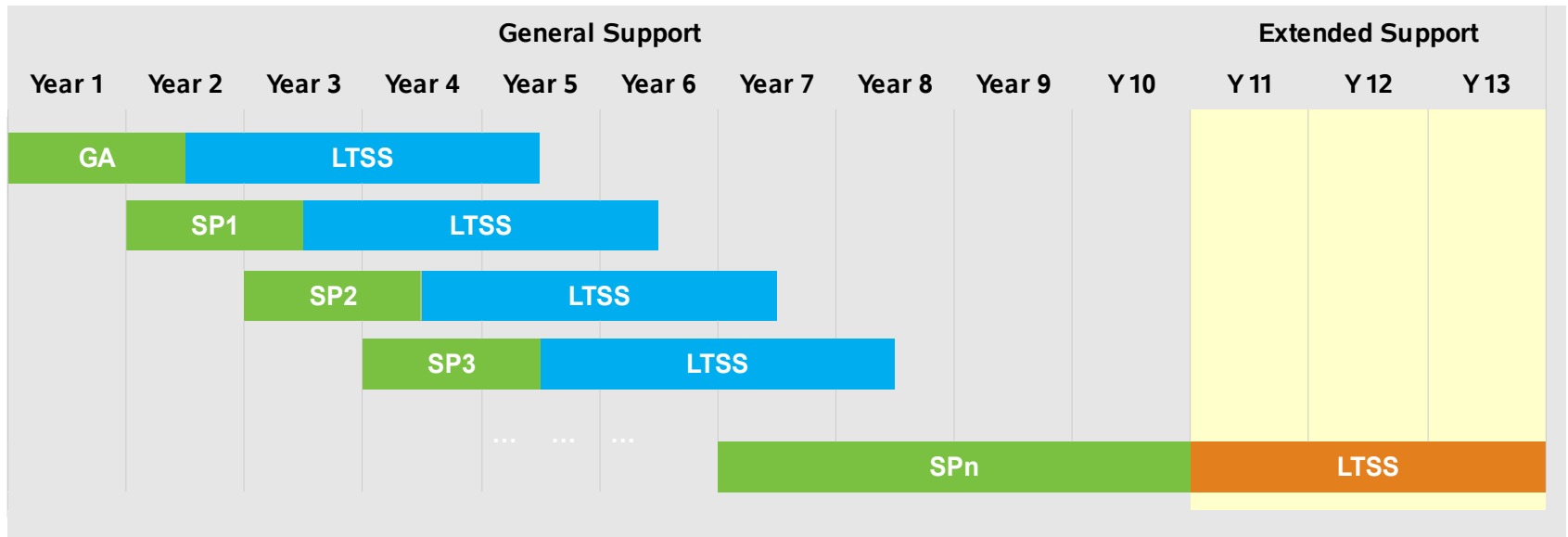
⁵ Only available with LTSS.

⁶ Limited to severity level 1 and 2 defects.

⁷ Only available with LTSS. Limited to severity level 1 and 2 defects.

⁸ Discretionary, based on customer and partner requests.

SUSE Linux Enterprise Server 12 Life Cycle Model



13-year lifecycle

- 10 years general support
- 3 years extended support

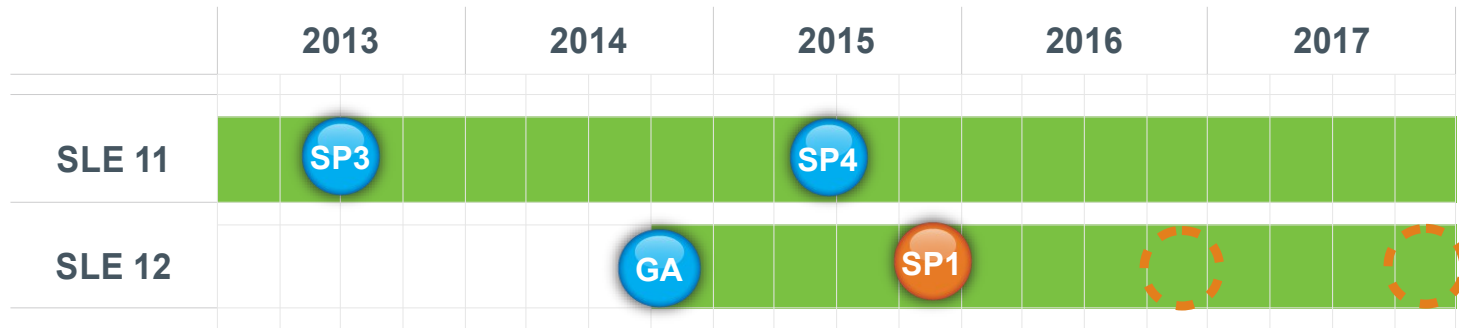
Different Lifecycle for Desktop and Modules.
Not committed.
Dates subject to change.

Long Term Service Pack Support (LTSS)

- Available for all versions, including GA
- Up to 3 years extended support



SUSE Linux Enterprise Server 12 Life Cycle and Code Streams



Current work in progress:

- Planning for SUSE Linux Enterprise 12 SP2
- Long term planning (SLE 12 SPs and SLE 13)

Heads Up:

- For SLE 12 SP2 we are planning a Kernel version upgrade

Not committed.
Dates subject to change.

SUSE Linux Enterprise 12 SP1 Scope

SUSE Linux Enterprise 12 SP1

Scope

Consolidation release

- Stability of APIs and ABIs
- No Kernel version change

Expand **leadership** areas of SUSE Linux Enterprise

Docker support

Hardware support

- Follow **customer** needs
- *Incremental, non-intrusive changes* on all architectures
 - x86-64, IBM System z (z13), IBM Power8
- Selective **Driver Updates**

New in SP1: Overview

Kernel

(Selection)

- Still 3.12 based, but lots of bugfixes and updates
- Refreshment of drivers where feasible, e.g.
bnx2*, mlx5, qla*, ixgbev*, ...
- Improvements for btrfs (hardening, de-duplication, send/receive)
- Improved libceph
- Perf, oprofile enhancements, especially for POWER 8
- ...many more

Application Updates (Selection)

- Firefox 31.8 ESR
- Apache 2.4.16
- Java 8
- MariaDB 10.0.20
- PostgreSQL 9.4
- gcc5 runtime
- WickeD
- Tomcat 8
- Fcoe-utils 1.0.30
- Xen 4.5

New Applications

(Selection)

- SMT
- TeamD
- Docker: now supported (separate Module)
- Shibboleth
- yast2-journal
- LSB5

Selected Details And Highlights

SUSE Linux Enterprise Server 12

The advanced foundation for your success



Increase uptime



Improve operational efficiency



Accelerate innovation

Improve Operational Efficiency

Improve Operational Efficiency

SMT



- Until now:
 - SMT was a separate product
 - Running on SLES 11
 - Starting with **12 SP1**:
 - No longer separated, now **included** in SLES 12 SP1
 - Runs on SLE 12 SP1
- => Smoother installation and easier to get

Improve Operational Efficiency

Docker



- Until now:
 - Only as TechPreview available
 - Starting with 12 SP1:
 - Fully supported
 - Moved from 'main media' to module (“Containers Module”)
 - `yast2-docker` for easier managing docker images
- => “Faster” lifecycle than core iso
- => SLE 11 SP3, SP4 and SLE 12 images available



Improve Operational Efficiency

JeOS – Just Enough Operating System

- Not everybody wants/needs a full-blown OS
- Solution: Provide something that is “just enough”
- **Small image size** for download (<300MB, bigger for VMware)
- Bigger when put on media
- “basic” system
- Updateable (after registration)
=> Currently available for SLES 12, upcoming: SP1

Improve Operational Efficiency/Accelerate Innovation

New modules



- **Containers** Module
 - we heard about that already
- **Toolchain** Module
 - gcc5, runtime libraries in SLE 12 SP1
- **Certifications** Module
 - For those who have to stay on (FIPS) certified packages
 - (not yet released)
- **SUSE Package Hub**
 - Not yet available via SCC, but already accessible

SUSE Linux Enterprise 12 Modules



Name	Content	Life cycle	Agility %
Legacy	Sendmail, old IMAP, old Java	Until 09/2017	0
Certifications	FIPS 140-2	Frozen versions	0
Web and Scripting	PHP, Python. Future: Node.js	3 years; overlap: 18 month	60
Toolchain	GCC	Yearly delivery	90
Advanced Systems Management	“Machinery” cfengine, puppet	Continuous Integration	90
Public Cloud	Initialization code and tools	Continuous Integration	100
Containers	Docker, Tools, Images	Continuous Integration	100

Improve Operational Efficiency

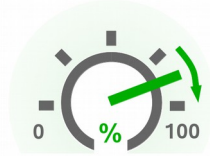
LSB



- LSB 4 contains old stuff no longer maintained upstream
- LSB 5 spec finalized, but no official Certification available yet
- SLES 12 SP1 contains LSB 5 packages

Increase Uptime

Improve Operational Efficiency/Increase Uptime Networking



- Installer now supports **virtio-net** on s390x as primary network
- **WickeD** integration:
 - OpenVPN
 - OVS bridge support
 - TeamD
- Teaming support now with **TeamD**
 - Teaming is not Bonding – similar functionality, but different design
 - Control logic is in user-space
 - Easier to extend

Increase Uptime Migration



- Migration in general simplified
- **Rollback** for Service Pack migration
 - Allows easier recovery
- SUSE Linux **Live Patching**
 - Of course, same as with SLES 12

SUSE Linux Enterprise 12 SP2

SUSE Linux Enterprise 12 SP2

Scope

Refresh release

- **Kernel version upgrade**
- Significant **Hardware Enablement**

Certifications

- ISV certifications remain
 - Stability of userland APIs and ABIs: core libraries and system compiler remain backward compatible
 - FIPS: do not touch certified security modules (except Kernel)
- => Feature submissions until End of November!



SUSE Linux Enterprise 12 SPs

Public Betas

SUSE wants to become even more **open**

→ We are planning **public betas**, tentatively for SUSE Linux Enterprise 12 SP2 already



Thanks for your attention!
Questions?

Thank you.







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