

What's new with SUSE® Linux Enterprise Server 10 SP4

for IBM System z

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Agenda

- Introduction
- System z specific
 - Hardware support
 - Usability improvements
 - Software additions/removals/updates
- Non-System z specific
 - Security enhancements
 - Usability improvements
 - Software additions/removals/updates
- Questions (I'll also take questions during the talk.)

Introduction

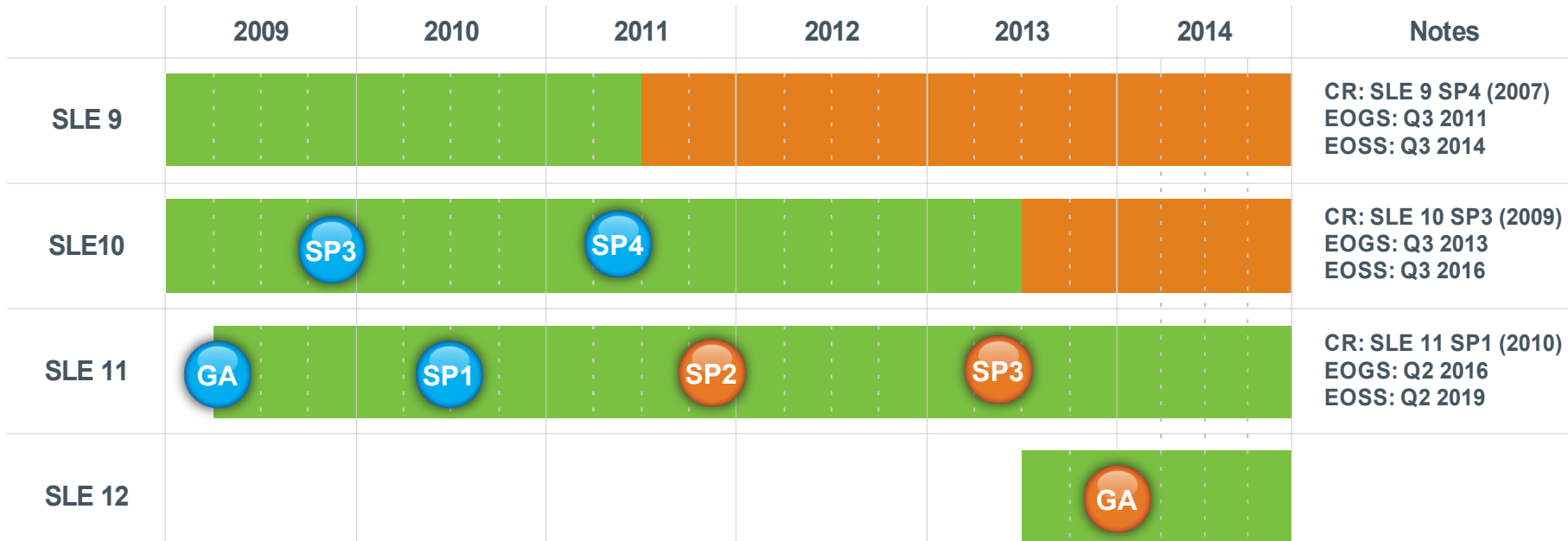
- Service Pack 4 is (almost certainly) the last service pack for SLES10. Final service packs are usually focused on new hardware enablement. As such, major changes are to be avoided as much as possible.
- Even so, we had a number of new enhancements for System z and in general.
- As usual, lots and lots of bug fixes and small enhancements that were created for SP3 have been included.
- Note that I will not be talking about any features introduced in SLES10 GA through SP3. This is only about changes introduced in SLES10 SP4.

SUSE Linux Enterprise Standard Platform Lifecycle

| General Support | | | | | | | Extended Support | | |
|-----------------|--------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------|------------------|--------|---------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| GA | | | | | | | | | |
| | SP1 | Long Term Service Pack Support | | | | | | | |
| | | SP2 | Long Term Service Pack Support | | | | | | |
| | | | SP3 | Long Term Service Pack Support | | | | | |
| | | | | SP4 | Long Term Service Pack Support | | | | |

- 10-year lifecycle (7 years General Support, 3 years Extended Support)
- Major releases every ~4years, service packs every 16-18 months
- Six month upgrade window
- Long Term Service Pack Support – extend upgrade window or extend major release lifecycle

SUSE Linux Enterprise Current Platform Lifecycle



- SUSE announces Service Pack releases and development and product schedules to customers and partners
- Dependable release timing
- Predictability for planning rollouts and migrations

System z specific

Hardware support

Hardware Support

- Enhanced qeth for new network device type support
 - OSX/OSM CHPID
 - z196 and z114 systems (Fate #309788, IBM # 63600)
- Optimized Latency Mode (OLM) toleration
 - Limited # of stacks can access an OLM OSA Express 3
 - This will provide meaningful a message if you're rejected (Fate # #309789, IBM # 63602)
- FICON - HyperPAV enablement
 - (Fate # 309805, IBM # 63563)

Usability improvements

Usability Improvements

- Dump on panic - Prevent reipl loop
 - Update to the s390-tools
 - New DELAY_MINUTES keyword in dumpconf (Fate # 309790, IBM # 63603)
- snIPL enhancement to trigger SCSI dump on remote container (Fate # 309791, IBM # 63604)
- zipl support for device mapper devices, with restrictions
 - Physical device is of type DASD or SCSI
 - All blocks on the logical device correspond to blocks on the same physical device
 - Adjacent blocks on the logical device correspond to adjacent blocks on the physical device
 - Access to block 0 of the physical device

Usability Improvements (2)

- Openssl-libica toleration for 4K keys when using the crypto hardware
 - Current implementation blocks usage of the crypto hardware for supported algorithms when one algorithm not supported by the hardware uses the card while it is shared with other processes.
 - Actually considered a bug fix. (Fate # 309850, IBM # 63612)

Software updates/additions/removals

Software Updates/Additions/Removals

- snIPL to 2.1.9 (Fate # 309792, IBM # 63606)
- Added 31bit compat library for c++ Boost (Fate # 309795, IBM # 63610)

Non-System z specific

Security enhancements

Security enhancements

- chroot of sftp for openSSH (Fate # 305918)
- Implement sudo options SETENV and NOSETENV
 - Keeps “untrusted” users from malicious/errant manipulation (Fate # 309458)
- Include DH Groups 22-24 for Strongswan
 - Don't ask me what this means. See http://w3.antd.nist.gov/usgv6/TSTs/IKEv2_v1.0_C.html (Fate # 309537)

Usability improvements

Usability Improvements

- Updated AutoFS kernel module
 - Fixes several very difficult-to-fix-otherwise bugs
 - In conjunction with updating userspace tools (Fate # 309394)
- Reserve ports for applications using fixed port numbers
 - Such as IMPI, NFS, home-grown applications
 - Prevents daemons from grabbing ports that other daemons need
 - Introduces `/proc/sys/net/ipv4/ip_local_reserved_ports` (Fate # 310019)
- Change MPIO defaults to exclude friendly names
 - If incorrect friendly names are used with MPIO, corruption can occur on the filesystems. See TID 7001133. (Fate # 310081)

Usability Improvements (2)

- Extend lscpu virtualization detection
 - Current only recognizes x86_64 and x86 Hypervisors
 - Now extended to System z and PPC64 (Fate # 310255)
- Libraries created on SLES11 can now be used for compilation/linking on SLES10
 - Could be accomplished before with `-hash-style=both`, but that could have other effects on applications. (Fate # 310795)

Software updates/additions/removals

Software Updates/Additions/Removals

- BIND 9.6
 - Provides DNSSEC support (Fate # 308859)
- Java 1.4.2 SR13 FP5 (Fate # 309752)
- Java 5 SR12 (Fate # 309845)
- SBLIM Java CIM Client 1.3.9.1 (Fate # 309756)
- AutoFS 5.0.5 (Fate # 310757)
- squashfs v3 (Fate # 312500) ??????

Questions



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