

# SLD3 Migration

Current Statistics

Migration Campaign

AFS System Tzpe Names

SLD3 News and Facts

Linux Wiki

A large, faint, light blue watermark is visible in the background. It features a stylized network diagram with three nodes and connecting lines, and the word "DESY" in a large, bold, sans-serif font below it.

---

# Migration Statistics (Site Hamburg)



| <b>OS</b> | <b>Jul → Sep</b> |      |
|-----------|------------------|------|
| DL3       | 69 → 67          | -2   |
| DL4       | 324 → 308        | -16  |
| DL5       | 914 → 872        | -42  |
| SLD3      | 234 → 340        | +106 |
| SLD4      | 51 → 70          | +19  |

**We're moving in the right direction.  
Thank you for your support!  
We'll continue and try to increase pace.**

# Announcements:

## PAL Migration, Pool PCs

---



- pal cluster nodes will migrate to SL3 by mid October
    - after public announcement
    - requires migration of k5cron jobs
    - may require changes to scripts (path or command names)
  
  - Linux pool PCs in bldgs. 1 and 2 will be replaced
    - by Igel Thin Clients with secured X11 tunnels
    - after PAL migration
    - Use of local media (CD, Floppy) will no longer be possible
    - Is that needed in pool PCs?
-

# AFS System Type Name



- The AFS system type name serves two purposes
  - (1) to designate the combination of hardware architecture and operating system on which a particular set of AFS binaries are supported
  - (2) as values for the magic '@sys' variable, which is used to select files based on the client system architecture.
- The `sys` command returns the first. It is defined at compile time
- The `fs sys` command returns the second. It can be set and modified at any time.
- The two are often confused for each other
- Sites which don't care will have them identically and set to defaults
  - Which, in case of Linux, reflect kernel instead of library versions and does not suit software distribution needs
- Canonical sysnames are listed on <http://grand.central.org/numbers/index.html>
- New AFS releases support a list of compatible system names for (2)

# AFS System Type Defaults at DESY



- DL1 i386\_linux20
- DL2 i386\_linux22
- DL3 i386\_suse63
- DL4 i386\_linux24
- DL5 i586\_linux24
- SLD3 (1) i386\_linux24 (2) i586\_rhel30, i386\_linux24
- SLD4 (1) i386\_linux26 (2) i586\_rhel40, i386\_linux26

**You need to know these when you use @sys for software distribution or compatibility links in AFS**

# Local Administrator Feature



- Enable users to perform root privileged commands
  - by allowing sudo for the owner(s) of a machine
- SALAD flag 'ladm' creates sudo right for registered owner

```
$ sudo -l
```

User woller may run the following commands on this host:

```
(root) NOPASSWD: /usr/local/etc/post_install,  
/usr/local/bin/salad, /usr/local/salad/ALL/etc/jammi,  
/bin/kill, /bin/mount, /bin/umount, /sbin/fdisk,  
/usr/bin/yumex, /usr/bin/yum, /usr/bin/system-config-  
display, /usr/bin/system-config-soundcard, /usr/bin/apt-  
get, /usr/bin/apt-cache
```

- To exploit that, make sure that end users are registered
  - It's in the user/responsible field of the wboom or AMS records

# wboom record



```
$ wboom -view linuxtest3
```

```
-----  
Variable                               List  
-----  
hostname                               linuxtest3  
alias  
ip                                     131.169.137.108  
subnet                                 137  
mac                                     001320B8D5B5  
serial_number  
desy_number  
equipment_class                        pc  
boot_version                           Linux  
hardware_type                          i686  
standard_memory                        1GB  
special_memory  
netgroups zdv-desktop-hosts 0001  
user-responsible                        flemming  
phone                                    4667  
location                                2b/213  
group-owner                            IT  
comment  
config                                  zdv  
subconfig afs auto ppm desktop pub p da-d ladm  
bootp_configtag  
status                                  ok-flemming-06/09/19
```

# Release Cycles



- Professional Linux Releases (DL): 2 years
  - Create repository on release
  - Maintain this repository with irregular updates
  - Freeze at end of life
- Enterprise Linux Releases (SL): up to 7 years
  - Create initial repository on release, maintain fixes
  - Create new repository for quarterly updates, maintain fixes
  - 28 repositories per major release after 7 years? No way!

**Enterprise Linux requires different methods of repo maintenance and client synchronization, owing to its lifetime**

# SL Jumbo Patch



- The SL Jumbo Patch updates a previously installed system to the latest repository
  - `cd /usr/local/salad/system`
  - `/usr/local/bin/salad -p Linux.JUMBO`
- Implemented as yum wrapper due to yum's incorrect handling of package exclusion lists
  - Preview of effects possible by running 'jammi' script directly
- Implemented for SLD3 and SLD4
- Executed by root user or (on request) in nightly update
- Our goal is to have no more than two repos in the field
  - This would require quarterly updates (maintenance downtimes)

- A Wiki service for the Linux communities at DESY
  - has been suggested and discussed long ago
- Web Office Wiki services are under development
  - but will take more time before general availability
- We would like to start a linux developer platform before
  - based on a simple MoinMoin Wiki engine
  - with low service level (single server, may have downtimes)
- Need a kick-off with community members in October
  - to collect expectations and prepare a basic layout
- Who's interested?