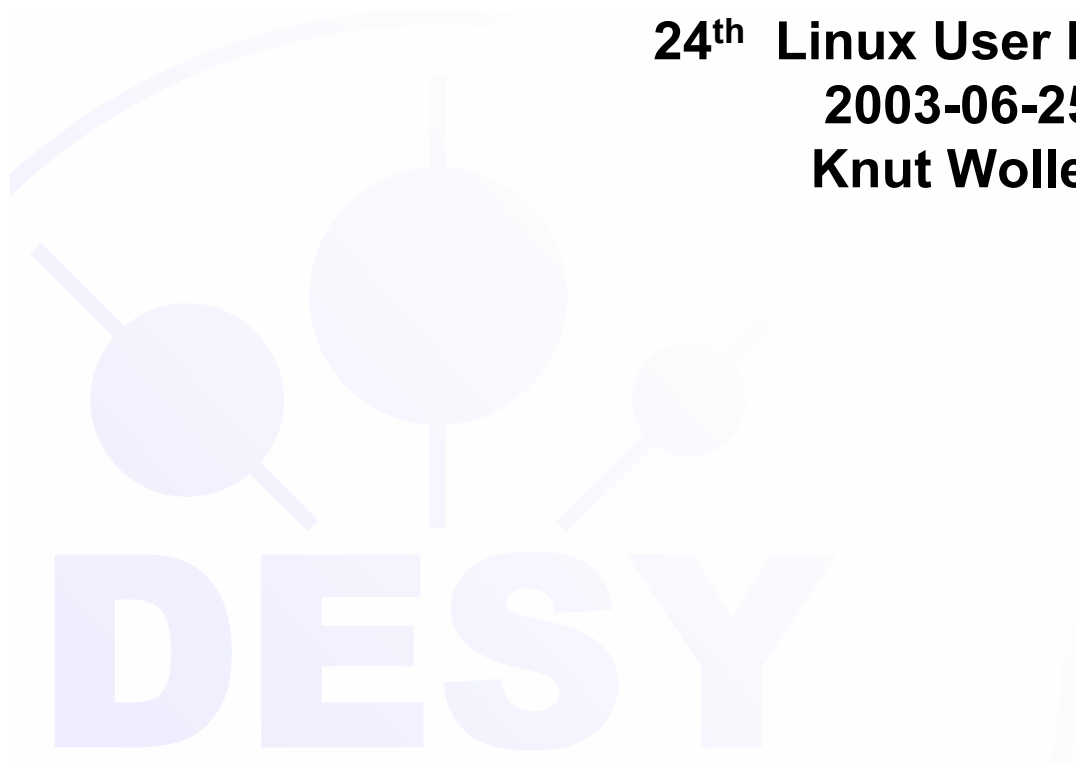




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Kernel Issues

24th Linux User Meeting
2003-06-25
Knut Woller



DESY

Status today

- **We initially released DL4 with 2.4.7**
- **Most systems are running one of our 2.4.18 RPMs now; they evolved over time**
- **We decided against 2.4.19 and 2.4.20 due to known flaws; they do run at Zeuthen**
- **Ptrace exploit has been fixed by preempting module (breaks gdb) and patched 2.4.18 kernels**
- **We agreed to wait for 2.4.21 release**

2.4.21

- **2.4.21 has been released last week**
- **First 2.4.x kernel including ptrace fix**
- **Other features and fixes**
 - numerous IDE/ATA fixes and hacks
 - reverts aic7xxx driver changes (works again)
 - Improvements to various drivers (e.g. e100, e1000)



Next Steps

- **Build 2.4.21 server and desktop RPMs according to our configs (two weeks)**
- **Test on selected systems (one week)**
- **Make it the default for new installations**
- **Roll out on all DL4 systems starting mid July, finish before Lumi Run starts**

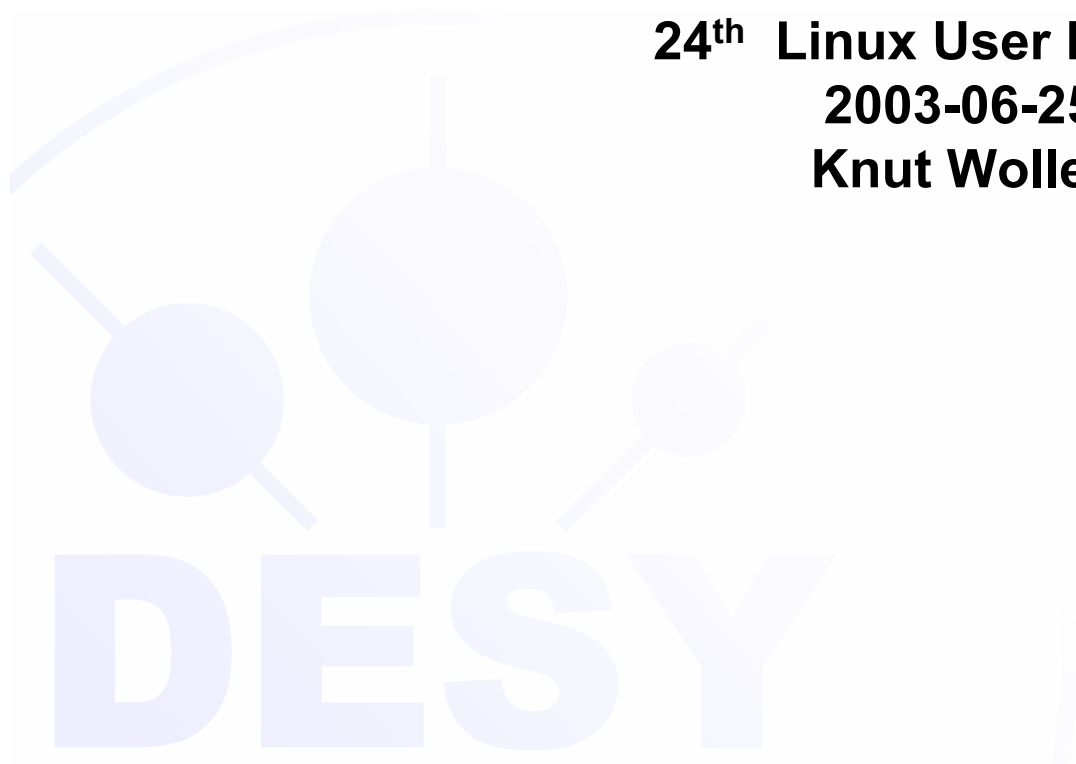
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OpenAFS Client

24th Linux User Meeting
2003-06-25
Knut Woller



DESY



Status today

- **We are building OpenAFS 1.2.3 clients along with our kernel RPMs**
- **Match of AFS modules and kernel (several 2.4.18 builds) is not uniform**
- **Mistreating the client seems to be a good way to halt DL4 systems, indicating that we did something wrong**
- **Certain client/kernel combinations in DL4 have proven buggy and unusable**



Next Steps

- **Build new OpenAFS client RPMs along with the 2.4.21 kernels and enforce close matching between the two**
- **We are looking at OpenAFS 1.2.10rc1, which fixes a few shutdown and deadlock issues wrt. 1.2.9a (current 'stable')**
- **Development, packaging and testing will go along with new kernel RPMs**
- **Ready for production release by mid July**



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DESY Linux 4 Jumbo Fix

24th Linux User Meeting
2003-06-25
Knut Woller

A large, faint watermark of the DESY logo is visible in the background, centered on the page. It features the same circular emblem and network structure as the logo in the top right, with the word "DESY" written in large, bold, sans-serif letters below it.

DESY

Why this?

- **We have not been too good at fixing bugs and vulnerabilities lately**
- **We have put emphasis on continuous operations and lack a scheme to roll out minor updates in time (cf. J. Kahnert's report)**
- **End of Life of SuSE 7.2 by end of July**
- **HERA Lumi Run starts in October**
- **It makes sense to do some final polishing in the next three months**

What's in it?

- **Kernel Upgrade to 2.4.21**
- **AFS client upgrade to 1.2.10 (maybe 1.2.9)**
- **glibc patch (fix nscd crashes)**
- **Xfree 4.2 security update**
- **Package security updates from SuSE ftp server to fill existing local root exploits**

How will it happen?

- **Components of the Jumbo Fix will be developed and tested individually**
- **We will not break compatibility. Except for kernel and OpenAFS, patched RPMs will be the same versions as the existing ones**
- **The Jumbo Fix would be applied during a single reboot in a matter of minutes**
- **This would our final major effort for DESY Linux 4 (except for security fixes)**



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Opinions?

- **How reasonable does this sound?**
- **What may we have overlooked?**
- **Which requirements do you have?**

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