



Site Report

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1. Status of cell cms.hu-berlin.de

- Since 2006 accessible for real users
- about 35000 User entries
- about 35000 RW-Volumes
- about 500 GB storage used
- 3TB SAN storage for volumes allocated
- 2TB SAN storage for backups allocated



2. Usage & Access

- software distribution
- optional home directory of 5GB
- storage for compute service
- central storage for workgroups of 50GB
- access via web server webafs



3.1 Fileservers

- **All** servers are on the same architecture and the same OS is running
3 filesystems

- **Hardware**

Dell Poweredge 1750, 2xXeon 3 Ghz,
2GB RAM, SAS-RAID1 for OS
SAN for volumes

- **Software**

OS Debian(etch)
openafs-fileserver 1.4.2



3.2 Kerberos & AFSDDB

3 kerberos & openafs-db servers

- **Hardware**

Dell Poweredge 1750, 2xXeon 3 Ghz,
2GB RAM,SAS RAID1 for OS

- **Software**

OS Debian(etch)

heimdal-kdc 0.7.2

openafs-krb5 1.4.2

openafs-dbserver 1.4.2



3.3 Web access

2 virtual machines working as failover cluster

- **Software**

OS: Ubuntu 8.04 LTS

heartbeat 2.1.3-2

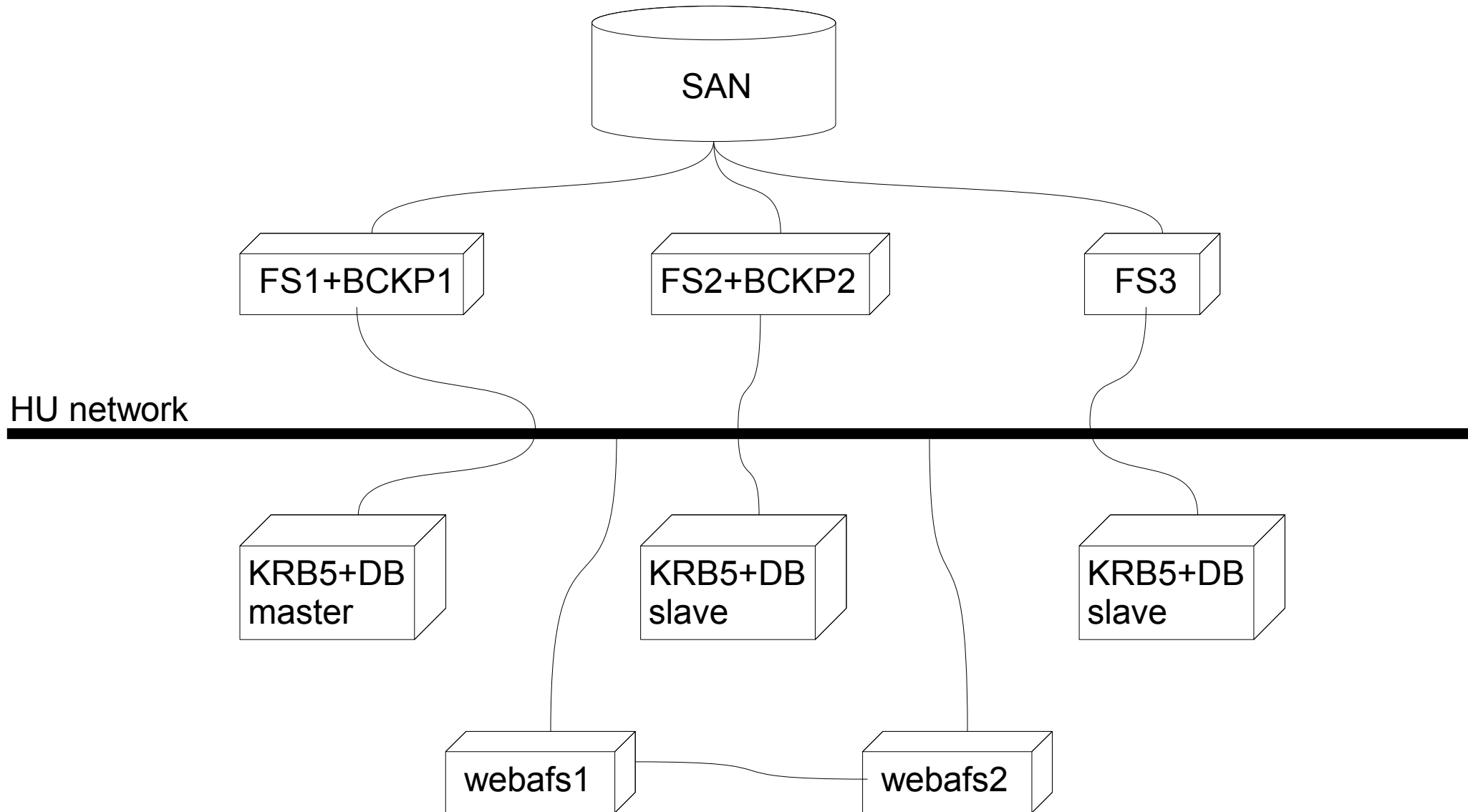
apache2.2-common 2.2.8-1ubuntu0.11

libopenafs-dev 1.4.6.dfsg1-2+ubuntu0.1

openafs-client 1.4.6.dfsg1-2+ubuntu0.1

filedrawers 0.4.3 from git

mod_waklog SVN_20090908





4. Client support

- Different linux distributions
- (Debian, Ubuntu, RedHat, Suse, gentoo, maemo)
- Sun Solaris
- MacOS X
- MS W2k, XP, Vista
- Others on demand



5. Backup

- 2 of 3 file servers
- 2 backup instances in different storage arrays
- daily recoverable hierarchical backups
- snapshots into SAN



mfile: afs file management - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://webafs.cms.hu-berlin.de/?path=/afs/.cms.hu-berlin.de/u/

Most Visited N NAGIOS

VMware I... SolaRis1... Smpatch... Cannot fi... @ xyll@mail... Однокла... (Untitled) mfile... X

computer und medienservice at the hu-berlin wednesday september 23 2009

[home](#) [help](#) **mfile: afs file management**

Location: /afs/.cms.hu-berlin.de/user/filippos/projects [Change](#) [Go Up ↑](#) [Refresh](#)

Folder Properties

projects

Actions

[Upload File\(s\)](#)
[Cut Selected Item\(s\)](#)
[Copy Selected Item\(s\)](#)
[Paste to This Folder](#)
[Delete Selected Item\(s\)](#)
[Create a New Folder](#)
[Rename Selected Item](#)
[Set Permissions for Folder](#)
[Favorite Locations](#)

View Options

[Show Hidden Files](#)

filedrawers version: 0.4.3

<input checked="" type="checkbox"/>	Type	Title Δ	Size	Last Modified
<input type="checkbox"/>	Folder	SNMP	2 KB	9/7/2009
<input type="checkbox"/>	Folder	afs_meet_roma_2009	2 KB	9/22/2009
<input type="checkbox"/>	Folder	flash-streaming	2 KB	6/30/2009
<input type="checkbox"/>	Folder	netwatch	2 KB	8/4/2009
<input type="checkbox"/>	Folder	nfs_cluster	2 KB	9/7/2009
<input type="checkbox"/>	Folder	nfsv4	2 KB	5/11/2009
<input type="checkbox"/>	Folder	nmap2nagios	2 KB	8/8/2009
<input type="checkbox"/>	Folder	openafs-OSD	2 KB	8/26/2009
<input type="checkbox"/>	Folder	openafs-samba	2 KB	9/7/2009
<input type="checkbox"/>	Folder	webafs	2 KB	9/7/2009

Find: [Previous](#) [Next](#) [Highlight all](#) Match case

Done webafs.cms.hu-berlin.de N Nicht festgelegt



7. Future

- backup into Tivoli HSM
- integrated login via CAS for web frontend
- only one home directory for users
- openAFS-OSD integration



8. Other tests

Kerberized NFSv4(Solaris) vs OpenAFS

- working only with host principals
- user mapping problem not solved
- no clients for Windows



Thank you for your attention!!!

Questions?