Update on DESY Hamburg UNIX Environment

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HEPiX IN2P3

Update on DESY Hamburg UNIX Environment

I. AFS WGS

- Update on AFS WGS
- Installation Management
- DCE/DFS Pilot Project
- Batch Facilities

II. Mass Storage

III. Desktop Computing

IV. Security

V. PC Farms

I. AFS Workgroupservers

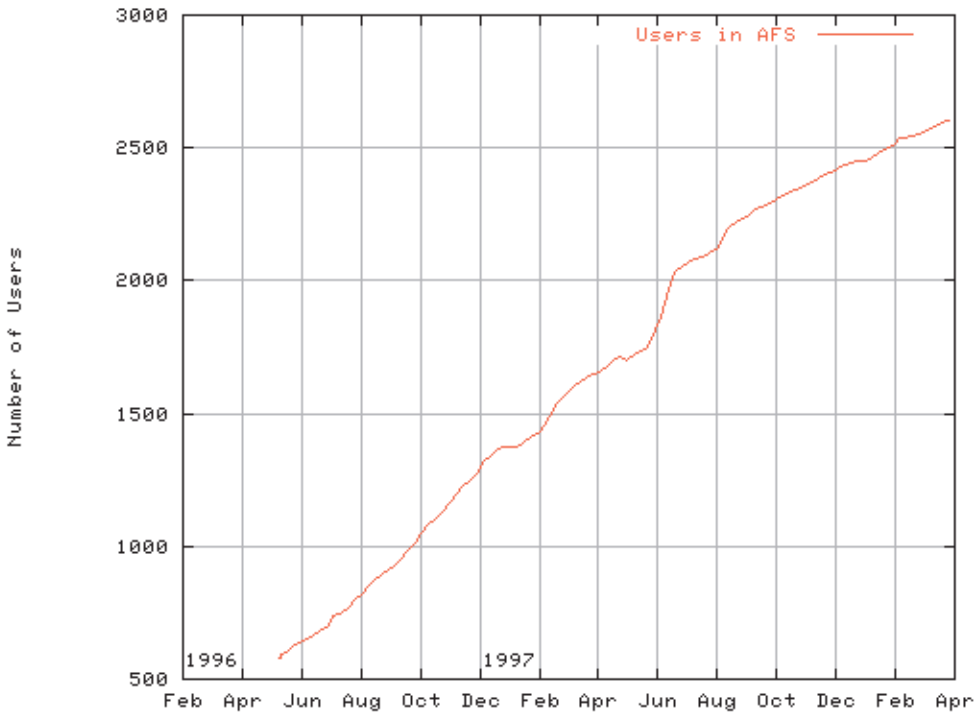
Update on AFS WGS

- **still growing rate:**
  about 2600 users now,
  55 GB homedir space,
  about 170 WGS in Hamburg

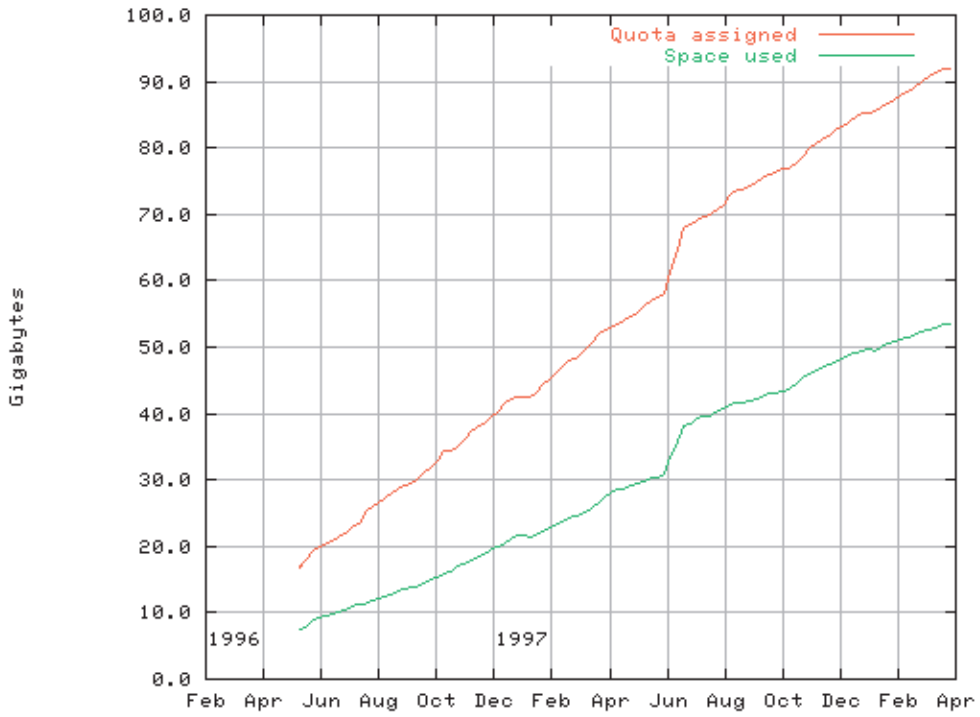
→ **incl. AFS binary service:**
soon additional RAID required

I. AFS Workgroupservers

Update on AFS WGS (cont.)



users



AFS space (users)

I. AFS Workgroupservers

Update on AFS WGS (cont.)

- **AFS:**
  - **1(2) SGI Challenge XLs: big (Ø >100 users) AFS WGS**
    AFS performance → hot spots (disk, CPU ?)
  - **moving of other XLs with local homedirs to AFS postponed**
    (increases problem with AFS diskspace)

I. AFS Workgroupservers

Update on AFS WGS (cont.)

- OS:
  - SOLARIS won the race (increasing rate) today:
    price / performance / reliability, easy network installation
    2.5.1 still mainstream version, 2.6 ~summer
  - AIX boxes: num. increased (price/performance)
    4.1.5, 4.2 supported versions
  - LINUX WGS support started (see my separate talk)
  - SGI: no new hardware, old systems moved to IRIX 6.2
  - HP-UX machines: no new HW, move to 10.20 not yet finished
  - DU support: stopped finally

I. AFS Workgroupservers

Installation & Adminstration Management

- **see separate talk (Alf Wachsmann)**
  - **evaluation from free to expensive, simple to powerful tools**
  - **finally decision between woom/salad and cfengine**

  → smooth transition to cfengine in Hamburg aspired

I. AFS Workgroupservers

DCE/DFS Pilot Project

- First DCE/DFS tests started 2.5 years ago
- DESY user registry: DCE security service since 1.5 years

- further work on adminstration tools
  (new: project admintool for managing group of filesets)

- work on authentication topics for [DFS & AFS]
  - for 6 'fat' machines: completely moved from
    YP to DCE-based authentication
  - integrated login: AFS, DFS and translator token

I. AFS Workgroupservers

Batch Facilities

- **Migration from Loadleveler to LSF (3.0b) started:**
  - **first cluster: HP**
  - **technical advantages, but:**
    - **price**
    - **OS: IRIX64 6.2 port**
    - **AFS token extension for Linux**

II. Mass Storage

since 1st of March: EUROSTORE project started
(see talk from Martin Gasthuber)

- **european project (EU):**
  - **2 years**
  - **industry + research**

- **DESY task:**
  - **providing HSM-software (migr. between different media levels)**
  - **software: JAVA**

III. Desktop Computing

- currently supported:
  - X terminals
  - NT PCs + Exceed, homedir service (NT),
    AFS client available,
    local mail/news/web client
- Linux support requested, under heavy discussion
  - lots of self installed systems

IV. Security

- **increasing rates of hacker incidents (also from collaboration sites)**
- **not supported SUNOS 4 and Linux systems cracked**
- **organizational action: security commission founded**
- **technical action: (slightly) restricted network access from outside DESY (WAN router)**

V. PC Farms

- all farms: Linux OS, one PC as FDDI/100BT router
- extension of HERMES (own installation) farm soon by
  5 Dual PII boxes (sum 30 CPUs)
- new: H1 farm (own installation), 10 Dual PII/266
  summer: online processing, now MC
- ZEUS farm, formerly own installation (18 PCs, single CPU PPro200)
  reinstalled as Linux AFS WGS
  in production: reconstruction and analysis
  LSF needed