News accumulated over the last 12 months ...
Facilities

> XFEL status
  ▪ Construction of the superconducting part finished in September last year
  ▪ Cooling started in December last year
  ▪ First electrons in the -271°C cooled main accelerator in January

> DESY hosts the XFEL scientific computing and data management centre
  ▪ Quite a lot of resources on the HPC cluster and XFEL dCache instance

> Starting signal for the Innovation Centre
  ▪ Joint project by DESY, University of Hamburg & City of Hamburg
  ▪ Limited company was founded that will run the centre
  ▪ Construction work will begin this year
Facilities (cont.)

> Inauguration of new research halls at high-brilliance X-ray source PETRA III

- in September 2016
- Halls named after the two famous scientists Ada Yonath (Israeli Nobel laureate) & Paul P. Ewald (pioneer of structural analysis using X-rays)

> FLASHForward accelerates first electron bunches

- Plasma accelerator project
- The laser will control the formation of the plasma at FLASH in the operation phase
News from CTA (Cherenkov Telescope Array)

> Zeuthen site selected as SDMC
  - Science Data Management Centre
  - Additionally the seat of the Scientific Director of CTA
  - New building at lake side will be erected

> Bologna will become CTA's administrative headquarter
Further news from Zeuthen site

> Zeuthen celebrated 25 years anniversary as DESY site
> New cameras (for gamma-ray telescopes) developed & produced by Zeuthen staff went into production on H.E.S.S. site in Namibia

> Wolfgang Friebel retired
> Two new colleagues started working for DV group
  - Timm Essigke as Wolfgang's successor
  - Fabian Krack as Waltraut Niepraschk's successor
CERN AFS at DESY (HH)

> **Background:**
  - CERN to decommission its AFS cell
  - CERN hides AFS on 15.2.2017
  - DESY largest off-site user of CERN AFS

> **Potential impact at DESY**
  - NAF users have access to AFS
  - Grid-WNs have AFS

> **On 3.1.2017, implemented a script**
  - Basically `ls/of | grep /afs/cern.ch` every 5 minutes on all relevant nodes
  - Plus some mimicry around

> **Send one email to each users that has accessed CERN AFS the previous day**

[Graph showing access of users over time with a trend line indicating decreasing access.]
CERN AFS at DESY (HH) cont.

> Access to which destination?

- Mostly stuff also in CVMFS
- ~9% of files in user/work directories

<table>
<thead>
<tr>
<th>Directory</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>/afs/cern.ch/cms/slc6_amd64</td>
<td>33.9%</td>
</tr>
<tr>
<td>/afs/cern.ch/sw (non-ROOT)</td>
<td>29.5%</td>
</tr>
<tr>
<td>/afs/cern.ch/sw (ROOT)</td>
<td>9.4%</td>
</tr>
<tr>
<td>/afs/cern.ch/work</td>
<td>7.7%</td>
</tr>
<tr>
<td>/afs/cern.ch/cms/share</td>
<td>5.6%</td>
</tr>
<tr>
<td>/afs/cern.ch/atlas/project</td>
<td>3.8%</td>
</tr>
<tr>
<td>/afs/cern.ch/atlas/software</td>
<td>3.4%</td>
</tr>
<tr>
<td>/afs/cern.ch/user</td>
<td>1.8%</td>
</tr>
<tr>
<td>/afs/cern.ch/atlas/offline</td>
<td>1.8%</td>
</tr>
<tr>
<td>/afs/cern.ch/eng</td>
<td>1.6%</td>
</tr>
<tr>
<td>/afs/cern.ch/cms/lumi</td>
<td>1.1%</td>
</tr>
<tr>
<td>/afs/cern.ch/atlas/groups</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

> Grid: Interesting case

- For years, DESY Grid WNs did not have AFS
- Since ~1 year, they have AFS
- ATLAS, CMS and LHCb show activity
- CMS mainly user and work areas. How did they do before? No-one complained!
- ATLAS: „...will not fix older sw with afs rpaths“
- LHCb: Changed things, but not 100% AFS-free
- „recommendation is therefore that sites remove the CERN AFS cell from the worker nodes “... Sites should not be forced to change their setup because of bad experiment software...

> Future:

- „Hiding CERN AFS“ activities are OK
- To be effective, they need to be much longer than 24h ... minimum 1 week

> Alternatives?

- Tell users about CVMFS
- CernBox on DESY shared resources?
Call for tenders (server)

> Server procurement frame contract: Call for tenders

> Frame contract covers

  - HPC & Batch WN
  - General server
  - Storage building blocks
  - GPFS Native RAID systems
  - NetApp storage

> Covers a 5 year period, in 5 lots

  - At least two vendors per lot planned

> Currently in selection phase ... cannot say more

> DESY is also preparing a call for tenders for its Mass Storage equipment

  - Will probably include disk/flash based object storage in the call, along with classic tape storage
  - Hopefully launched in Q3/4 this year
OpenStack pilot

- Openstack Newton on Ubuntu 16.04
- 160 Cores 940GB RAM
  - 6 Nova compute hosts using kvm
- 1TB Ceph Storage
  - 6 Ceph hosts with 36 OSDs in total
- Neutron network using Distributed Virtual Routing on Arista
- DNS names via REST API into Nokia QIP
- All core services as seperated VMs on 4 XenServer hosts
- Currently in pilot operation mode
> New Identity & Access Management System (IAM) went into production
  - Used to keep track of the 30k+ people registered at DESY
  - Gears towards delegated administration while maintaining a central life cycle management

> New email quarantine system productive
  - Shall help in protecting from malware
  - Ransomware is increasingly evolving into a nasty problem...

> Web-based training infrastructure established for security and safety instructions
  - for: DESY, EXFEL, CFEL

> Windows 10: Starting pilot phase within next weeks
  - Plan: Mostly CBB (Current branch for business), some rare LTSB (Long Term Servicing Branch) for machine control systems
  - Some current investigation: Privacy settings / MS-AppStore / Additional (Cloud-)Storage

> Infrastructure hosted for whole BELLE-II collaboration
  - Membership Management Services
  - Collaboration Services
BTW: don't miss the HTCondor workshop at DESY!

- 6th - 9th June 2017
- https://indico.cern.ch/event/611296/