

NAF Status

- **DUST status**
- **BIRD: Hardware & HTCondor Status**
- **AFS: News from DESY and Greetings from CERN**
- **Misc**

Yves Kemp
11.1.2017 Hamburg

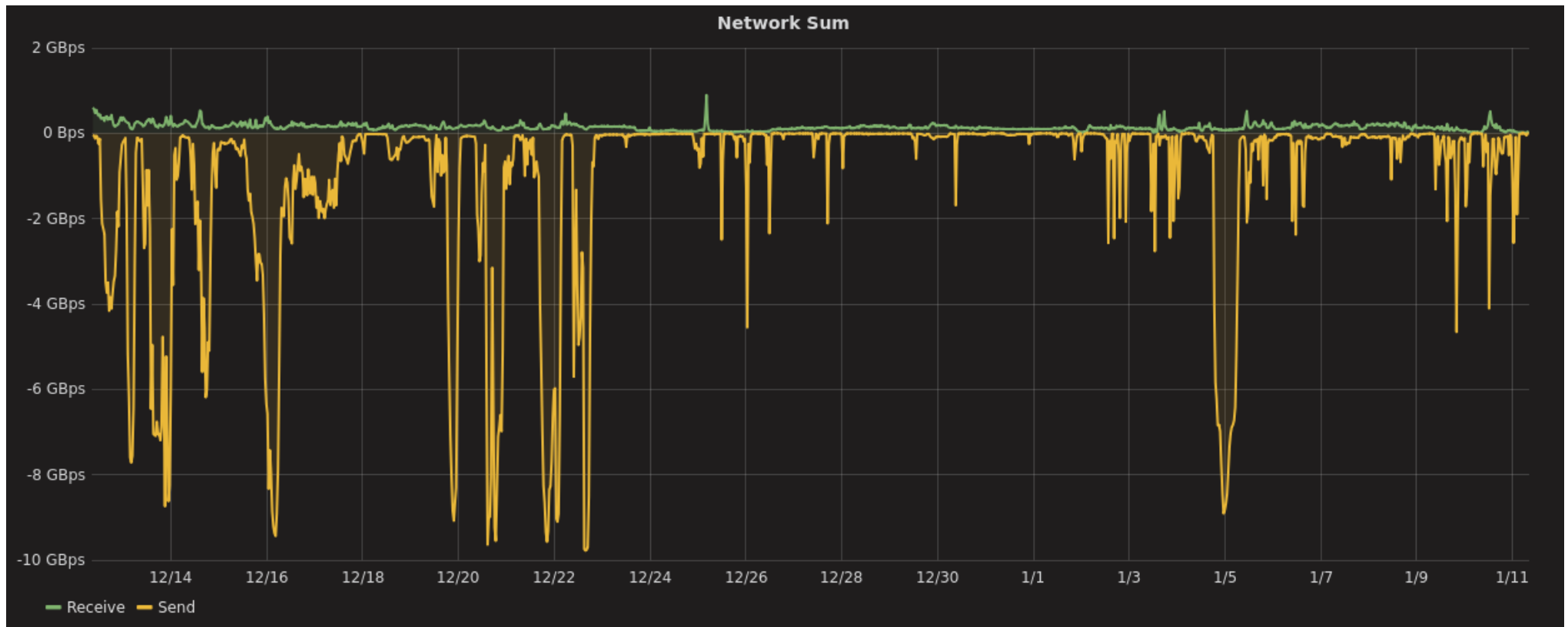
DUST Status: News since Alliance Meeting

- > DUST is stable - running Ganesha as planned
- > All experiments are now fully* migrated
- > Quota management tool is working : <https://amfora.desy.de/>
- > No reports of missing data received so far.
 - Proposal to shut down SONAS on 1.2.2017
- > *nearly fully migrated: Still waiting for one ATLAS user to clean up his 100 million files ...
Need to bring down substantially before migration of his files can take place



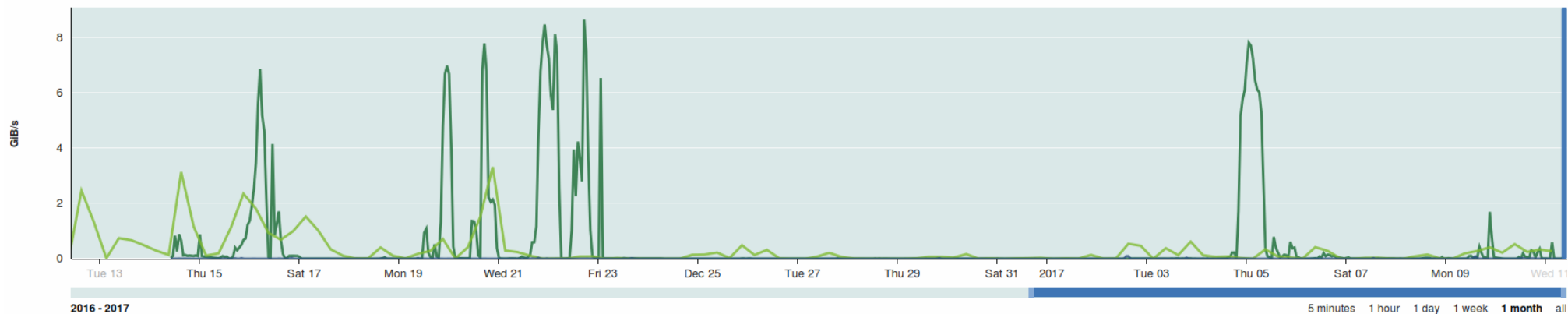
DUST performance

- DUST NFS export nodes are equipped with ~1 TB fast SSD cache
 - Huge performance improvement as many cache hits
 - Unfortunately this part of the code still has some bugs, so usage currently disabled
- In general, DUST performance is excellent!



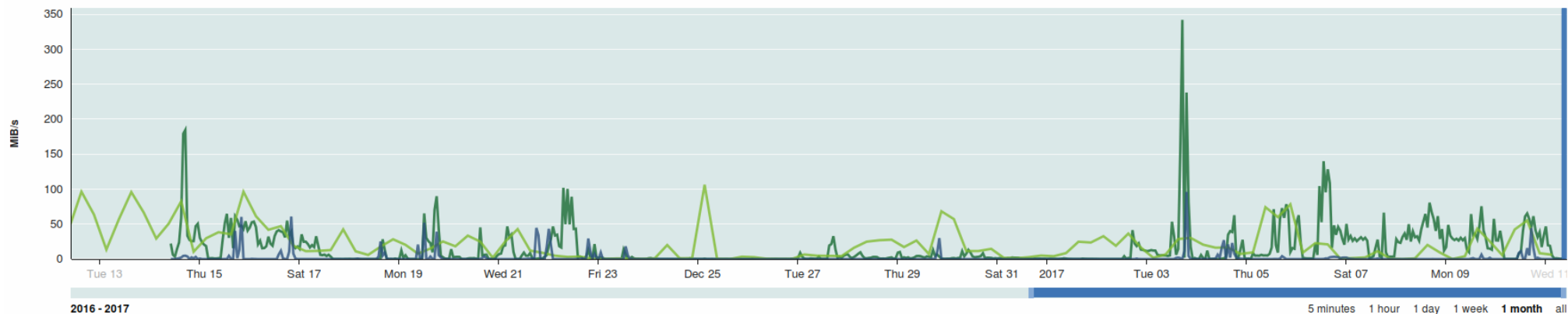
Export / NFS / Throughput / V4 Read ★

■ /dust/atlas ■ /dust/cms ■ /dust/ilc



Export / NFS / Throughput / V4 Write ★

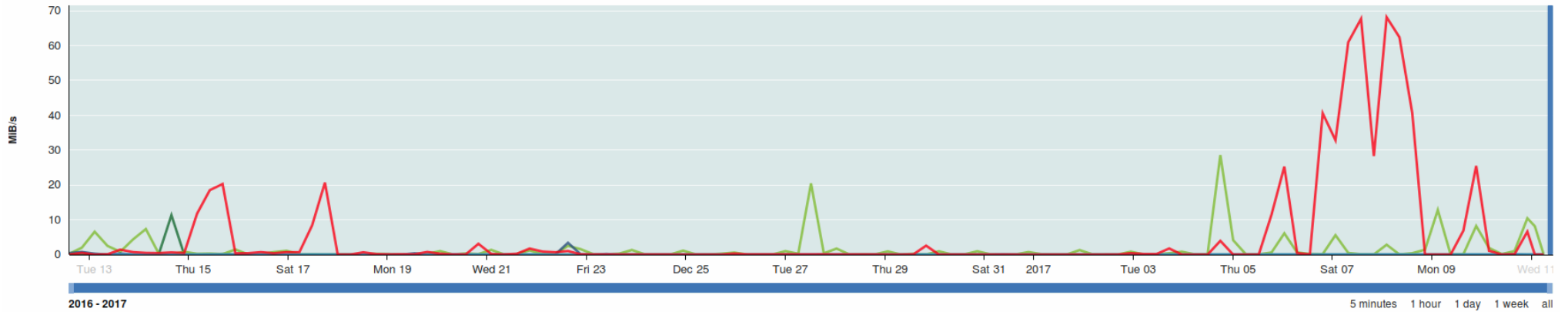
■ /dust/atlas ■ /dust/cms ■ /dust/ilc



Export / NFS / Throughput / V4 Read ★



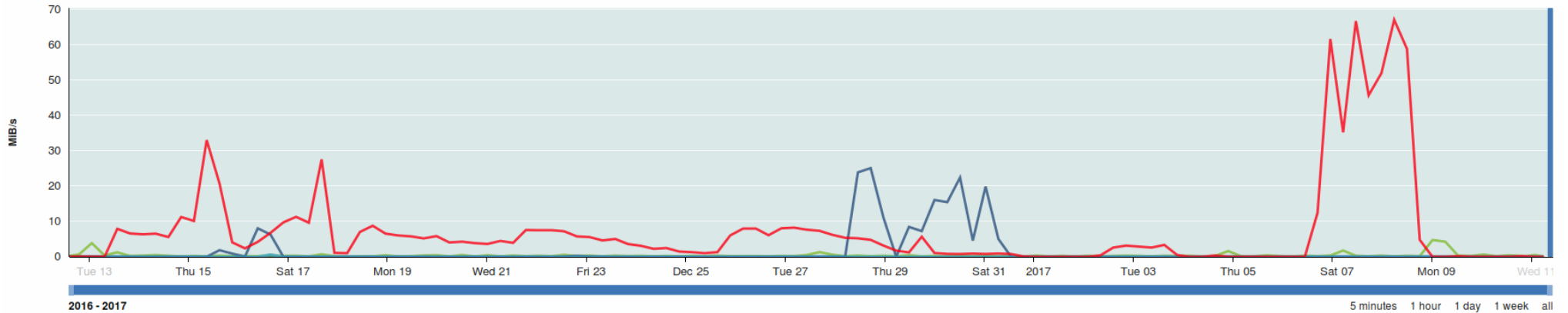
■ /dust/belle1 ■ /dust/belle2 ■ /dust/h1 ■ /dust/lhcb ■ /dust/zeus

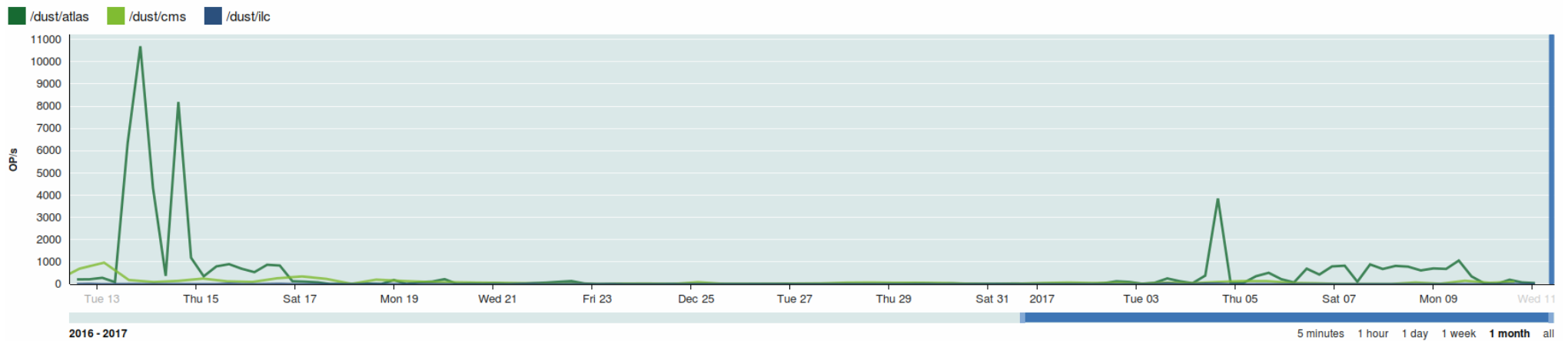
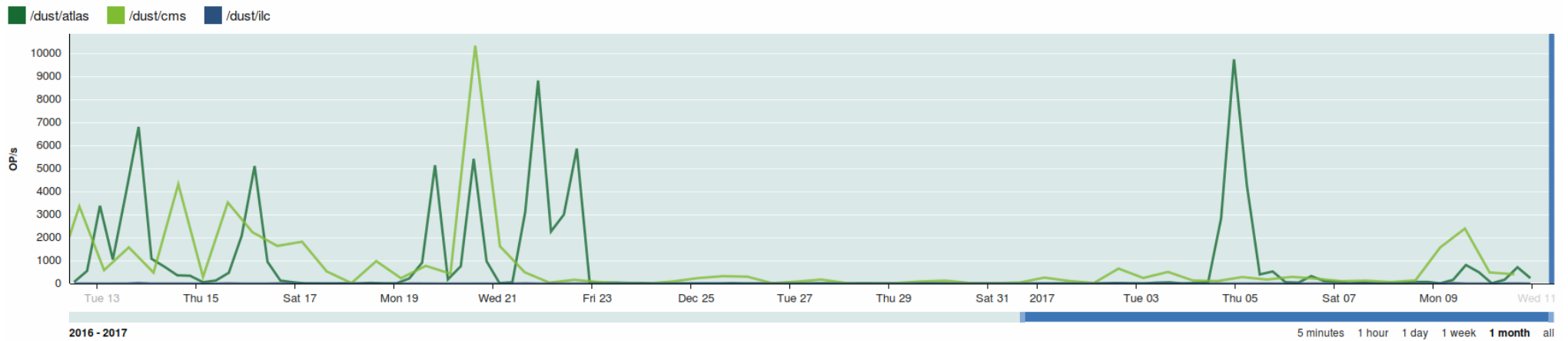


Export / NFS / Throughput / V4 Write ★



■ /dust/belle1 ■ /dust/belle2 ■ /dust/h1 ■ /dust/lhcb ■ /dust/zeus





DUST future plans

- > In addition to UNIX ACLs (user/group/world read/write/execute):
 - > "Simple NFSv4 ACL Support" for *Group* Filesets (more like AFS ACLs)
 - > ... If this is needed, talk to us!
-
- > Planning for enlargement in 2017:
 - Capacity increase: Current working plan is „doubling“
 - Metadata increase: At least „doubling“ (This was getting short already ... See the 100 million files user)
 - Bandwidth: We see good behaviour, and will already investigate with current DUST to increase bandwidth ... Already now above what SONAS could deliver!



... One more thing on DUST2

- > Policy for data of expired accounts
- > We will unlink data once an account is expired.
 - Unlink a fileset: No longer visible, but still existing on disks
- > After 180 days: Removal of the fileset
- > **WILL NOW BE IMPLEMENTED IN PLATFORM ADAPTER**
- > Better: Users should organize data inheritance **BEFORE** account expires
- > ... Somewhat in line with what was decided in CUC



BIRD status

16	2009-11
33	2009-12
43	2010-01
17	2010-03
3	2010-07
55	2010-12
14	2011-05
102	2011-09
9	2011-10
1	2012-03
25	2012-06
64	2012-10
16	2012-11
18	2013-01
1	2013-06
2	2013-08
40	2013-09
16	2013-10
64	2014-10
13	2015-07
22	2015-09
40	2016-11

Plan:

Remove these systems from BIRD during Januar
... Of these, 15 UNIH/CMS Systems!

40 Newly purchased systems from IT
+32 new WNs from UniHH/CMS to come this week



HTCondor Status

- > ... Unfortunately, break-through here
- > Bug in AFS credentials within HTCondor
- > Some important underlying renovation done
- > Contact with CERN batch team



- > We see that OpenAFS project has increased its activity
- > Still, unsafe future, ideas to move away
- > One possible alternative / temporary workaround: Test setup of commercial AFS implementation

Greetings from CERN AFS

From: Jan Iven <jan.iven@CERN.CH>
To: hepix-users@HEPIX.ORG

Dear HEPHX community,

this is to announce that we plan
to block external access to CERN
AFS space for a 24h test period
on

February 15th 2017, 09:00 (CET)

...

- > As a first reaction: Monitoring access on PAL, Bastion, NAF WGS, BIRD+Grid WNs
- > Daily email to affected users
- > Webpage with some information on workarounds
 - https://linux.desy.de/linux__desy_for_users/access_to__afs_cernch/
- > You can provide me with information about your VO
- > Future: DESY closes firewall to CERN AFS ???



CERN AFS usage

- > ROOT and some compilers most usage
- > Very little usage of personal areas seen
- > Some users have already changed to CVMFS
- > Question to SFT.cern.ch open about „HowTo“
- > Interestingly ATLAS & LHCb Grid jobs use CERN AFS ... GGUS ticket open

34346 /afs/cern.ch/sw/lcg/contrib
14631 /afs/cern.ch/sw/lcg/app
9891 /afs/cern.ch/sw/lcg/external
925 /afs/cern.ch/atlas/offline/external
641 /afs/cern.ch/atlas/software/builds
138 /afs/cern.ch/sw/IntelSoftware/linux
120 /afs/cern.ch/cms/slc6_amd64_gcc530/ext
61 /afs/cern.ch/atlas/project/HSG7
59 /afs/cern.ch/user/r/rlane
32 /afs/cern.ch/sw/lcg/releases
23 /afs/cern.ch/work/y/yuchen
14 /afs/cern.ch/cms/cafi/python
9 /afs/cern.ch/work/m/mstanesc
9 /afs/cern.ch/cms/slc6_amd64_gcc472/exte
5 /afs/cern.ch/sw/contrib/CMT
3 /afs/cern.ch/user/a/amorley
3 /afs/cern.ch/sw/XML/TL2015
2 /afs/cern.ch/user/m/mspanrin
2 /afs/cern.ch/user/a/anehrkor
2 /afs/cern.ch/cms/external/tex
1 /afs/cern.ch/work/p/pmogg
1 /afs/cern.ch/user/t/telenz
1 /afs/cern.ch/user/n/njeong
1 /afs/cern.ch/atlas/software/dist



Distro:

- > SL 5: End-of-live 31.3.2017!
 - NAF+BIRD is SL5 free. Thanks!

- > SL 6: Entering „Production Phase 3“ in 10.5.2017 / EOL 30.11.2020
 - „... New functionality and new hardware enablement are not planned...“
 - Think about migrating away from SL 6!!!!

- > EL7: No WGS ... But: qrsh -l os=el7
 - ~ 20 WN with EL7 available
 - Please test (and use)!



> ATLAS dCache Upgrade 24.1.2017 10:00 - 25.1.2017 18:00

- Database migration which is time consuming
- Many defective hardware parts to be replaced

> Naf-helpdesk@desy.de

- Is still the main entry point for normal users
- Rethinking internal ticket handling: More a „fast dispatching“ regime

> Consequences

- Tickets might be dispatched earlier to corresponding support unit ... Also naf-VO-support
- UCO will do follow-up ... Vos might want to think about using RT for their support list
- VO experts should use dedicated support units directly