

NAF User Committee April 2011

NAF Status Report

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NUC, 13.4.2011

AFS problems (1)

- > Ongoing subject of discussion and investigation within NAF operators
- > Understanding of source problem is rather advanced: We think we know the code changes that induced (most of) the problems
 - Reverting back to an older version no option, patching AFS ourselves really no option
 - Debug output requested by developers cannot be produced: Debug tool hangs in case of problems
- > You ask: “How often does this occur? Who is affected?”
 - We cannot answer this. To the best of our knowledge, we have nothing we can trigger on to tell us when this happens. Basic AFS monitoring not conclusive.
 - The best report is still user reporting troubles. Then we know. Often, we can only say “Thank you for your report, now it works again.”
 - We are working on best effort on different edges. This takes time...
 - One of these things is monitoring ... see later
 - This is a really unfortunate situation ... but we cannot change it at the moment, and need your cooperation.



AFS problems (2): Two concrete examples from ATLAS

- > #374939: Investigation with a test setup (dedicated AFS server for a few volumes + dedicated IN)
 - Planning of a special setup machine: Find HW, install SW, test installation...
 - Now (almost) finished – together with Peter v.d.R will try to find a time slot for performing investigations
 - More details later
- > #380798: Report of AFS outage
 - First answer after eight minutes
 - Question for more information could not be answered (see previous slide why)
- > ... We see fewer problem reports from CMS. Whatever that means.



Current status:

> Monitoring of the server:

- Online status, load, IO, network, ...

> Monitoring of the AFS services

- Responsiveness of AFS service ports
- Database server & file server

> Monitoring of fileserver specifica

- #active threads, unprocessed requests, corrupts packages, resends, ...
- General logging info

> Availability of services and filesystem

- Directly (via NAF AFS request) and indirectly (login,...) of selected volumes

Future:

- > Installation of AFS debug/quarantine server
 - Allow for detailed tracing of single problematic jobs
 - Offers the possibility to raise verbosity of server (on production server, too much info in real life to process)
 - Is a special setup, needs preparation
- > Thinking about external support, as own manpower not sufficient
 - Have to solve costs and general procedure first
- > Have regular contact with developers in order to have them solve the underlying problem in the source code

Modifying SGE behavior

- > Via Job Submission Verifier
- > Current Status
 - Thomas Finnern has done rewrite in Perl
 - Waiting for input from experiments
- > From our side, we could enable it within short



ATLAS Request for NX/VNC

- > Written request from 9.2.2011 from ATLAS to NAF
- > NX: speed up X connections (e.g. for ROOT&PROOF) over low bandwidth/ high latency networks
- > VNC: Desktop sharing: Users at different institutes can work together
- > NAF statement: We understand the use case. We are currently not in a position, in which we could fulfill these requests
 - Technical limitations: Examples: NX is not stable enough to be deployed and used on a large basis – set aside the interplay with gsissh.
 - Support limitations: Especially VNC will bring a huge quantity of new products to the NAF (KDE, Gnome, ...). No support structure available, and with current manpower situation not feasible.
 - General manpower limitations: Developing, installing and supporting these products (or similar ones) not feasible with current manpower situation.



Issues that made it to naf-announce

- > Today morning: Upgrade of glibc (security issues), followed by the release of long standing updates
 - Including upgrade to 1.6. version of SVN.
- > 24.3 20:00 – 25.3 ~9:00: Host certificates of KDC no longer valid, and new ones in bad format
 - Installed monitoring to prevent this (at least the first part) in future
- > 22.3. 6:00-9:00: Network intervention, used to reboot IN and activate new kernel
 - Also enabled the new login VMs.
- > 10.3. 8:00-10:00: Upgrade of AFS server: No noticeable interruption



(Some) other problems / selection from tickets

- > Batch monitoring: RRD troubled, hence accounting plots temporarily uncomplete
 - Fixed
 - ... and fixed at the same time a problem with bad counting of multi-core jobs
- > Some kswapd problems observed
 - ... seems to have vanished with Kernel upgrade
- > Question: Do users get an email when their account expires?
 - Answer: Yes, they do.

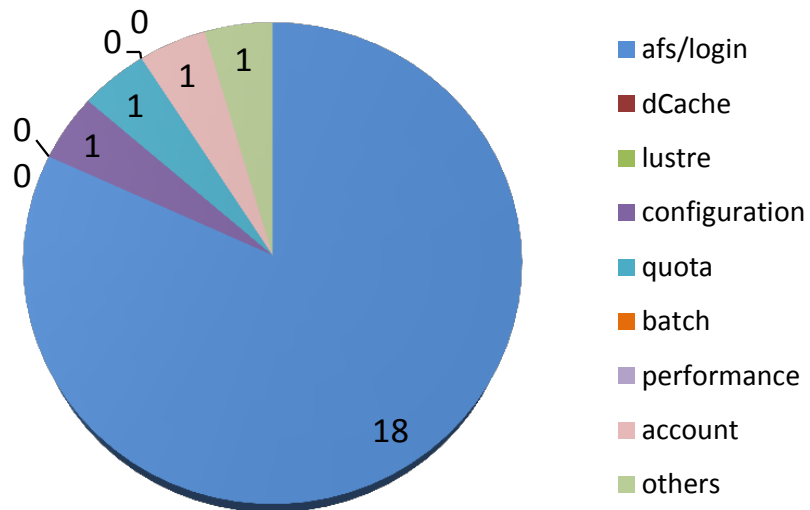


Naf-helpdesk@desy.de (1.3. – 31.3.2011) (Benjamin Kahle)

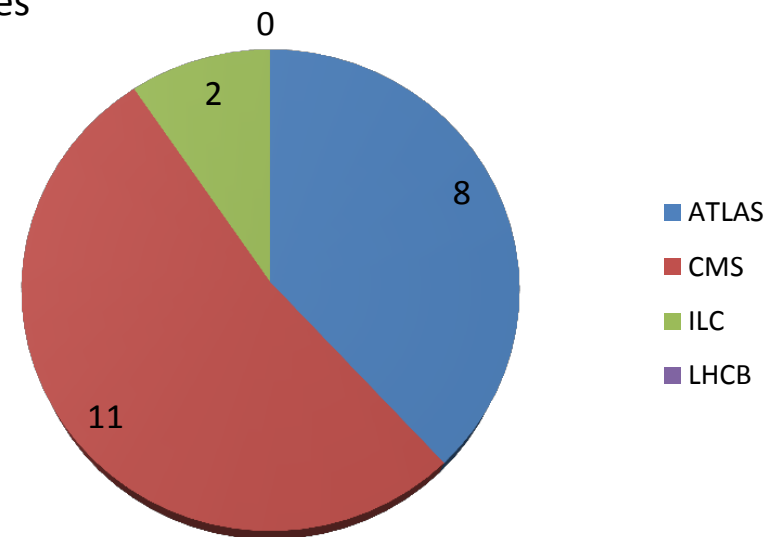
22 Tickets in total

Dominated by AFS problems
and a problem with host certificates

Category of Requests



Requests by Experiment



Date/Category of Requests

Problems with host
certificates

