

National Analysis Facility

The National Analysis Facility (NAF)

- some questions to YOU what you need / like / want

... much time for discussions ... interrupt at any given moment!

... and speak to us after the meeting / at dinner / tomorrow / by email!

Disclaimer: Not all your wishes will come true



[Yves Kemp](#), Martin Gasthuber, Andreas Gellrich, Birgit
Lewendel, Christoph Wissing + Andreas Haupt
TeraScale Alliance Workshop 2011 – 8.12.2011 Bonn

dCache: Main data workhorse for the NAF and Grid

- > The main data store - has proven to be very reliable and well performing
 - Optimizing performance through analyzing and tuning – together with experiments



> Question to the Audience

- For those that use both Lustre* and dCache: When and why do you use which one?
- Would a real mount for dCache help you? Read-Only? Read-Write?

*or whatever successor to Lustre will come

Additional Storage in the NAF

- > The additional Fast File System in the NAF (Lustre): Easy and fast access for ~10% of the data
- > The additional Global File System in the NAF (AFS): Easy and global access for ~0.1% of the data (mainly code, histograms and the like)
- > Questions to the Audience:
 - Who uses Lustre at the NAF? What for? How often? Change rate of data?
 - We have dCache and AFS. Do we need something inbetween?
 - Which NAF AFS resources do you use **outside** of the NAF?
 - Who has left the NAF because of AFS and Lustre instabilities ;



Geographical setup of the NAF

- > Idea 2007: Data distributed over the two DESY sites Hamburg and Zeuthen – distribute the NAF over the two sites
- > Lessons 2011:
 - Network latency, bandwidth and WAN reliability issues
 - Only ATLAS data is distributed – CMS, LHCb and ILC data either in HH or ZN
- > Question to the Audience:
 - Who has jobs that need HH and ZN data at the same time?
 - CMS, ILC and LHCb: Is your data really concentrated at one site?
 - ATLAS: Is there an internal organization (e.g. Physics Groups) that could be used to concentrate needed data at one site?



NAF interactive experience

- > IT world has changed since 2007:
 - Better networks, general and mobile availability
 - More graphical tools for analysis and code development used
- > Problem: gsissh with certificates and login process make usage of tools like NX, VNC or mobile devices difficult or even impossible.
- > Questions to the Audience:
 - Who would need additional access methods then ssh+terminal?
 - Could you live with traditional login using with Password/Kerberos?
 - Who would like to use Smartphones / Tablets to work with the NAF?
What for?



Group experience

- > TeraScale Alliance has brought together people from different institutes
 - People from different institutes work together – and use the NAF



- > Question to the Audience:
 - How can we help groups working together?
 - What collaborative tools are needed which are not there?
 - Do you need additional data exchange methods?

User support – and adjacent considerations

> User support at different levels:

- First Level support from IT – naf-helpdesk@desy.de
- Second Level support from IT – can be contacted by experiments experts
- Support from experiment experts – naf-VO-support@desy.de

> Question to the audience:

- Is this repartition always clear?
- What response time do you expect? Which response at which stage?
(Compared also to other facilities you use)



NAF Long-Term Future

- > **Clear commitment from DESY: We will continue the NAF!**

- > 2012 will be the year of modernizing the NAF – **Thank you for your input!**

- > Discussions will go on within providers, and between providers and user representatives in the NUC

- > **Contact us at any time! Contact your NUC representatives!**
 - ATLAS: Wolfgang Ehrenfeld, Marcello Barisonzi
 - CMS: Hartmut Stadie, Andreas Nowack
 - ILC: Shaojun Lu, Steve Aplin
 - LHCb: Alexey Zhelezov, Johan Blouw

