

# CMS – NAF Report

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## General Remarks

- Quick tour through 3 institutes collecting NAF feedback
- ~15 people, all diploma students or beyond (most doing analysis)

## Outcome

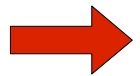
- Almost 100% aware of the NAF
- ~50% do have a NAF account

## Feedback

- In general: positive feedback
  - NAF works fine (as expected)
  - NAF supports general use cases
  - Issues if any solved quickly (accounts, AFS scratch space)
- What are the benefits of using the NAF?!?  
especially asked by 50% w/o NAF account

## Overview

- Many have used the NAF test-wise or during workshops
- More and more users use the NAF for (parts of) the full analysis chain:
  - AFS SCRATCH: CMSSW workarea & developement
  - Lustre: storage of data with highly reduced information (AOD)
  - dCache: access & storage of large datasets/skims
  - Interactive/Batch for FWLite or „final“ step of analysis
  - Grid: CRAB jobs for skimming / Intermediate analysis steps



Resource concept matches perfectly to use cases

**In general: interactive use of resources appreciated!**

- Benefits of NAF compared to e.g. RWTH setup not clear (Grid cluster with sufficient storage and CPU, desktop cluster with local batch)
- NAF used as backup when trouble with local site (e.g. storage)
- Awareness: Users benefit from NAF Grid resources via CRAB
- Important for users:
  - Inhouse expertise
  - People prefer to talk to someone (instead of mailing list)

## Future

- Several people plan to re-evaluate the benefit of running their analysis on the NAF

## Future plans:

- Some groups plan to move **CPU intensive jobs** to NAF resources
- Migration of more **end user analyses** to the NAF

## Summary of comments and wishes:

- **Access to the lustre** file system from the **grid**
- **Larger “/scratch”** partition, eventually with user or analysis group **quota**
- **Guaranteed disk space for datasets fragments** (1 block minimum) and analysis area (some TB per analysis group)
- **Guaranteed disk space per user**
- Currently, **mailing list** used **to report problems**. As mailing lists do not allow to inform about the status of the request  
→ **Ticketing system like GGUS** would be more transparent to the user.

**Users are very happy with the performance, availability and support at the NAF**

**Thank you!**

## Storage

- Maintenance of e.g. AFS Scratch size via Registry?
- Lustre space monitoring?
- Scratch space sufficient?
- Lustre: How to replicate datasets e.g. from dCache?
- Symbolic link from AFS Home to AFS Scratch

## User Interface

- Migration of workgroup server to SL5 should include SL5 UI  
CMS idea:
  - Use consistent set of software  
CMSSW (slc5\_ia32\_gcc434): end of November first release  
CRAB tested on slc5  
matching to SL5 User Interface (glite 3.2 only as 64 bit)
  - During transition periode: both software stacks required
  - Timeline for validation and transition still under discussion

## Batch

- Interactive Batch (SGE): environment variables  
e.g. like \$USER\_SCRATCH pointing to Lustre  
→ forcing users to have consistent directory structure
- Multi-core environment used for fitting
- 2 GB as memory resource default?
- Reservation of slots for quick interactive jobs possible?