

# Report from NAF User Committee

*Terascale Alliance Grid Project Workshop 2009*

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for the NAF User Committee  
DESY

# Content

**① NAF User Committee**

**② Experiments**

**③ Virtual IT Centre**

# NAF User Committee

Documentation: <http://naf.desy.de/nuc>

2 contacts from each experiment + NAF admins

**ATLAS** Jan Erik Sundermann, Wolfgang Ehrenfeld (chair)

**CMS** Carsten Hof, Hartmut Stadie

**LHCb** Johan Blouw (co-chair), Alexey Zhelezov

**ILC** Steve Aplin, Niels Meyer

**NAF** Andreas Gellrich, Kai Leffhalm

- since November 2008 two ILC members
- LHCb requirement paper in discussion

# News from NAF User Committee

NAF technical coordinators:

- Andreas Haupt (DESY-Zeuthen)
- Yves Kemp (DESY-Hamburg)

→ improved communication between NUC/experiments and NAF admins

Meetings:

- meetings in steady mode at the moment
- regular phone meetings: 2<sup>nd</sup> Wednesday each month, 1pm
- face-to-face meeting: May 2009 and November 2009 (annual Alliance workshop)
- NAF User Meeting at Aachen was a success!  
Next meeting planned for annual Alliance workshop, if around November 2009

# NAF Extension: Resources

Additional resources are always welcome!

- at the moment there is no real need for additional resources: CPU and dCache storage
- real data is needed for defining additional requirements
  - might be too late for this year funding
  - cosmics might help to estimate event size better
- new Lustre scratch space is set up at the moment
  - need to see how this is shared between experiments

# Status of the Experiments

**Status of the experiments:** ATLAS, CMS, LHCb, ILC

- every experiment is well set up  
(ATLAS and CMS early user, then ILC and LHCb)
- not very much interactive activity from CMS and LHCb
- CMS very active on NAF-GRID resources
- ATLAS main interactive user, then ILC

Still, batch system has free resources!

Comments:

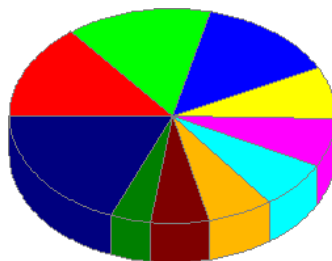
- fair share implemented but not fully effective as system is not full on average and some experiments are missing
- a few power users but around  $\sim 30$  active users per month (batch)

# Usage 2008

CPU time at interactive NAF 2008 by Project/User:



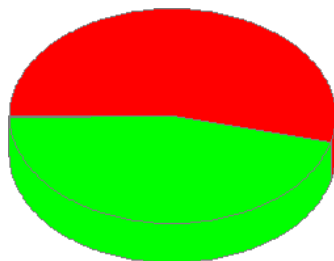
atlas:76%	ilc:23%
cms:0%	lhcb:0%
support:0%	



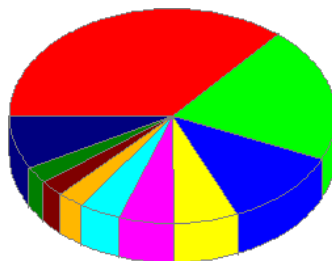
ilc1:14%	atlas1:14%
atlas2:14%	atlas3:8%
ilc2:7%	atlas4:7%
atlas5:6%	atlas6:6%
atlas7:4%	101 other:19%

# Usage 2009

CPU time at interactive NAF 2009 by Project/User:



atlas:54%    ilc:46%  
lhcb:0%    cms:0%  
support:0%



ilc1:36%    atlas1:20%  
atlas2:12%    atlas3:6%  
atlas4:5%    ilc2:4%  
atlas5:3%    ilc3:2%  
atlas6:2%    34 other:8%



# NAF as a prototype for of a VIC?

Difficult question!

What can we learn from the NAF for the Virtual IT Centre?

NAF services:

- login
- support
- ???

Experiments:

- tools
- data access
- support
- ???

# ATLAS Use Cases

ATLAS use cases (power user):

- physics fitting: `fittino`
- NLO cross section calculation
- private MC production: `AtlfastII`
- ntuple production

Data analysis is not the major activity at the moment (for obvious reasons), but people work on this.

→ difficult to learn about end user data analysis

At least people get used to work on the NAF.

# Why NAF?

Why are the (ATLAS) users working on the NAF?

- CPU and storage resources available
- easy to use (account, login, software, data, support)
- input data available
- experiment software up to date
- support of experiment software with site specific tools
  - available software
  - easy to set up (athena, ganga, root, UI, site specific tools)
  - data catalogue interface for local data
- AFS home directory

What is not very well working?

- data transfer to home institutes (experiment tools not easy to use, network connection seems slow and a bit unstable)

Similar things can be said for ILC.

# NAF → VIC

What can we use/learn from NAF?

- tools are important to get the users started and working
  - account registration
  - ATLAS: software setup
  - ATLAS: data management
- support and documentation is important
- enough resources are important
- good network is needed (even without WAN data access)