

Report from Operation

Kai Leffhalm, Andreas Haupt

On behalf of the Naf Operators for the NUC
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- > Storage
- > Action Items
- > Downtime
- > New Batch System
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Lustre space

General concept

- > Quotas are supported by lustre (at least after the downtime)
- > They are not set by default
- > Quotas can be set to disable writing until data is deleted by a misbehaving user
- > General quotas can be enabled if many users are misusing the space
- > Setting quotas is done by VO admins

Automatism

- > No automatic deletion will be implemented:
 - It takes too much manpower to make it absolutely secure
 - It is very difficult to prevent clever users from bypassing the mechanism
- > No automatic quota in the beginning as this would prevent free and temporary usage of a big file system



Lustre space cont.

Tools

> Lustre Reports:...

- ...about disk usage from each user will be available to VO admins
- ...will report total used space and available space for a certain file system
- `sudo /usr/sbin/lustrereportquota <vo> <path to filesystem>`

> List own quota is possible for each user

- `/usr/sbin/lustregetquota <vo> <user> <path>`
- **Example:**
`/usr/sbin/lustregetquota atlas leffhalm /scratch/zn/lustre/atlas`

> Set quota is possible for VO admin

- `sudo /usr/sbin/lustresetquota <vo> <user> <path> <hard quota>`
- **Example:**
`sudo /usr/sbin/lustresetquota atlas leffhalm /scratch/zn/lustre/atlas 500G`



Report example

```
sudo /usr/sbin/lustrereportquota atlas /scratch/zn/lustre/atlas
```

```
⋮
34926676    524288000    leffhalm
 4393484         0      efeld
⋮
-----
Total given Quotas in kB: 524288000
-----
UUID bytes Used Available Use% Mounted on
filesystem summary:  19.9T 9.2T 9.7T 46% /scratch/zn/lustre/atlas
```



afs scratch space

Automatic scratch space

- > It is planned to give every user 10GB afs scratch space, which is secure as all afs space but without backup
 - ⇒ This should ease the use of afs scratch space
- > This space should probably be mounted in `~/scratch`
- > Might have some problems with already existing links there
- > Change for existing users should be done by NAF operators
- > Still group space available to extend space for special tasks



Action Items

Solved Items

- > Documentation was updated and reviewed (W.E.)
 - advice on user files storage
- > ini glite32:
 - exists
 - Documentation still not available, will done soon
 - Time plan for changing the default?
- > Batch: memory default is 1.5GB

Unsolved Items

- > cmt problem \Rightarrow offline discussion
- > sysnames \Rightarrow offline discussion
- > SL5 migration still running
- > multicore batch job monitoring
- > group profiles



Downtime

Planned Changes

- > Network maintenance in Zn
- > Reconfigure GbE-Interfaces of HH OSS (stability)
- > Activation of lustre quotas in HH
- > Firmware updates (especially HP hardware)
- > Kernel updates (all systems)
- > If OK for experiments: default login machine is SL5
- > Lustre 1.8.2 update - if already available (which is not the case) and tested



New Batch System

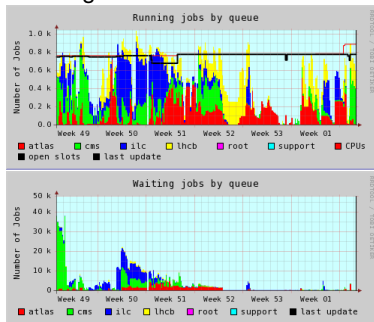
SGE6.2

- > SGE 6.2 is now installed on test machines
- > After login just change to tcx044 (submit host) and submit jobs or start interactive sessions
- > There are 128 cores dedicated to this for testing
- > Please test it and report any problems
- > Perhaps some users can be asked to make a test. . .
- > It will get the default after the downtime

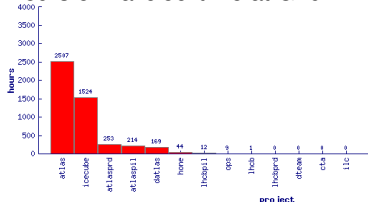


Usage Plots

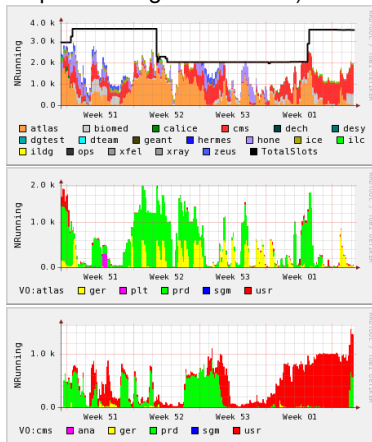
Running Jobs at NAF batch:



Hours of wallclocktime at Grid Zn:



Running Jobs at grid in HH (with emphasis on german users)



Web Statistics

Visitors

339 unique visitors per month last year

Most viewed Pages

Webpage	#accesses in Dec. 09
/general_naf_docu/working_with_the_local_batch_system/	49
/general_naf_docu/naf_storage/	65
/general_naf_docu/naf_overview/	56
/general_naf_docu/naf_storage/working_with_dcache/	81
/general_naf_docu/interactive_login/	64
/general_naf_docu/naf_account/	50
/general_naf_docu/faq_and_support/	42



Tickets

Naf-helpdesk

- > Only four tickets send last month
- > All send to the experts

Naf

- > Nine errors in total, four from helpdesk
- > All with different subjects
- > Most of them helped to fix things

