

ATLAS Computing @ RZG

Status

Stefan Kluth, 13.03.06

RZG Status

- Hardware
 - new Maxtor MaxLine III 300 GB disks
 - two broken disks so far ...
 - one fileserver broken, returned for repair
- Software
 - OS Suse SLES 9
- Operation
 - dedicated interactive node: s01
 - dedicated short queues on s01
 - still intermittent afs problems

LCG @ MPI/RZG

- Basic installation ready
 - Thanks to Ariel, Alberto and Denis!
 - interface LCG ↔ SGE + afs
 - CHEP 2006 poster
- For ATLAS need site qualification now
 - ongoing work
 - Sven Hermann and Ariel (FZK), Alberto (RZG), SK



Integration of an AFS-based Sun Grid Engine site in a LCG grid

Objective:

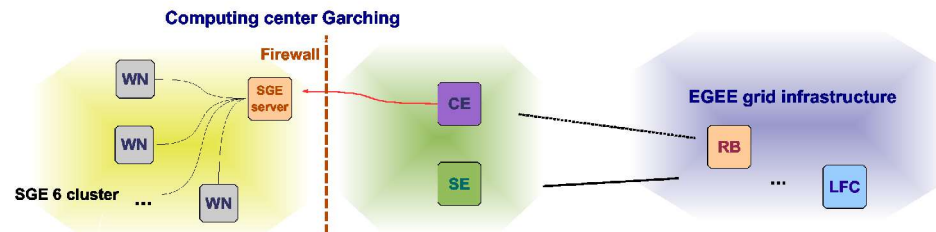
- Integration of existing Linux Cluster with
 - SUSE Linux
 - Sun Grid Engine batch system
 - AFS File System
 - operated by a Computing Center in the EGEE/LSG infrastructure

Problems:

- LCG supports only Torque/PBS, LSF, Condor
- The computing center does not change its standard tools
- Integration of two security frameworks
 - › GSI
 - › Kerberos

Approach:

- use Globus2 SGE-jobmanager & infoprovider developed by The London e-Science Centre*
- adapt it for AFS and LCG-2.6



- Existing cluster
- New users added (poolaccounts)
- CE authorized as SGE client
- No need to deploy software in the WNs:
 - › middleware in AFS, relocatable tarball installation of LCG 2.6.0

- Can be remote location
- Secure connection
- Acts as LCG gateway to cluster
- Poolaccounts get KRB5 tokens via keyfiles

Extra fixes:

- JobManager needs "use filetest 'access';" (Globus does not know about ACLs)
- Fix for job_script_name in SGE jobmanager
- Force bash usage in SGE wrapper scripts, source grid_env.sh
- Fix quoting in globus-job-manager.conf

Conclusions:

- restriction to SciLinux prevents LCG dissemination
- presented approach circumvents this obstacle
- SGE-AFS clusters can be integrated within the LCG Grid

* <http://www.lsc.ic.ac.uk/projects/SGE-LCG.html>



CHEP 06 poster

GOC DB

Applications Actions GOC Database Download Mana Mon 13 Mar, 09:08 us

GOC Database 2.0 - Mozilla

File Edit View Go Bookmarks Tools Window Help

https://goc.grid-support.ac.uk/gridsite/gocdb2/ind Search

Home Bookmarks


Max-Planck-Institut fuer Physik, ... GOC Database 2.0 The Data Analysis BriefBook

- Check global monitoring status
- Edit your personal profile

DB system and web interface designed and maintained by [Matt Thorpe](#) (Grid Operations Centre, RAL) 2004-2005

MPPMU

Status:	Uncertified
Type:	Production
ROC:	GermanySwitzerland
Site local time (CET):	09:05 (13/03/06)
Official Name:	Rechenzentrum der Max-Planck-Gesellschaft am Max-Planck-Institut für Plasmaphysik
Map Name:	MPI-RZG
Institution / Department Homepage:	www.rzg.mpg.de
Site email:	lg-support@rzg.mpg.de or alberto.baragatti@rzg.mpg.de
Site telephone:	+49 89 32354 468 or +49 89 3299 1366
Emergency telephone:	+49 89 3299 2176
CSIRT email:	lg-security@rzg.mpg.de
CSIRT telephone:	+49 89 3299 2175
Operational hours:	9:00 - 17:00 (CET)
GIIS URL:	klap://grid-ce.rzg.mpg.de:2170/mds-vo-name=MPPMU,o=grid
Organisation:	LOG2

 **MONITORING: ON** [Edit site information](#)

GOC monitoring

The screenshot shows a Mozilla browser window with the address bar containing `http://goc.grid.sinica.edu.tw/gstat/MPPMU/`. The page title is "GStat: 07:57:59 03/13/06 GMT". The main content area displays the following information:

- MPPMU Status: OK** (with a green bar and "goc graphs" link)
- GOCDB Configuration information:**
 - status: Uncertified, type: Production
 - giis url: `ldap://grid-ce.rzg.mpg.de:2170/mds-vo-name=MPPMU,o=grid`
- To test site GIIS: `ldapsearch -x -H ldap://grid-ce.rzg.mpg.de:2170 -b mds-vo-name=MPPMU,o=grid`
- BDII Node Check:** . (with "alert_history" link)
- CERN SE Check:** . (with "alert_history" link)
- No BDII Node to check in GOCDB
test: `ldapsearch -xLLL -l 15 -h bdihostname -p 2170 -b 'GlueSEUniqueID=lxn1183.cern.ch,mds-vo-name=CERN-C`
- GIIS Perf Check: ok** (with "alert_history" link)
- Performance metrics table:

Query Response Time (ms):	2742.7 - OK
GIIS Entries Found:	16 - OK
GIIS Old Entries Found:	0 - OK

At the bottom, there is a partially visible line graph with a y-axis labeled "ms" and a value of 20.

Site Functional Tests

Applications Actions Site Functional Tests Download Manager Mon 13 Mar, 09:14 us

Site Functional Tests report - Mozilla

File Edit View Go Bookmarks Tools Window Help

https://lcg-sft.cern.ch/sft/sitehistory.cgi?site=grid-ce.rzg.mpg.de Search

Max-Planck-Institut ... GOC Database 2.0 SPIEGEL ONLINE - N... GStat: 07:57:59 03/... Site Functional Test...

Colours definition

SD	Scheduled downtime	#a3a3a3
JL	Job list match failed	#aab3ff
JS	Job submission failed	#f4876b
CT	Critical tests failed	#f9d48e
NT	Non-critical tests failed	#f2f98e
OK	OK	#b2f98e

votag	VO Tag management
lfcrep	lcg-rep to "central" SE (LFC)
lfcdel	lcg-del (LFC)
csh	CSH test
lfcrm	Replica Management using LFC
swdir	VO software directory
lfccr	lcg-cr to local SE (LFC)
bi	BrokerInfo
js	Job submission

VO dteam

Test date	St.	js	ver	wn	ca	rgma	bi	csh	rm	votag	swdir	rgmasc	lfcrm	lfccr	lfccp	lfcrep	lfcdel	
2006-03-02 17:36:04	CT	O	2.6.0	I	O	X	O	O	X	W	X	X	??	X	X	X	X	??
2006-03-02 16:30:35	CT	O	2.6.0	I	O	X	O	O	X	W	X	X	??	X	X	X	X	??
2006-03-01 20:19:49	OK	O	??	??	??	??	??	??	??	??	??	??	??	??	??	??	??	??
2006-02-28 08:34:57	JS	X	??	??	??	??	??	??	??	??	??	??	??	??	??	??	??	??
2006-02-28 07:51:46	JS	X	??	??	??	??	??	??	??	??	??	??	??	??	??	??	??	??

Rows displayed: 5