



GridPP
UK Computing for Particle Physics

Quarterly report

NorthGrid

Quarter 2 2005

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Current site status data

Site	Service nodes	Worker nodes	Local network connectivity	Site connectivity	SRM	Days SFT failed	Days in scheduled maintenance	Security incidents this quarter which impact on Grid
Lancaster	SL3 LCG2.4.0	SL3 LCG2.3.1	1 Gb/s	1 Gb/s (prod) 290 Mb/s ukLight	yes	22	23	0
Liverpool	SL3 LCG2.4.0	SL3 LCG2.4.0	1 Gb/s	1 Gb/s	no	0	92	0
Manchester	SL3 LCG2.4.0	SL3 LCG2.4.0 Patched	100 Mb/s	1 Gb/s	Yes	35	18	0
Sheffield	SL3 LCG2.4.0	SL3 LCG2.4.0	1Gb/s	1Gb/s	no	29	0	0

- 1) Local network connectivity is that to the site SE
- 2) It is understood that SFT failures do not always result from site problems, but it is the best measure currently available.



Site	Promised			Actual		
	Integrated kSI2K hours until this quarter	CPU (kSI2K)	Storage (TB)	Integrated kSI2K hours until this quarter	CPU (kSI2K)	Storage (TB)
Lancaster	1422632	510	86.7	1013385.6	464.6	34
Liverpool	6635640	605	80.3	0	0	0
Manchester	9807168	1340	372.5	831268	40	12
Sheffield	1959990	182.5	3	827741	244.5	2
Total	37825430	2637.5	542.5	2672394.6	749.1	48

- 1) The GridPP-Tier-2 MoUs made reference to integrated CPU over the 3 years of GridPP2. Under the “Promised - integrated kSI2K hours until this quarter” an estimate is provided of what the Tier-2 would have expected to provide to this quarter on the basis of planned installations. “Static kSI2K” shows what would currently be expected if all purchases planned to this quarter had been made and implemented. The actual columns show what has been delivered.



Site	Estimated for LCG			Currently delivering to LCG		
	Total job slots	CPU (kSI2K)	Storage (TB)	Total jobs slots	CPU (kSI2K)	Storage (TB)
Lancaster	429	440	81.8	392	464.6	34
Liverpool	713	575	80	0	0	0
Manchester	1200	1200	360	97	40	0.5
Sheffield	226	182.8	3	163	240	2
Total	2568	2397.8	524.8	652	744.6	36.5

1) The estimated figures are those that were projected for LCG planning purposes:

http://lcg-computing-fabric.web.cern.ch/LCG-Computing-Fabric/GDB_resource_infos/Summary_Institutes_2004_2005_v11.htm

2) Current total job slots are those reported by EGEE/LCG gstat page.



VOs supported by site

Site	ALICE	ATLAS	BABAR	CMS	LHCB	SIXT	DZERO	Total
Lancaster	1	1	0	1	1	0	0	4
Liverpool	0	1	0	0	1	0	0	2
Manchester	1	1	1	1	1	0	1	6
Sheffield	1	1	0	1	1	1	0	5
Total	3	4	1	3	4	1	1	--

0 => not supported 1 => supported
dteam not listed

CPU used per VO over quarter (KSI2K hours)

Site	ALICE	ATLAS	BABAR	CMS	LHCB	DZERO	Total
Lancaster	0	1	0	0	2385	0	2386
Liverpool	0	0	0	0	0	0	0
Manchester	2	176	2918	0	40	480	3616
Sheffield	4284	10416	0	204	417	0	15321
Total	4286	10593	2918	204	2842	480	21323

1) Information currently available from APEL

http://goc.grid-support.ac.uk/gridsite/accounting/tree/gridpp_view.php - please note these pages are still under development!

Nb. This could be automated with an SQL/R-GMA query



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Usage by VO for Tier-2

Jobs	Apr 2005	May 2005	June 2005
alice	0	0	301
atlas	577	6524	5157
Babar	38	57	3818
Cms	0	4	40
Dzero	85	2	0
lhcb	1532	2064	804

CPU (KSI2K hours)	Apr 2005	May 2005	June 2005
alice	0	0	4286
atlas	1329	3427	5487
babar	134	22	2762
Cms	0	0	204
Dzero	480	0	0
Lhcb	42	1754	1046

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Storage resources in use per VO (TB)

Site Storage	ALICE	ATLAS	BABAR	CMS	DZERO	LHCB	Total
Lancaster	0	0.1	0	0	0	0	0.1
Liverpool	0	0	0	0	0	0	0
Manchester	0	0.07	0	0	0	0	0.070
Sheffield	0.004	0.17		0	0	0	0.174
Total	0.004	0.34	0	0	0	0	

*Difficult to provide this for the period but we can at least show *current* usage. Numbers need to be provided by site Admins (> du - sh) but this will change under dCache.*

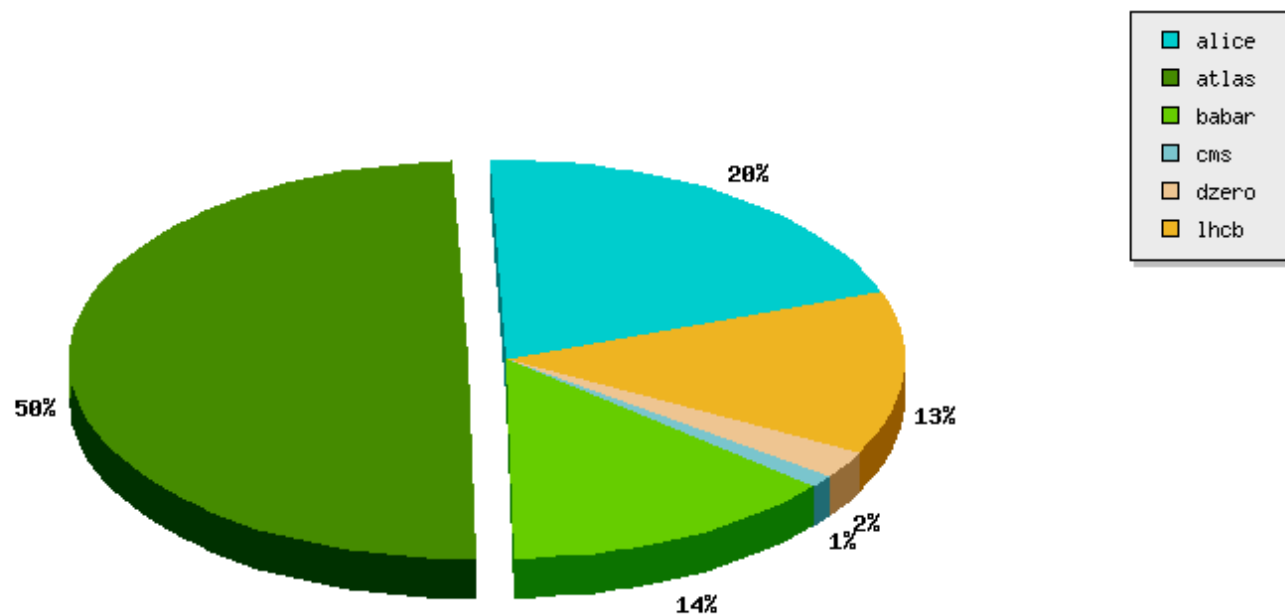


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CPU Usage by VO (KSI2K hours)

Plot for NorthGrid (Apr 2005 to Jun 2005)



<http://goc.grid-support.ac.uk/gridsite/accounting/custom.php>

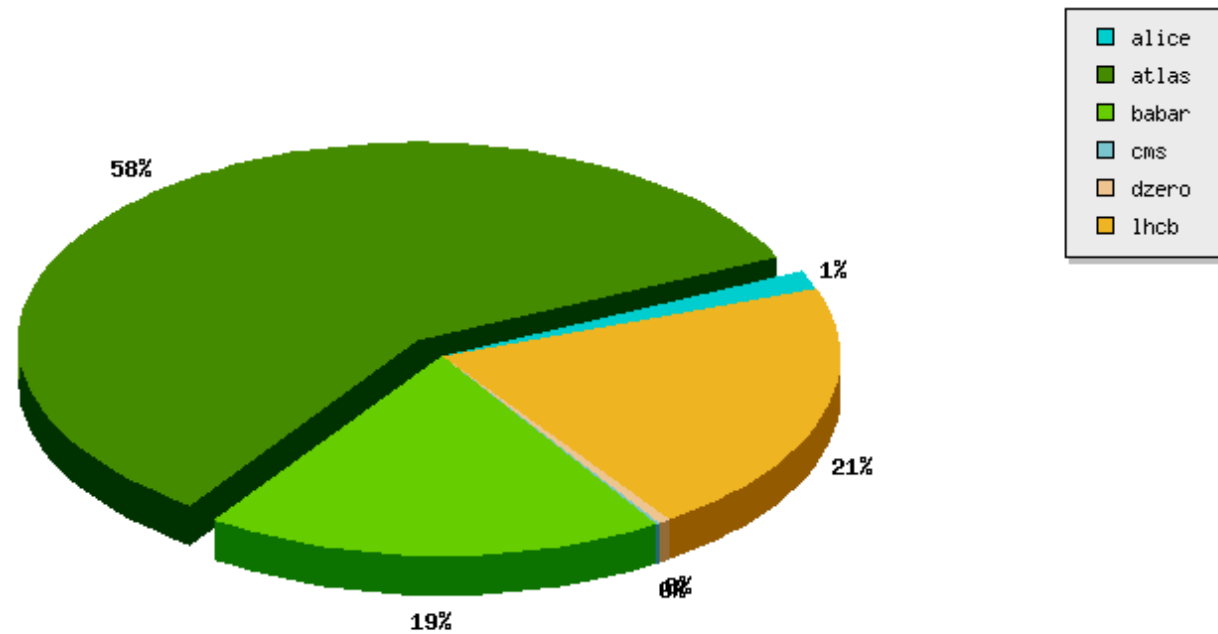
30th June 2005

Quarterly report: NorthGrid



Usage by VO (jobs)

Plot for NorthGrid (Apr 2005 to Jun 2005)





Site	Successes	Problems/Issues
Lancaster	<ul style="list-style-type: none">• Installing new cluster, preparing for SC3	<ul style="list-style-type: none">• Dcache setup.
Liverpool	Filled post	Manpower, communication with Tier2
Manchester	Setting up dcache, placing the order for the new farm. Filled the second post. Installed VOMS server.	
Sheffield	-Successfully running the cluster with very few problems.	



<p>General risks</p> <ul style="list-style-type: none">•Insufficient hardware support effort•Inability to recruit suitable staff•At-risk periods due to vacations etc	<p>Mitigating actions</p> <ul style="list-style-type: none">•Close working with PProgs and between groups
<p>Institute specific risks</p> <ul style="list-style-type: none">•Contention between service and Service Challenge goals (Lancaster)•Lack of resources online due to inconstant support (Liverpool)	<p>Mitigating actions</p> <ul style="list-style-type: none">•Separate SEs•Keep communication open all the time, train new post to be independent.

- 1) Here "risk" is any significant event (which has a reasonable chance of occurring) that could potentially prevent the Tier-2 from meeting its project commitments. For example, not getting expected funding to fund equipment/infrastructure is a reasonable risk whereas loss of all staff is not.



- Lancaster to perform throughput tests and commission experiment network and file transfer usage in SC3
- Liverpool to be restored to LCG availability
- Delivery of Manchester resources and commissioning
- Upgrade sites to LCG-2_6_0 within 3 weeks
- Install SRM at 3 sites
- Extend support to non-LHC VOs.

Objectives and deliverables for last quarter

Objective/deliverable	Due date	Metric/Output	Status
Tier-2 hardware support posts all filled	30 th July 2005	4.5/4.5 filled	Done
Find out network topology	30 th April June 2005	Evaluation of the situation	Done

Objectives and deliverables for next quarter

Objective/deliverable	Due date	Metric/output
Technical co-ordination between sites	30 th Sept 2005	1 TB/month - met
>= 1 Management Board a quarter	30 th Sept 2005	>= 1 Management Board/quarter
Effective monitoring	30 th Sept 2005	Entries in GANGLIA, published
One site in SC3 throughput tests on UKLight	31 th Aug 2005	3x1GB files/hour over 2-3 days
Updating sites to LCG-2_6_0 within 3 weeks from release	10 th Aug 2005	Gstat tests
Extending support to additional non-LHC VOs.	31 th August 2005	Gstat tests
Installing SRM at 3 sites	30 th September 2005	Gstat tests



For Tier-2 coordinator:

Area	Description
Talks	HEP SYS MAN meeting on VOMS
Workshops	Networking for non Networkers
Conferences	Deployment, Tier2, Dteam meetings
Publications	

Tier-2 coordinator effort	Comments
3 Months	



- Tier2 resources that were expected are slowly getting into place
- Communication and cooperation between sites are still a problem but it's improving
- Liverpool is still down in the last two weeks of the quarter there has been enough activity to let hope that they will go into LCG.
- Sheffield is doing very well
- Manchester is getting the big farm
- Even if not all directly involved in the service challenges sites should start to install software and get acquainted with it.
- Given RB problems filling fabrics, can GridPP act in a way to improve this?
- Need for a model by which the distributed Tier-2 acts as a collective entity
- How will the switch from SJ4+ESLEA to SJ5 be managed?