



GridPP
UK Computing for Particle Physics

Quarterly report

SouthernTier-2

Quarter 02 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
Birmingham	SL303 LCG2.4.0	SL303 LCG2.4.0	100Mb/s	1Gb/s	No	10	1	0
Bristol	SL304 LCG2.4.0	SL304 LCG2.4.0	100Mb/s	1Gb/s	No	Site not yet up	0	0
Cambridge	SL303 LCG2.4.0	SL303 LCG2.4.0	100Mb/s	2.5Gb/s	No	61	7	0
Oxford	SL304 LCG2.4.0	SL304 LCG2.4.0	100Mb/s	2.5Gb/s	No	27	5	0
RAL PPD	SL303 LCG2.4.0	SL304 LCG2.4.0	1Gb/s	2Gb/s	No	28	7	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)
Birmingham		196	9.3		196	9.3
Bristol		38	1.9		38	1.9
Cambridge		32	4.4		32	4.4
Oxford		119	18.5		119	18.5
RAL PPD		151	11.8		98	5.8
Total		624	45.9		483	39.9

- 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.
- 2) RAL PPD delayed purchase due to lack of use earlier in year.



Site	Estimated for LCG			Currently delivering to LCG		
	Total job slots	CPU (kSI2K)	Storage (TB)	Total jobs slots	CPU (kSI2K)	Storage (TB)
Birmingham				40	28	0.35
Bristol				2	0.8	0.16
Cambridge				38	34.2	1.86
Oxford				74	66.6	2.91
RAL PPD				86	75.25	0.16
Total		200	7	240	204.85	5.44

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	BIOMED	CDF	CMS	DTEAM	DZERO	HONE	LHCB	SIXT	ZEUS	Total
Birmingham	1	1	1	1	0	1	1	0	1	1	1	0	9
Bristol	0	0	1	0	0	1	0	0	0	0	0	0	2
Cambridge	1	1	0	0	0	1	1	0	0	1	0	0	5
Oxford	1	1	0	0	1	1	1	0	0	1	1	1	8
RAL PPD	1	1	1	0	0	1	1	1	1	1	0	1	9
Total	4	4	3	1	1	5	4	1	1	4	2	1	

0 => not supported 1 => supported

Resources used per VO over quarter (KSI2K hours)

Site CPU	ALICE	ATLAS	BABAR	BIOMED	CDF	CMS	DTEAM	DZERO	HONE	LHCB	ZEUS	Total
Birmingham	15	3	371	65	0	111	8	0	53	5325	0	5951
Bristol	0	0	0	0	0	0	0	0	0	0	0	0
Cambridge	0	0	0	0	0	0	0	0	0	0	0	0
Oxford	0	2021	556	0	0	158	4	0	0	15085	1737	19561
RAL PPD	6507	2462	4910	0	0	4364	30	0	1395	18463	5816	48311
Total	6522	4486	5837	65	0	4633	42	0	1448	38873	7553	69459

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



Usage by VO for Tier-2

Data taken from goc accounting pages NormSumCPU (CPU hours normalised to 1KSPECint2000)

Jobs	April 2005	May 2005	June 2005
alice	0	0	880
atlas	928	1776	6923
Biomed	0	0	20
babar	432	345	1305
cms	4	562	702
dteam	615	4058	3258
dzero	1	3	4
hone	0	13	320
lhcb	443	5055	4396
zeus	0	4686	4972

April 2005

CPU	April 2005	May 2005	June 2005
alice	0	0	6522
atlas	674	747	3065
Biomed	0	0	65
babar		378	4597
cms	0	1012	3621
dteam	0	30	12
dzero	0	0	0
hone	0	45	1403
lhcb	246	26942	11685
zeus	0	3098	4455

Quarterly report: SouthGrid



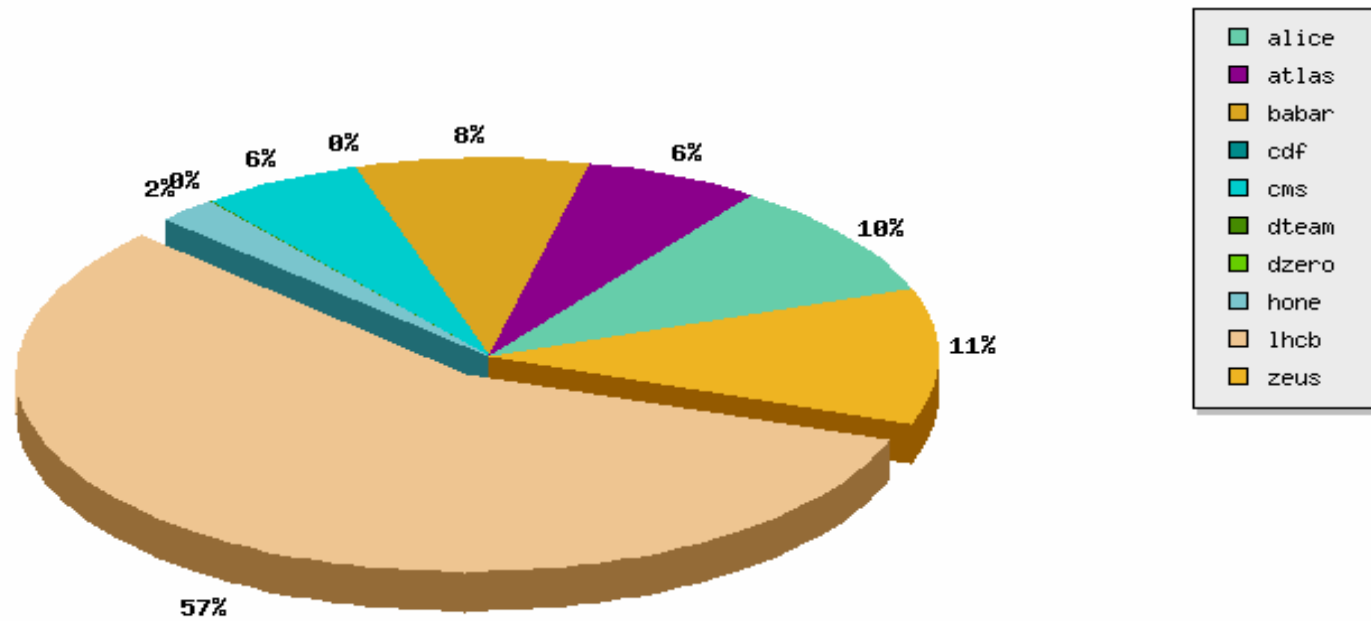
Storage resources in use per VO (TB)

Site Storage	ALICE	ATLAS	BABAR	CDF	CMS	DTEAM	DZERO	HONE	LHCB	ZEUS	Total
Birmingham	0	0.0027	0	0	0	0	0	0.000417	0	0	0.003117
Bristol	0	0	0	0	0	0	0	0	0	0	0
Cambridge	0	0	0	0	0	0	0	0	0	0	0
Oxford	0	0.0811	0	0	0	0.0000312	0	0	0.000033	0	0.081164
RAL PPD	0.000033	0.085	0.000525	0	0.000033	0.000261	0.000033	0.02461	0.000065	0.00071	0.11127
Total	0.000033	0.16637	0.000525	0	0.000033	0.0002922	0.000033	0.025027	0.000098	0.00071	0.195551

*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.*



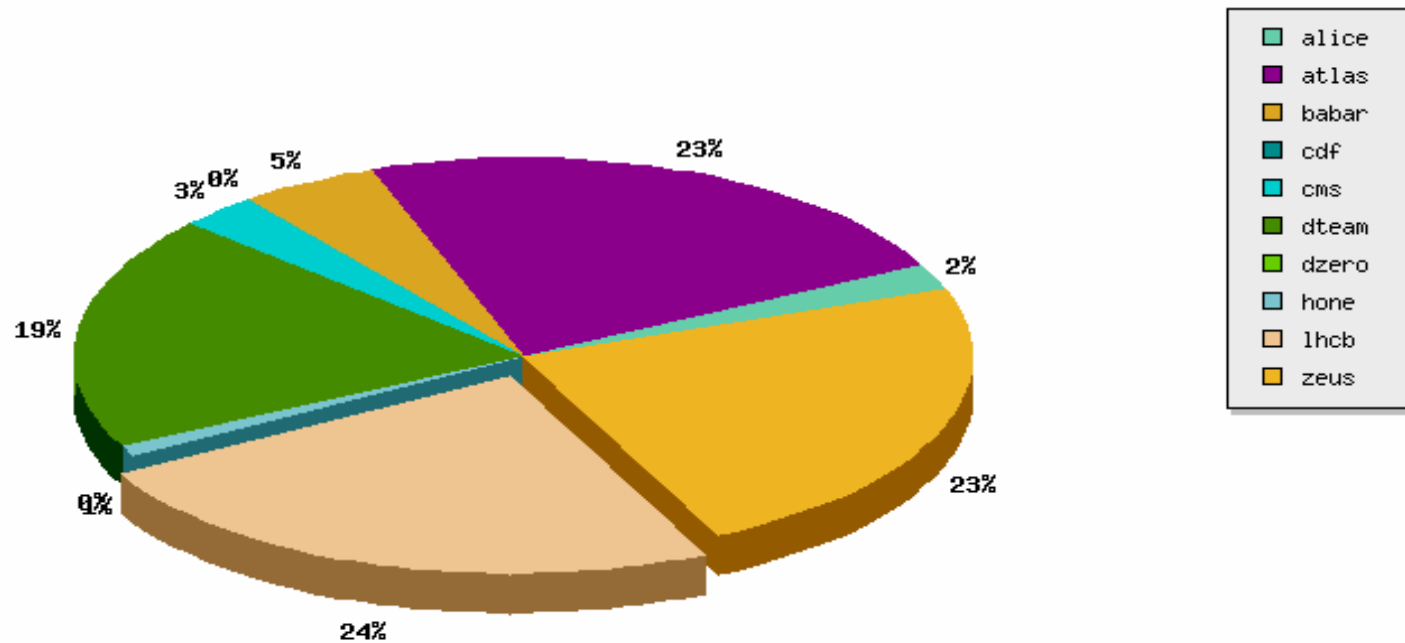
Plot for SouthGrid (Apr 2005 to Jun 2005)





Usage by VO (jobs)

Plot for SouthGrid (Apr 2005 to Jun 2005)





Site	Successes	Problems/Issues
Birmingham	<ul style="list-style-type: none">•Upgraded to 2.4.0	
Bristol	<ul style="list-style-type: none">•Finalizing the HP funded post•Recruited Sys admin on Rolling Grant	<ul style="list-style-type: none">•Lack of Manpower has hindered progress
Cambridge	<ul style="list-style-type: none">•Upgraded to 2.4.0•Integrated LCG cluster in to Cam Grid Condor cluster.	<ul style="list-style-type: none">•Still some ownership problems wrt to Condor users cf lcg pool uid's.•Apel Accounting does not yet support Condor
Oxford	<ul style="list-style-type: none">•Upgraded to SL 304•Installed LCG_2.4.0•New Sys Admin Started	
RALPPD	<ul style="list-style-type: none">•Upgraded to 2.4.0	Dcache test system h/w problems



<p>General risks</p> <ul style="list-style-type: none">•Lack of use by casual users. Feedback from jobs that go astray is not user friendly	<p>Mitigating actions</p> <ul style="list-style-type: none">•Need better training for users and more useable software.•Need to integrate UI's with Local clusters for ease of use.
<p>Institute specific risks</p> <ul style="list-style-type: none">•Cooling a big problem. Lack of adequate computer room space at Oxford•Slow progress on building of new computer room will delay upgrade of Oxfords resources.•Use of Condor at Cambridge prevents monitoring statistics??•Bristol Manpower•Lack of Bristol resources	<p>Mitigating actions</p> <ul style="list-style-type: none">• Some improvements to AC and Power in current Computer Room is alleviating the problem•SRIF Funding now secured, but still will take time.•Condor support to be added to APEL•Recruitment is completed•Local cluster will be used, SRIF funded eScience cluster to follow with luck



- Setup and purchase integration test bed for SouthGrid use
- Coordinate use of this cluster within UK Testzone
- Install LCG-2.6.0
- Support some non LHC VO's
- Investigate dcache at RAL PPD, then install at other sites starting with Birmingham.
- Possible new Hardware purchases.
- Start some inter site performance tests

Objectives and deliverables for last quarter

Objective/deliverable	Due date	Metric/Output	Status
All sites upgraded to LCG 2.4.0	28 th April 2005	All sites at 2.4.0	5/5 upgraded
Network connectivity upgrades to each site planned and agreed with GridPP network support	15 th June 2005		Birmingham will be connected to UKLIGHT this summer. Thames Valley MAN will be upgraded by November 2005
SRM deployment started	15 th March	At least 30% sites have SRM available	1 site has started installing dcache
April 2005	Quarterly report: SouthGrid		

Objectives and deliverables for next quarter

Objective/deliverable	Due date	Metric/output
Install LCG2.6.0 at all sites	Late July 2005	
Testing of disk-to-disk transfers in preparation for Service Challenge 4	31 st September 2005	
First sites to install SRM	31 st September 2005	
Support no LHC vo's	31 st September 2005	



For Tier-2 coordinator:

Area	Description
Talks	"SouthGrid Status report" - gridpp13 2005
Conferences	•Oxford IT Support Staff Conference
Publications	

Tier-2 coordinator effort	Comments
3 months	



- South Grid technical meeting held in May continued to focus sites on rapid upgrades. All sites have migrated to Scientific Linux and are running the latest release.
- There are continuing manpower issues at Bristol but this will ease shortly as the new Systems Administrator starts in August.
- Oxford will be able to expand resources once the new computer room is built. SRIF funding for this has been obtained.
- Oxford new Sys Admin is in place, allowing the T2C more time to Coordinate!
- Yves Coppens is providing valuable help across SouthGrid.
- Bristol will be on line within the week, and its resources will rapidly expand once the new Sys Admin is in place.