

# Management Reporting

WLCG Reliability Workshop  
26-30 November 2007



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LCG Planning Officer



# Outline

- **Current documents**
  - **High Level Milestones**
  - **Accounting Resources**
    - CPU, Disk, Tape
  - **Site Reliability**
    - Site Reports
    - Monthly Reliability Summaries
- **Next Steps**
  - **Job Efficiency**
    - Job Efficiency Summaries
- **Wish List**

<http://cern.ch/LCG/planning>



# High Level Milestones Dashboard

- We are now in a different phase compared to 2005-2007 when each site had different preparations to implements and therefore different milestones
  - E.g. installations, infrastructure, networking, buildings, etc
- Each site had its Milestones Plan and a Quarterly Report focusing on the specific milestones and progress of each site.
  - On several occasions the Referees had expressed interest in a higher overview of the milestones across all sites
- Now the services are installed and common milestones can be expressed and should be met by all sites
  - E.g. DB Services, gLite Services (or equivalent by other MW), SRM Services, 24x7 Support, VO Box Support, etc.
- A new High Level Milestones Dashboard has been introduced, with milestones across all sites
- Green="Done", Orange="Late<1 Month", Red="Late>1 Month
- This new representation is very clear and is reviewed monthly at the MB Meetings.

08-Nov-07		WLCG High Level Milestones - 2007												08-Nov-07		WLCG High Level Milestones - 2007																							
		Done (green)				Late < 1 month (orange)		Late > 1 month (red)						Done (green)				Late < 1 month (orange)		Late > 1 month (red)																			
ID	Date	Milestone				ASGC	CC IN2P3	CERN	FZK GridKa	INFN CNAF	NDGF	PIC	RAL	SARA NIKHEF	TRIUMF	BNL	FNAL	ID	Date	Milestone				ASGC	CC IN2P3	CERN	FZK GridKa	INFN CNAF	NDGF	PIC	RAL	SARA NIKHEF	TRIUMF	BNL	FNAL				
<b>24x7 Support</b>																		<b>Site Reliability - June 2007</b>																					
WLCG-07-01	Feb 2007	24x7 Support Definition Definition of the levels of support and rules to follow, depending on the issue/alarm							Sep 2007			Sep 2007	Dec 2007					WLCG-07-12	Jun 2007	Site Reliability above 91% Considering each Tier-0 and Tier-1 site				Apr 89%															
WLCG-07-02	Apr 2007	24x7 Support Tested Support and operation scenarios tested via realistic alarms and situations								Oct 2007	Oct 2007	Jan 2008						May 89%													Jun 91%								
WLCG-07-03	Jun 2007	24x7 Support in Operations The sites provides 24x7 support to users as standard operations										Sept 2007	Mar 2008					Jul 91%															Aug 91%						
																		WLCG-07-13	Jun 2007	Average of Best 8 Sites above 93% Eight sites should reach a reliability above 93%				Averages of the 8 Best sites Apr-Sept 2007 Apr 92% - May 94% - Jun 87% - Jul 93% - Aug 94% - Sept 93%															
<b>VOBoxes Support</b>																		<b>MSS Main Storage Systems</b>																					
WLCG-07-04	Apr 2007	VOBoxes SLA Defined Sites propose and agree with the VO the level of support (upgrade, backup, restore, etc) of VOBoxes							Oct 2007									WLCG-07-25	Jun 2007	CASTOR 2.1.3 in Production at CERN MSS system supporting SRM 2.2 deployed in production at the site				CERN Tier-0															
WLCG-07-05	May 2007	VOBoxes SLA Implemented VOBoxes service implemented at the site according to the SLA							Oct 2007	Nov 2007								WLCG-07-26	Nov 2007	SRM: CASTOR 2.1.3 Tested and Accepted by the Experiments From the SRM Roll-Out Plan (SRM-16 to -19)				ALICE n/a		ATLAS Nov 2007		CMS Nov 2007		LHCb Nov 2007									
WLCG-07-05b	Jul 2007	VOBoxes Support Accepted by the Experiments VOBoxes support level agreed by the experiments				ALICE n/a						n/a			n/a	n/a	n/a	WLCG-07-27	Nov 2007	SRM: dCache 1.8 Tested and Accepted by the Experiments From the SRM Roll-Out Plan (SRM-16 to -19)				ALICE n/a		ATLAS Nov 2007		CMS Nov 2007		LHCb Nov 2007									
																		WLCG-07-28	Sept 2007	Demonstrated Tier-0 Performance (Storage, DM at T0) Demonstration that the highest throughput (ATLAS 2008) can be reached.				CERN Tier-0															
<b>VOMS Job Priorities</b>																		<b>Demonstrated Tier-0 Export to Tier-1 Sites</b>																					
																		WLCG-07-28b	Sept 2007	Demonstration that the highest throughput (ATLAS 2008) can be reached.				CERN Tier-0															
WLCG-07-06a	Jun 2007	New VOMS YAIM Release and Documentation VOMS release and deployment. Documentation on how to configure VOMS for sites not using YAIM				EGEE-SA1												WLCG-07-29	Feb 2008	SRM: CASTOR 2.1.3/dCache in Production at T1 Site From the SRM Roll-Out Plan (SRM-20 to -21a)																			
WLCG-07-06b	Apr 2007	Job Priorities Available at Site Mapping of the Job priorities on the batch software of the site completed and information published															WLCG-07-30	Dec 2007	SRM Implementations with HEP MoU features With full features agreed in the HEP MoU (srmCopy, etc)				CASTOR		DCache		DPM												
WLCG-07-07	Jun 2007	Job Priorities of the VOs Implemented at Site Configuration and maintenance of the jobs priorities as defined by the VOs. Job Priorities in use by the VOs.																WLCG-07-11	Depl Date +30d	SL4 Operational at Site (for WN and UI nodes) This has to happen within 30 days after the release from GD.				Replaced by individual milestones for the Middleware components.															
<b>Accounting</b>																		<b>WN and UI</b>																					
WLCG-07-08	Mar 2007	Accounting Data published in the APEL Repository The site is publishing the accounting data in APEL. Monthly reports extracted from the APEL Repository.															WLCG-07-31	Jun 2007	WN Installed in Production at the Tier-1 Sites WN on SL4 installed on each Tier-1 site, with the configuration needed to use SL4 or SL3 nodes									n/a				n/a		n/a					
<b>3D Services</b>																		<b>UI Certification and Installation on the PPS Systems</b>																					
WLCG-07-09	Mar 2007	3D Oracle Service in Production Oracle Service in production, and certified by the Experiments																WLCG-07-32	Jun 2007	UI Certification and Installation on the PPS Systems done Jul 2007				EGEE - SA1-PPS done Jul 2007															
WLCG-07-10	May 2007	3D Conditions DB in Production Conditions DB in operations for ATLAS, CMS, and LHCb. Tested by the Experiments.															WLCG-07-33	Aug 2007	UI Tested and Accepted by the Experiments				ALICE		ATLAS		CMS		LHCb										
<b>Procurement</b>																		<b>gLite CE</b>																					
WLCG-07-16	1 Jul 2007	MoU 2007 Pledges Installed To fulfil the agreement that all sites procure the 2007 MoU pledged by July 2007							Sept 2007				Jan 2008				WLCG-07-35	Sept 2007	gLite CE Development Completed and Component Released				EGEE - JRA1																
WLCG-07-17	1 Apr 2008	MoU 2008 Pledges Installed To fulfil the agreement that all sites procure they MoU pledged by April of every year										March 2008				WLCG-07-36	+4 weeks	gLite CE Certification and Installation on the PPS Systems				EGEE - PPS																	
																		WLCG-07-37	+4 weeks	gLite CE Tested and Accepted by the Experiments				ALICE		ATLAS		CMS		LHCb									
																		WLCG-07-38	+4 weeks	gLite CE Installed in Production at the Tier-1 Sites								n/a											
<b>FTS 2.0</b>																		<b>SAM Vo-Specific Tests</b>																					
WLCG-07-18	Jun 2007	FTS 2.0 Tested and Accepted by the Experiments In production at CERN and accepted tested by each Experiment				ALICE		ATLAS				CMS		LHCb		WLCG-07-39	Sept 2007	VO Specific SAM Tests in Place With results included every month in the Site Availability Reports.				ALICE		ATLAS		CMS		LHCb											
WLCG-07-19	Jun 2007	Multi-VO Tests Executed and Tested by the Experiments Scheduled at CERN for last week of June				(will be part of CCRC in February and May 2008)												WLCG-07-40	Oct 2007	Experiment provide the Test Setup for the CAF Specification of the requirements and setup needed by each Experiment				ALICE		ATLAS		CMS		LHCb									
WLCG-07-20	Sept 2007	FTS 2.0 Deployed in Production Installed and in production at each Tier-1 Site																WLCG-07-41	Jul 2007	xrootd xrootd Interfaces Tested and Accepted by ALICE				ALICE															
<b>BDII</b>																		<b>Site Reliability - Dec 2007</b>																					
WLCG-07-21	Jun 2007	BDII Guidelines Available On how to install BDII on a separated node				EGEE - SA1 (not requested)												WLCG-07-14	Dec 2007	Site Reliability above 93% Considering each Tier-0 and Tier-1 site				Aug 91%															
WLCG-07-22	Jun 2007	Top-Level BDII Installed at the Site For each Tier-1 site																Sept 91%										Oct 91%											
<b>glxexec</b>																		Nov 91%									Dec 93%												
WLCG-07-24	Jul 2007	Decision on Usage of glxexec and Guidelines to Follow				GDB												WLCG-07-15	Dec 2007	Average of Best 8 Sites above 95% Eight sites should reach a reliability above 93%																			



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r24 - 09 Nov 2007 - 17:08:52 - AlbertoAimar





## LCG Phase 2 Milestones Plans

### WLCG High Level Milestones (updated monthly)

- [WLCG High Level Milestones - 08.11.2007](#) ([PDF](#), [XLS](#))
- [WLCG High Level Milestones - 22.10.2007](#) ([PDF](#), [XLS](#))
- [WLCG High Level Milestones - 3.10.2007](#) ([PDF](#), [XLS](#))
- [WLCG High Level Milestones - 25.09.2007](#) ([PDF](#), [XLS](#))
- [WLCG High Level Milestones - 12.07.2007](#) ([PDF](#), [XLS](#))

### All Milestones Plans - 30.04.2007 (updated quarterly)

[Hide attachments \(15\)](#)

!	<a href="#">Attachment</a>	<a href="#">Action</a>	<a href="#">Size</a>	<a href="#">Date</a>	<a href="#">Who</a>	<a href="#">Comment</a>
	<a href="#">ASGC Plan-20070430.xls</a>	<a href="#">manage</a>	44.0 K	29 Jun 2007 - 11:48	<a href="#">AlbertoAimar</a>	
	<a href="#">Applications Area Plan-20070430.xls</a>	<a href="#">manage</a>	75.5 K	29 Jun 2007 - 11:47	<a href="#">AlbertoAimar</a>	
	<a href="#">CC-IN2P3 Plan-20070430.xls</a>	<a href="#">manage</a>	55.0 K	29 Jun 2007 - 11:50	<a href="#">AlbertoAimar</a>	
	<a href="#">CERN Plan-20070430.xls</a>	<a href="#">manage</a>	48.0 K	29 Jun 2007 - 11:51	<a href="#">AlbertoAimar</a>	

8-Nov-07

## WLCG High Level Milestones - 2007

Sites

ID	Date	Milestone	Done (green)							Late < 1 month (orange)				
			A&GC	CC IN2P3	CERN	FZK GridKa	INFN CNAF	NDGF	PIC	RAL	SARA NIKHEF	TRIUM F	BNL	FNAL

## 24x7 Support

WLCG-07-01	Feb 2007	24x7 Support Definition Definition of the levels of support and rules to follow, depending on the issue/alarm				Sep 2007				Sep 2007	Dec 2007				
WLCG-07-02	Apr 2007	24x7 Support Tested Support and operation scenarios tested via realistic alarms and situations							Oct 2007	Oct 2007	Jan 2008				
WLCG-07-03	Jun 2007	24x7 Support in Operations The sites provides 24x7 support to users as standard operations								Sep 2007	Mar 2008				

## VOBoxes Support

WLCG-07-04	Apr 2007	VOBoxes SLA Defined Sites propose and agree with the VO the level of support (upgrade, backup, restore, etc) of VOBoxes						Oct 2007								
WLCG-07-05	May 2007	VOBoxes SLA Implemented VOBoxes service implemented at the site according to the SLA						Oct 2007	Nov 2007							
WLCG-07-05b	Jul 2007	VOBoxes Support Accepted by the Experiments VOBoxes support level agreed by the experiments	ALICE	n/a						n/a			n/a	n/a	n/a	
			ATLAS											n/a	n/a	n/a
			CM S							n/a				n/a	n/a	n/a
			LHC b	n/a						n/a				n/a	n/a	n/a

## VOMS Job Priorities

VOMS Milestones below suspended until the VOMS Working Group defines new milestones.

WLCG-07-06b	Jun 2007	New VOMS YAIM Release and Documentation How to configure	Suspended												
WLCG-07-06	Apr 2007	Mapping of the job priorities on the custom software of the site completed and information published													
WLCG-07-07	Jun 2007	Job Priorities of the VOs Implemented at Site Configuration and maintenance of the jobs priorities as defined by the VOs. Job Priorities in use by the VOs.													

## Accounting

WLCG-07-08	Mar 2007	Accounting Data published in the APEL Repository The site is publishing the accounting data in APEL. Monthly reports extracted from the APEL Repository.													
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## 3D Services

WLCG-07-09	Mar 2007	3D Oracle Service in Production Oracle Service in production, and certified by the Experiments													squid front end
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# Accounting

- Every month the resources installed and available are accounting at all sites.
  - CERN and Tier-1 sites since early 2007
  - Tier-2 sites more recently (Sept 2007)
- Extracted from the APEL accounting database
- Shows the installed and the used resources vs. the pledges of the MoU.
  - The sites agreed how much to contribute and how to distribute the resources to the Experiments
  - CPU, Disk and Tape
- MoU: <http://lcg.web.cern.ch/LCG/C-RRB/MoU/WLCGMoU.pdf>
- Sometimes the applications does not uses all CPU available (e.g. doing I/O)
  - CPU time vs. Wall Clock time
- Reviewed every month at the MB (updates on the “red” numbers)

[http://lcg.web.cern.ch/LCG/MB/accounting/accounting\\_summaries.pdf](http://lcg.web.cern.ch/LCG/MB/accounting/accounting_summaries.pdf)

**Site Summary**

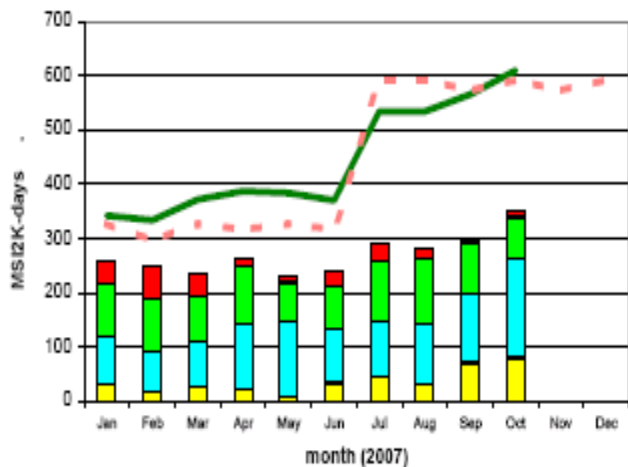
	<i>cpu used in year to date</i>			<i>cpu installed at end of period as % of pledge</i>	<i>disk used in year to date</i>			<i>disk at end of period</i>		
	<i>KSI2K-days</i>	<i>% of installed</i>	<i>% of pledge</i>		<i>TByte-months</i>	<i>% of installed</i>	<i>% of pledge</i>	<i>TBytes occupied</i>	<i>occupied as % of installed</i>	<i>occupied as % of pledged</i>
CERN Tier-0+CAF	846,170	70%	64%	94%	8,068	77%	118%	1,110	88%	123%
ASGC	67,441	33%	20%	100%	1,121	43%	27%	175	58%	28%
BNL	334,745	75%	76%	102%	5,742	113%	109%	984	128%	128%
CC-IN2P3	279,698	73%	89%	199%	3,055	67%	72%	497	51%	97%
CNAF	154,939	42%	38%	100%	2,301	76%	46%	314	90%	90%
FNAL	247,958	43%	83%	126%	5,800	115%	244%	1,000	198%	204%
FZK-GridKA	263,014	63%	75%	100%	1,854	48%	51%	318	51%	52%
NDGF	94,159	54%	62%	100%	861	71%	48%	0	0%	0%
NL LHC/Tier-1	106,564	58%	48%	46%	942	62%	26%	161	91%	22%
PIC	87,224	63%	96%	95%	872	78%	72%	199	100%	129%
RAL	98,263	47%	34%	63%	1,286	65%	35%	244	106%	54%
TRIUMF	104,121	95%	262%	566%	298	107%	84%	75	97%	97%
<b>Total</b>	<b>2,684,296</b>	<b>61%</b>	<b>63%</b>	<b>103%</b>	<b>32,200</b>	<b>79%</b>	<b>76%</b>	<b>5,077</b>	<b>90%</b>	<b>85%</b>

Colour coding of % columns: ≥ 90% < 50%

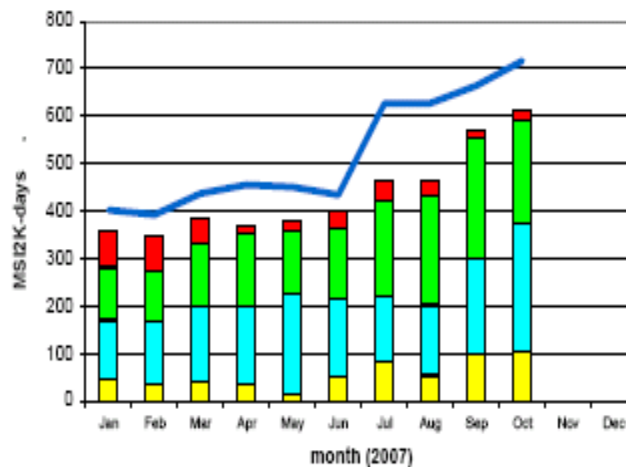


# Summary of CERN + Tier-1s

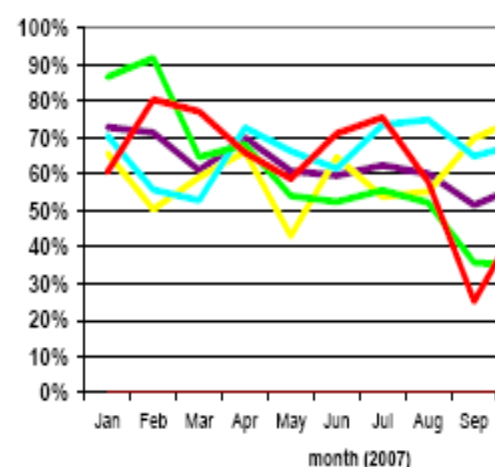
## CPU Time Delivered



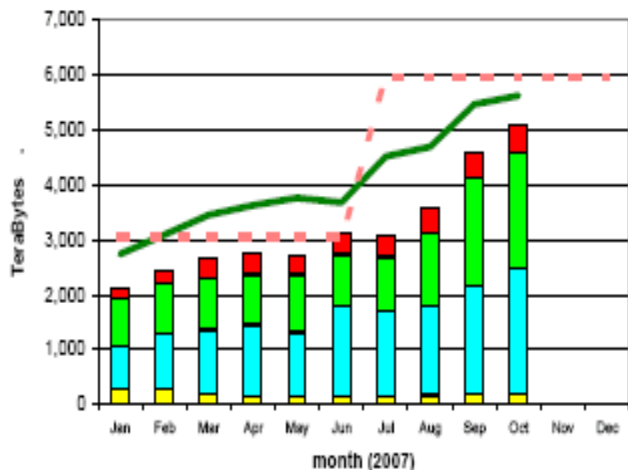
## Wall-clock Time Delivered



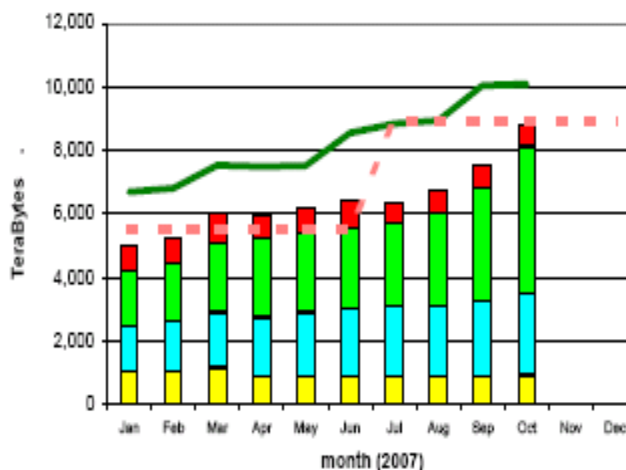
## Ratio of CPU : Wall\_clock Times



## Disk Storage Used



## Tape Storage Used

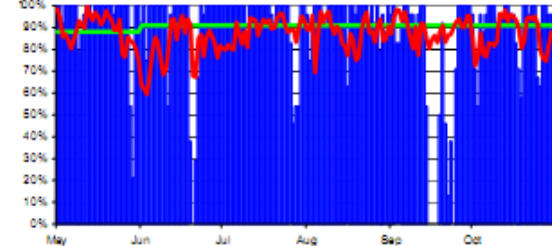
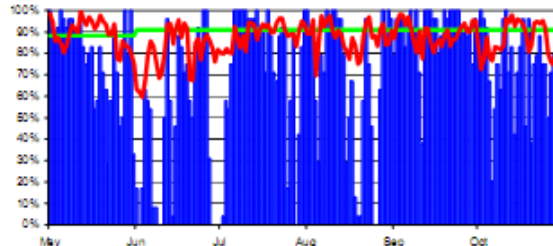
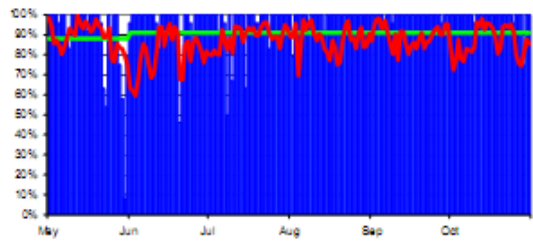
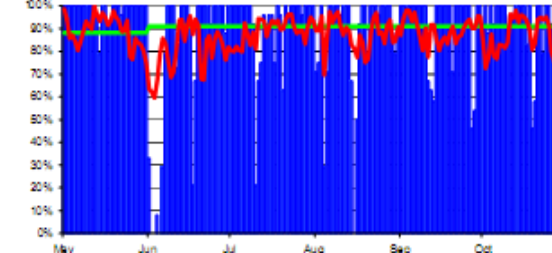
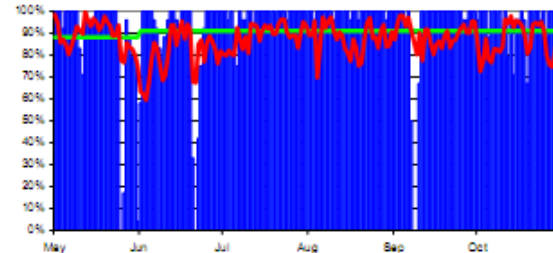
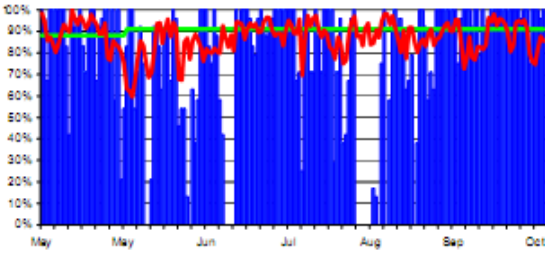
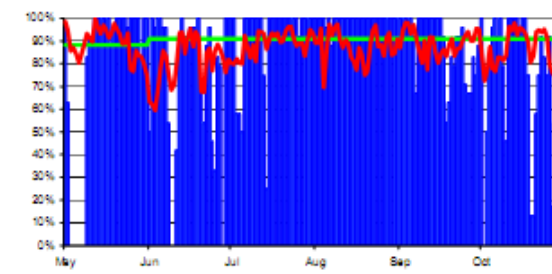
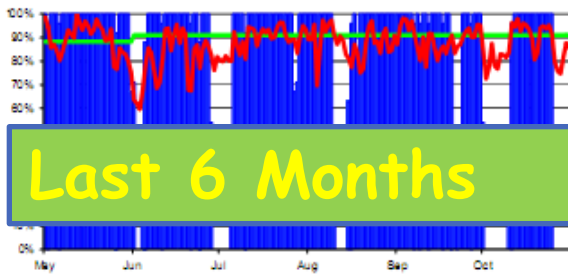
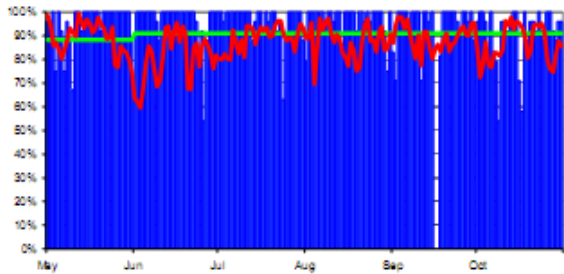
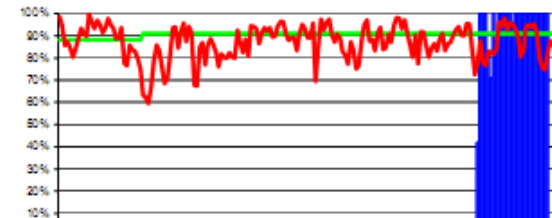
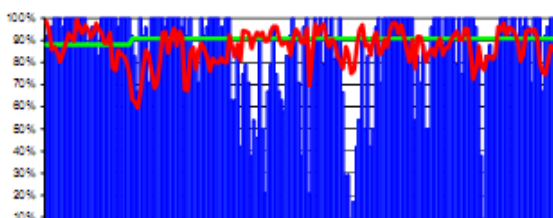
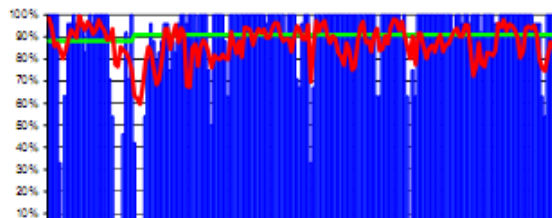


ALICE CMS installed capacity (inc. efficiency factor) installed capacity (w/o efficiency factor)   
 ATLAS LHCb MoU commitment (inc. efficiency factor) site average - cpu:wall\_clock ratio



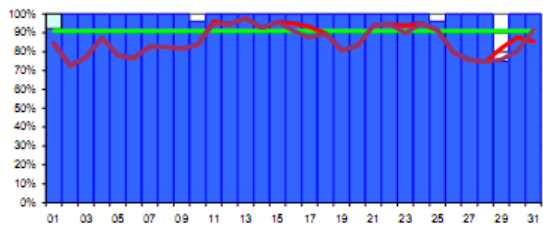
# Sites Availability and Reliability Metrics

- The SAM system provide very useful Site Availability Monitoring
  - Tests the Services at the Tier-0 and Tier-1 Sites
  - E.g. CE, SE, SRM, Data Transfers, Certificates, etc
  - Is extensible to more tests and also to VO-specific tests
  - Can check different implementations depending on the site and VO (e.g. EGEE, OSG, NGDF services, etc)
- Critical and non-critical tests have been developed for the general tests (OPS VO) and for/by the Experiments (ALICE, ATLAS, CMS, LHCb VOs).
- Downtimes are commented weekly in the Operations Meeting reports (problems, solution, severity)
- Since the beginning of 2007 we use the SAM data to review the reliability of the sites, monthly at the MB
- Targets have been set
  - 88% (Jan 07) 91% (Jun 07) 93% (Dec 07)

**CERN****DE-KIT (GridKa/FZK)****FR-CCIN2P3 (IN2P3)****IT-INFN-CNAF****UK-T1-RAL****NL-T1 (SARA-NIKHEF)****CA-TRIUMF****TW-ASGC****US-FNAL-CMS****ES-PIC****US-T1-BNL****NDGF**

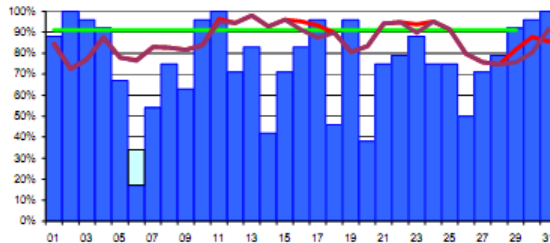
CERN

99%



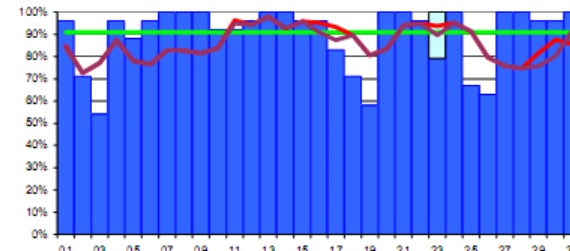
DE-KIT (GridKa/FZK)

76%



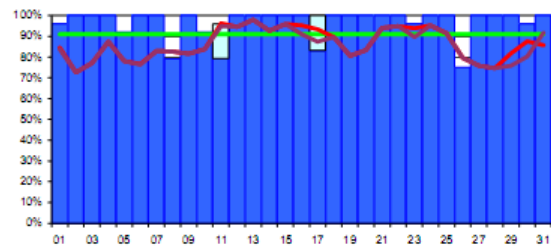
FR-CCIN2P3

90%



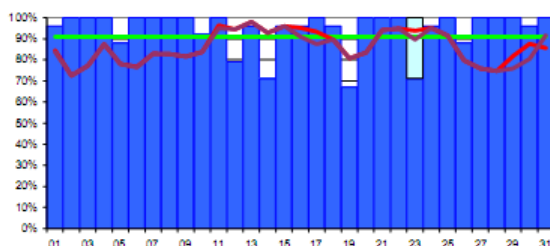
IT-INFN-CNAF

97%



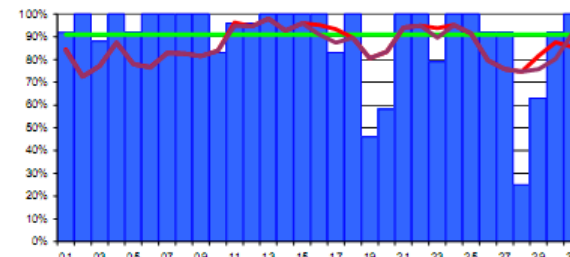
UK-T1-RAL

95%



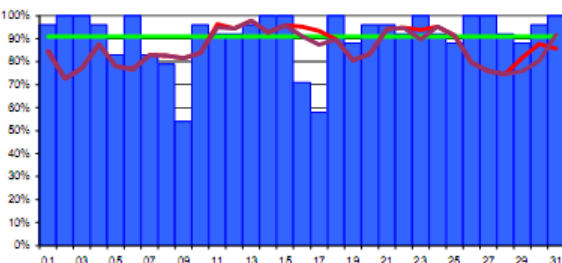
NL-T1 (SARA-NIKHEF)

89%



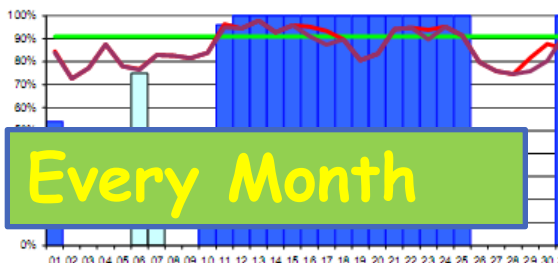
CA-TRIUMF

91%



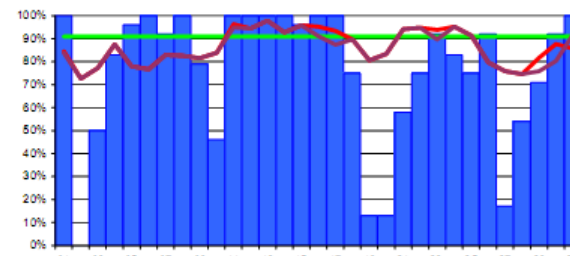
TW-ASGC

51%



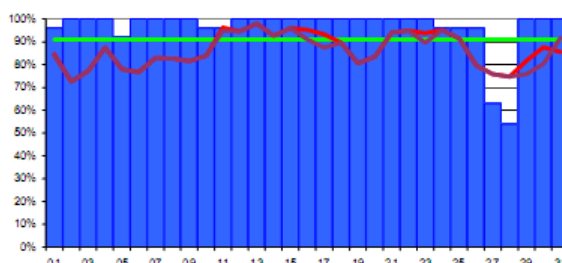
US-FNAL-CMS

75%



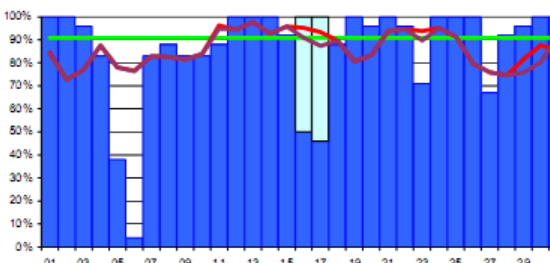
ES-PIC

96%



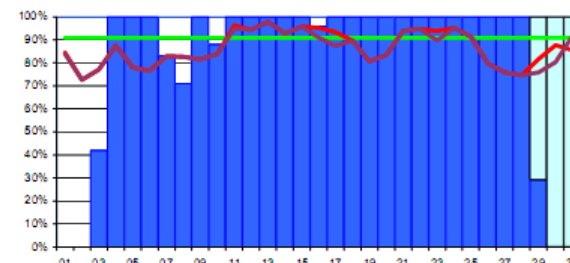
US-T1-BNL

89%



NDGF

89%





# Monthly Reliability of Tier-0, Tier-1 Sites January - October 2007

Site	Jan 07	Feb 07	Mar 07	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sept 07	Oct 07
CERN	99	91	97	96	90	96	95	99	100	99
DE-KIT (FZK)	85	90	75	79	79	48	75	67	91	76
FR-CCIN2P3	96	74	58	95	94	88	94	95	70	90
IT-INFN-CNAF	75	93	76	93	87	67	82	70	80	97
UK-T1-RAL	80	82	80	87	87	87	98	99	90	95
NL-T1(NIKHEF)	93	83	47	92	99	75	92	86	92	89
CA-TRIUMF	79	88	70	73	95	95	97	97	95	91
TW-ASGC	96	97	95	92	98	80	83	83	93	51
US-FNAL-CMS	84	67	90	85	77	77	92	99	89	75
ES-PIC	86	86	96	95	77	79	96	94	93	96
US-T1-BNL	90	57*	6*	89	98	94	75	71	91	89
NDGF	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	89
Reliability Target	88	88	88	88	88	91	91	91	91	91
Target + 90% target	5 + 5	6 + 3	4 + 1	7 + 3	6 + 3	3 + 2	7 + 2	6 + 2	7 + 2	5 + 4

Avg. 8 best sites: Apr 92% May 94% Jun 87% Jul 93% Aug 94% Sept 93% Oct 93%  
 Avg. all sites: Apr 89% May 89% Jun 80% Jul 89% Aug 88% Sept 89% Oct 86%

\* BNL: LCG/gLite CE probed by SAM but not installed with the SL4 upgrade

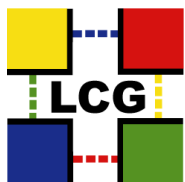


# Sites Availability and Reliability Reports

- Every week the Sites report about unavailability at the Operations Meeting
  - Explaining the problem, the solution found and the severity of the downtime
- The SAM tests are executed automatically and provide an objective (although not perfect) view of which services work at the sites
  - Critical and non-critical tests are added to improve the verifications
  - They are executed on all sites but depending on the site they test they can be adapted to specific Services (e.g. ARC at NDGF instead of gLite)
- VO can add their tests and can check what interests them or add verifications of their systems (e.g. PhedEx, DIRAC, etc)
  - The VOS can also choose which sites to check

Note: The VO-specific SAM results are not yet published - Experiments and Sites still finding out the problems with the tests





# Comparison with VO-Specific SAM Tests

## September 2007

	OPS	ALICE	ATLAS	CMS	LHCb	GOCDB id
CERN	100%	97%	100%	100%	96%	CERN-PROD
DE-KIT	91%	95%	62%	99%	91%	FZK-LCG2
FR-CCIN2P3	70%	45%	26%	8%	97%	IN2P3-CC
IT-INFN-CNAF	80%	97%	85%	100%	66%	INFN-T1
NDGF	97%	-	76%	-	-	NDGF-T1
UK-T1-RAL	90%	96%	100%	100%	97%	RAL-LCG2
NL-T1	92%	96%	92%	53%	90%	SARA-MATRIX
CA-TRIUMF	95%	-	98%	-	-	TRIUMF-LCG2
TW-ASGC	93%	-	98%	95%	-	Taiwan-LCG2
US-FNAL-CMS	89%	-	-	38%	-	USCMS-FNAL-WC1
ES-PIC	93%	-	100%	100%	93%	pic
US-T1-BNL	91%	-	72%	-	-	BNL-LCG2

>=91%	>=82%	<82%
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# Monitoring and Visualization Tool for LCG

Data Transfer | Job Status | Service Availability

(Version: gridview-3.1.2, Installation Date: Oct 30, 2007)



<< ABOUT

ABOUT >>

## What do you want ?

- Central Service Availability
- Aggregate Site Availability
- Tier-1 Site Availability
- Tier-2 Site Availability
- Site Detail Availability
- SAM Test Results

Defining VO **OPS**

Service **Overall**

- Use Site Full Name
- Use Site Abbreviation

Tier-1 Site **None**

Sites for VO **Any**

- Tier-2 Site
- None
  - 405002
  - 405003

- Current Status
- Hourly Report
- Daily Report
- Weekly Report
- Monthly Report

From **16 11 2007**

To **16 11 2007**

Display Graphs

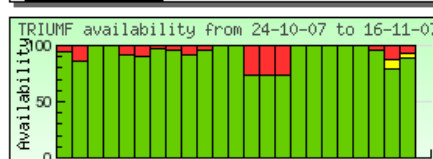
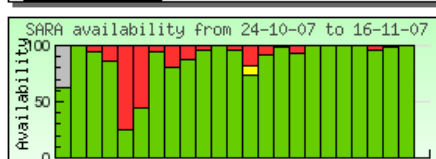
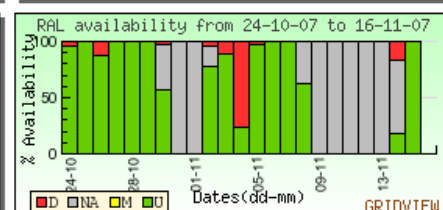
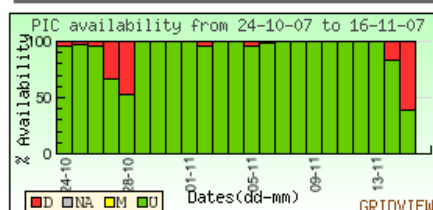
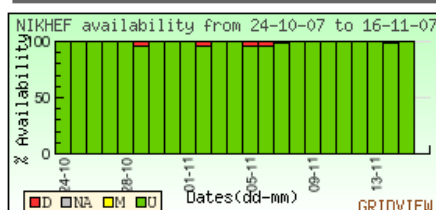
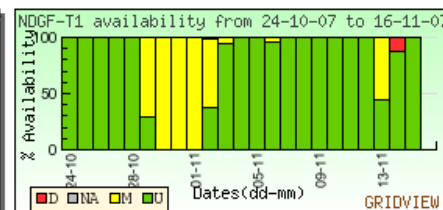
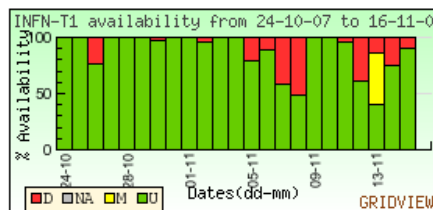
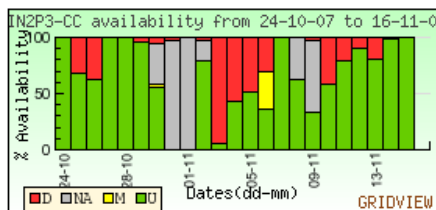
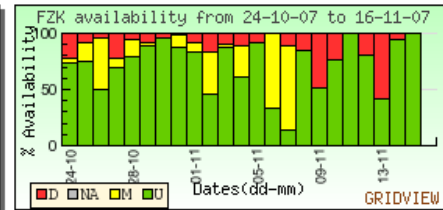
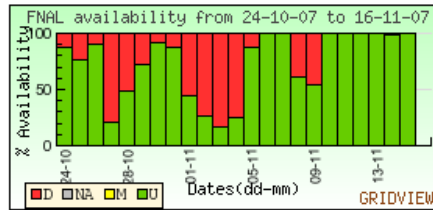
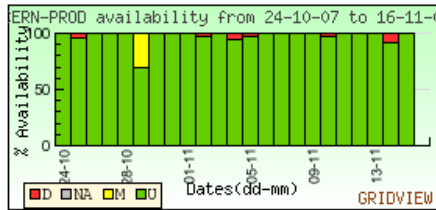
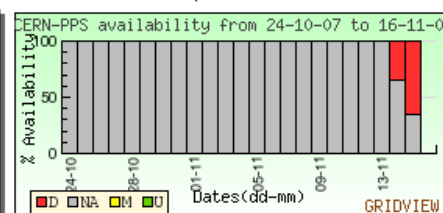
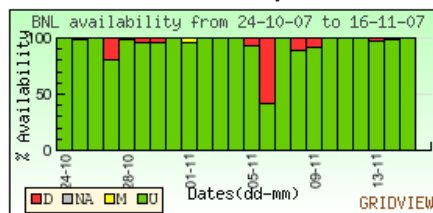
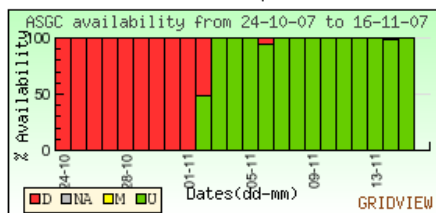
Set Defaults

[Switch to Old Algorithm](#)

[Sites Abbreviations](#)



(Click on the Graph below to see Availability of Individual Services at the Site)





# Monitoring and Visualization Tool for LCG

Data Transfer | Job Status | Service Availability

(Version: gridview-3.1.2, Installation Date: Oct 30, 2007)



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Service

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- Use Site Abbreviation

Tier-1 Site

Sites for VO

Tier-2 Site

- Current Status
- Hourly Report
- Daily Report
- Weekly Report
- Monthly Report

From     
 To

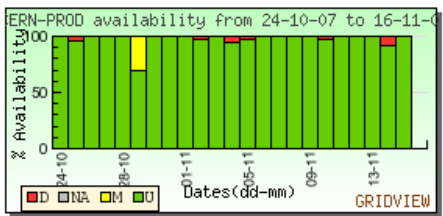
Display Graphs

Set Defaults

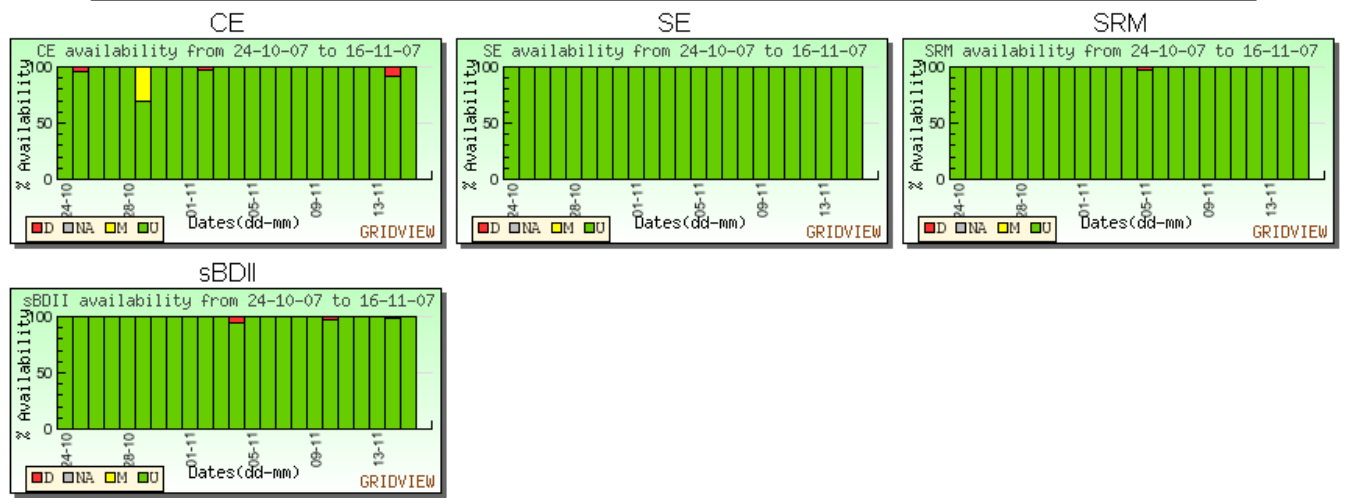
[Switch to Old Algorithm](#)  
[Sites Abbreviations](#)



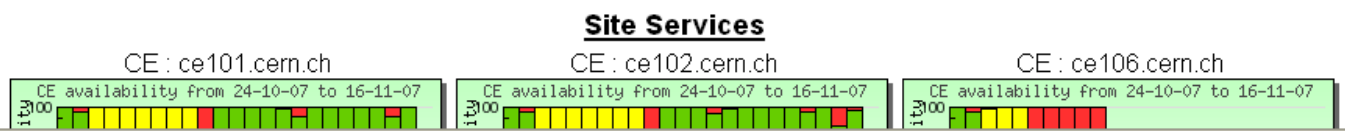
## Overall Service Availability for Site:CERN-PROD VO:OPS (Daily Report)



## Individual Service Availability for site:CERN-PROD VO:OPS (Daily Report)



## Service Instance Availability for site:CERN-PROD VO:OPS (Daily Report)





# Next Steps: Job Efficiency

- Sites Reliability tests show only whether the Services are running
  - Are the necessary condition for the Experiments application to run
- But one needs to verify what the success rates of REAL Experiments jobs are at the Sites
- Experiments monitor and display the execution of their jobs at the sites (e.g. ARDA Dashboard) and they have specific job submission and control systems
  - ALICE Agent, ATLAS Ganga, CMS Crab, LHCb Pilot
  - With specific verification to check exit status and verify the success/failure of the jobs
- This data is used to calculate the Site Job Efficiency
- Is being reviewed in order to find the best way to collect jobs success/failures

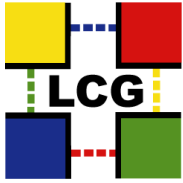


# Job Efficiency Table

(work in progress)

September 2007	ALICE	ATLAS		CMS	LHCb
	AGENT	GANGA	PROD	CRAB	PILOT
ASGC	-	22%	82%	90%	-
BNL	-	0%	0%	-	-
CERN	99%	50%	92%	76%	99%
CNAF	53%	52%	74%	97%	95%
FNAL	-	-	-	99%	-
FZK	96%	73%	93%	96%	93%
IN2P3	89%	77%	79%	99%	96%
NDGF	0%	-	84%	-	-
NIKHEF	100%	45%	84%	-	19%
PIC	-	7%	61%	100%	88%
RAL	99%	15%	93%	90%	90%
TRIUMF	-	4%	94%	0%	0%

>=91%		>=82%		<82%
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# Summary

## Metrics

- Services are in place and equipment is installed therefore Monitoring and Metrics are more appropriate

## Accounting

- Accounting Reports with CPU, Disk and Tape resources (installed and used)

## Reporting

- Milestones Dashboard and Quarterly Reports (simplified)

## Monitoring

- Information is displayed in a better way (dashboards, targets, colors, etc)
- Site reliability available online, weekly reporting and MB reviewing

## Next Steps

- Success rates and Job Efficiency for the Experiments applications

**WEB:** <http://cern.ch/LCG/planning>

**WIKI:** <https://cern.ch/twiki/bin/view/LCG/Planning>

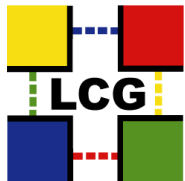




# Wish List (I)

- **Automated Accounting and Sites Reliability Reports (OPS and VO-spec)**
  - *Generate standard reports*
  - *Data export features (e.g. comma separated)*
- **Uniform naming across tools and web sites**
  - *Example: Every tool has a different name for the sites*
  - *We should have*
    - *1 GODDB id*
    - *1 Tier Sites Name*
- **Sites have officially selected their Tier-1 Site Name**
  - *also the Tier-2 Federations*

	GOCDB id
CERN	CERN-PROD
DE-KIT	FZK-LCG2
FR-CCIN2P3	IN2P3-CC
IT-INFN-CNAF	INFN-T1
NDGF	NDGF-T1
UK-T1-RAL	RAL-LCG2
NL-T1	SARA-MATRIX
CA-TRIUMF	TRIUMF-LCG2
TW-ASGC	Taiwan-LCG2
US-FNAL-CMS	USCMS-FNAL-WC1
ES-PIC	pic
US-T1-BNL	BNL-LCG2



## Wish List (II)

- A set of (very) few simple pages to access the information in a dashboard format
  - Not for the experts
  - Bookmarks, easy to use
- The users are often “casual” users that should find easily the information about transfers reliability etc.
  - Maybe some different interfaces depending on the profile
  - Service Expert, Site Operations, Mgmt. Overview, etc
- Clear entry (one) for all the information
  - Web:  
GridView provides a Mgmt. Overview
  - Reporting (Advanced):  
Is really needed with so much information to summarize.  
Export features  
Crystal Reports or Business Objects (or others) for extraction of data and report generation ?