

23-Jun-09		WLCG High Level Milestones															
ID	Date	Milestone	Done (green)				Late < 1 month (orange)				Late > 1 month (red)						
			ASGC	CC IN2P3	CERN	DE-KIT	INFN CNAF	NDGF	PIC	RAL	SARA NIKHE F	TRIUM F	BNL	FNAL			
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	Aug 2008	Aug 2008						Aug 2008			Jan 2009				
WLCG-07-05	May 2007	VOBoxes SLA Implemented VOBoxes service implemented at the site according to the SLA	Aug 2008	Aug 2008						Jan 2009	Aug 2008		Jan 2009				
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		
			ATLAS							n/a	n/a					n/a	
			CMS							n/a				n/a	n/a	n/a	
			LHCb	n/a						n/a					n/a	n/a	n/a
WLCG High Level Milestones - 2008																	
Pilot Jobs Frameworks																	
WLCG-08-14	May 2008	Pilot Jobs Frameworks studied and accepted by the Review working group Working group proposal complete and accepted by the Experiments.	ALICE			ATLAS			CMS			LHCb Nov 2007					
Tier-2 and VOs Sites Reliability Reports																	
WLCG-08-09	Jun 2008	Weighted Average Reliability of the Tier-2 Federation above 95% for 80% of Sites Weighted according to the sites CPU resources	See separated table of Tier-2 Federations 80% of the Sites above 95% reliability														
WLCG-08-11	Apr 2009	VO-Specific Tier-1 Sites Reliability Considering each Tier-0 and Tier-1 site (and by VO?)	Apr 2009														
			May 2009														
			Jun 2009														
WLCG High Level Milestones - 2009																	
SL5 Milestones																	
WLCG-09-21	Mar 2009	SL5 gcc 4.3 (WN 4.1 binaries) Tested by the Experiments Experiments should test whether the MW on SL5	ALICE			ATLAS			CMS			LHCb					
WLCG-09-22	Jul 2009	SL5 Deployed by the Sites (64 bits nodes) Assuming the tests by the Experiments were successful. Otherwise a real gcc 4.3 porting of the WN software is needed.															
Tier-1 Sites Procurement - 2009																	
WLCG-09-01	Sept 2009	MoU 2009 Pledges Installed To fulfill the agreement that all sites procure they MoU pledged by April of every year															
SCAS/glExec Milestones																	
WLCG-09-17	Jan 2009	SCAS Solutions Available for Deployment Certification successful and SCAS packaged for deployment	Done in March 2009														
WLCG-09-18	Apr 2009	SCAS Verified by the Experiments Experiment verify that the SCAS implementation is working (available at CNAF and NL-T1)	ALICE n/a			ATLAS			CMS n/a ?			LHCb					
WLCG-09-19	09-18 + 1 Month	SCAS + glExec Deployed and Configured at the Tier-1 Sites SCAS and glExec ready for the Experiments.															
WLCG-09-20	09-18 + 3 Month	SCAS + glExec Deployed and Configured at the Tier-2 Sites SCAS and glExec ready for the Experiments.															
Accounting Milestones																	
WLCG-09-02	Apr 2009	Wall-Clock Time Included in the Tier-2 Accounting Reports The APEL Report should include CPU and wall-clock accounting	APEL														
WLCG-09-03	Jul 2009	Tier-2 Sites Report Installed Capacity in the Info System Both CPU and Disk Capacity is reported in the agreed GLUE 1.3 format	% of T2 Sites Reporting														
WLCG-09-04a	Jul 2009	Sites publishing the User Level Accounting information															
WLCG-09-04b	Jul 2009	User Level Accounting verified and approved by the Experiments	ALICE			ATLAS			CMS			LHCb					
STEP 2009 - Tier-1 Validation																	
WLCG-09-23	Jun 2009	Tier-1 Validation by the Experiments	ALICE	n/a							n/a			n/a	n/a		
			ATLAS							n/a	n/a				n/a		
			CMS							n/a			n/a	n/a	n/a		
			LHCb	n/a						n/a				n/a	n/a	n/a	

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CREAM CE Rollout														
WLCG-09-25	Apr 2009	Release of CREAM CE for deployment												
WLCG-09-26	May 2009	All European T1 + TRIUMF and CERN at least 1 CE. 5 T2s supporting 1 CE												
WLCG-09-27	Jul 2009	2 T2s for each experiment provide 1 CREAM-CE each.	ALICE		ATLAS			CMS			LHCb			
WLCG-09-28	Sep 2009	50 sites in addition to the ones above												
SRM Milestones														
WLCG-09-05	Dec 2008	SRM Short-Term Solutions Available for Deployment	CASTOR		dCache			DPM		StoRM		BestMan		
WLCG-09-06	Jun 2009	SRM Short-Term Solutions Deployed at Tier-1 Sites Installation at the Tier-1 Sites												
FTS Milestones														
WLCG-09-07	Mar 2009	FTS Deployed on SL4 at the Tier-1 Sites FTS is ready to be installed on SL4 at the Tier-1 Sites												
Metrics and Monitoring Milestones														
WLCG-09-08	Nov 2008	Experiments Dataflows clear for the Tier-1 Sites Experiments should present the data flows they expect to reach at the Sites (a la LHCb)	ALICE		ATLAS			CMS			LHCb Nov 2007			
WLCG-09-09	Removed	Tier-1 Sites Define Their MSS Metrics Tier-1 Sites specify which metrics are going to be collected to demonstrate the dataflow supported												
WLCG-09-10	June 2009	Tier-1 Sites Publish Their MSS Metrics in SLS Tier-1 Sites make their current MSS metrics available via SLS												
WLCG-09-11	TDB	Automatic Alarms (SAM, etc) at the Tier-1 Sites Tier-1 Sites should be able to automatically send, receive and handle alarms and problem notifications												
WLCG-09-12	TDB	Monitoring of the Storage Systems The Storage systems used provide monitoring information to Sites and Experiments	CASTOR		dCache			DPM		StoRM		BestMan		
WLCG-09-13	TDB	Performance Metrics? User Response, Services Downtimes Operations KPI												
CPU Benchmarks/Units Milestones														
WLCG-09-14	Dec 2008	CPU New Unit Working Group Completed Agreement on Benchmarking Methods Conversion Proposal and Test Machines	CPU New Benchmarking Unit Working Group											
WLCG-09-15	Feb 2009	Sites Pledges in HEPSPEC-06 Pledged from the Sites should be converted to the new unit	LCG Office											
WLCG-09-16	Apr 2009	New Experiments Requirement in HEPSPEC-06 Experiments should convert their requirements to the new unit (or by LCG Office)	ALICE		ATLAS			CMS			LHCb			
WLCG-09-24	May 2009	Sites Benchmark their Capacity in the HEPSPEC-06 Resources from the Sites should be converted to the new unit												
Completed / Cancelled High Level Milestones														
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												
WLCG-07-02	Apr 2007	24x7 Support Tested Support and operation scenarios tested via realistic alarms and situations				Apr 2008	June 2008							
WLCG-07-03	Jun 2007	24x7 Support in Operations The sites provides 24x7 support to users as standard operations				July 2008	June 2008		Apr 2008		July 2008			

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3D DB Milestones																	
WLCG-07-09	Mar 2007	3D Oracle Service in Production Oracle Service in production, and certified by the Experiments												squid frontier			
WLCG-07-10	May 2007	3D Conditions DB in Production Conditions DB in operations for ATLAS, CMS, and LHCb. Tested by the Experiments.												squid frontier			
Site Reliability - June 2007																	
WLCG-07-12	Jun 2007	Site Reliability above 91% Considering each Tier-0 and Tier-1 site (Note: orange means > 90% of target)	Apr 88%														
			May 88%														
			Jun 91%														
			Jul 91%														
			Aug 91%														
Sept 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														
Procurement																	
WLCG-07-16	1 Jul 2007	MoU 2007 Pledges Installed To fulfill the agreement that all sites procure the 2007 MoU pledged by July 2007															
FTS 2.0																	
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-07-19	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-07-20	Sept 2007	FTS 2.0 Deployed in Production Installed and in production at each Tier-1 Site															
BDII																	
WLCG-07-21	Jun 2007	BDII Guidelines Available On how to install BDII on a separated node	EGEE - SA1 (not requested)														
WLCG-07-22	Jun 2007	Top-Level BDII Installed at the Site For each Tier-1 site															
glexec																	
WLCG-07-24	Jul 2007	Decision on Usage of glexec and Guidelines to Follow	GDB														
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.															
MSS Main Storage Systems																	
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-07-26	Nov 2007	SRM: CASTOR 2.1.6 Tested and Accepted by the Experiments at all Sites From the SRM Roll-Out Plan (SRM-16 to -19)	ALICE n/a			ATLAS Nov 2007			CMS Nov 2007			LHCb Nov 2007					
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-07-30b	May 2008	SRM Missing MoU Features Implemented With full features agreed in the HEP MoU (srmCopy, etc).	CASTOR			DCache			DPM								
CAF CERN Analysis Facility																	
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 May 2008			CMS June 2008			LHCb May 2008					
MSS Main Storage Systems																	
WLCG-07-28	Sept 2007	Demonstrated Tier-0 Performance (Storage, DM) Demonstration that the highest throughput (ATLAS 2008) can be reached.	CERN Tier-0														
WLCG-07-28b	Sept 2007	Demonstrated Tier-0 Export to Tier-1 Sites Demonstration that the highest throughput (ATLAS 2008) can be reached.	CERN Tier-0														
WLCG-07-29	Feb 2008	SRM: CASTOR 2.1.6/dCache in Production at T1 From the SRM Roll-Out Plan (SRM-20 to -21a)															
WLCG-07-30	Dec 2007	SRM Implementations with HEP MoU Features With features agreed in HEP MoU (srmCopy, etc).	CASTOR			DCache			DPM								

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WN and UI																
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				
WLCG-07-32	Jun 2007	UI Certification and Installation on the PPS Systems	EGEE - SA1-PPS done: Jul 2007													
WLCG-07-33	Aug 2007	UI Tested and Accepted by the Experiments	ALICE			ATLAS			CMS			LHCb				
xrootd																
WLCG-07-41	Jul 2007	xrootd Interfaces Tested and Accepted by ALICE	ALICE													
SAM Vo-Specific Tests																
WLCG-07-39	Sept 2007	VO-Specific SAM Tests in Place With results included every month in the Site	POSTPONED TO 2008 AND REPLACED BY A NEW MILESTONE (WLCG-08-08)													
Site Reliability - Dec 2007																
WLCG-07-14	Dec 2007	Site Reliability above 93% Considering each Tier-0 and Tier-1 site (Note: orange means > 90% of target)	Aug 91%													
			Sept 91%													
			Oct 91%													
			Nov 91%													
			Dec 93%													
			Jan 93%													
			Feb 93%													
WLCG-	Dec	Average of Best 8 Sites above 95%	Averages of the 8 Best sites Sept 2007 - Jan 2008													
Tier-1 Sites Reliability - June 2008																
WLCG-08-06	Jun 2008	Tier-1 Sites Reliability above 95% Considering each Tier-0 and Tier-1 site	Jan 93%				70	92		92	57		91			
			Feb 93%				20	84			84		67	85		
			Mar 93%				86		88					80		
			Apr 93%				76	84			90				92	
			May 93%				88									
			June 95%				86									93
WLCG-08-07	Jun 2008	Average of Best 8 Sites above 97% Average of eight sites should reach a reliability above 97%.	Averages of the 8 Best sites Jan-Jun 2008 Jan 96 - Feb 96 - Mar 96 - Apr 96 - May 96 - Jun 96													
Tier-1 Procurement																
WLCG-07-17	1 Apr 2008	MoU 2008 Pledges Installed To fulfill the agreement that all sites procure they MoU pledged by April of every year	Sept 2008	CPU OK May Disk Sep 08	July 2008	Apr 2008	CPU Jul 08 Disk Sep 08	CPU OK May Disk Sep 08	CPU OK May Disk Sep 08	Apr 2008	Nov 2008	Apr 2008	CPU OK Disk Nov 08	CPU OK May Disk Sep 08		
WLCG-08-04	Sept 2008	Sites Report on the Status of the MoU 2009 Procurement Reporting whether is on track with the MoU pledges by April. Or which is the date when the pledges will be fulfilled.		Tender Sept Install May	Tender Sept Install Apr	Tender Sept Install Apr	Tender Sept Install May	Tender Sept Install Apr	Tender Sept Install Apr	Tender CPU Sep Disk Oct	Tender Sept Install TBD	Tender CPU Disk Oct	Tender CPU Sep Disk Oct	Tender Sept Install Apr		
OSG RSV Tests																
WLCG-08-01	May 2008	RSV Tier-2 CE Tests Equivalent to SAM Successful WLCG verification of OSG test equivalence of RSV tests to WLCG CE tests	OSG-RSV													
WLCG-08-01b	Jun 2008	RSV Tier-2 SE Tests Equivalent to SAM Successful WLCG verification of OSG test equivalence of RSV tests to WLCG SE tests	OSG-RSV													
WLCG-08-02	Jun 2008	OSG Tier-2 Reliability Reported OSG RSV information published in SAM and GOCDB databases. Reliability reports include OSG Tier-2 sites.	OSG-RSV													
SAM VO-Specific Tests																
WLCG-08-08	Jun 2008	VO-Specific SAM Tests in Place With results included every month in the Site Availability Reports.	ALICE			ATLAS			CMS			LHCb				
MSS/Tape Metrics																
WLCG-08-03	April 2008	Tape Efficiency Metrics Published Metrics are collected and published weekly				June 2008										
Tier-1 Sites Reliability - Dec 2008																
WLCG-08-11	Dec 2008	Tier-1 Sites Reliability above 97% Considering each Tier-0 and Tier-1 site	Jul 95%	94			79	88			91					
			Aug 95%					43								
			Sept 95%				90	82				94				
			Oct 95%				84	90	92			83				
			Nov 95%		94		94	86			93	89	93			
			Dec 97%		88		80	91					95	95		
WLCG-08-12	Dec 2008	Average of ALL Tier-1 Sites above 98% Average Reliability above 98%	95% on all Sites - 97% on the Best 8 Sites													