

14-Jan-10		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 NIKHEF	TRIUMF	BNL	FNAL		
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 SAM 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	July 2009 95% 40/63 90% 48/63				August 2009 95% 36/60 90% 47/60				September 2009 95% 27/60 90% 43/60				Oct-09	
WLCG-08-11		VO-Specific Tier-1 Sites Availability Considering each Tier-0 and Tier-1 site (OPS and by VO?)	ASGC	IN2P3	CERN	DE-KIT	INFN CNAF	NDGF	PIC	RAL	SARA NIKHEF	TRIUMF	BNL	FNAL		
October 2009																
	OPS		99	99	100	95	99	72	98	83	94	99	98	99		
	ALICE		n/a	98	100	99	100	100	n/a	92	95	n/a	n/a	n/a		
	ATLAS		25	91	97	99	96	92	90	69	91	98	n/a	n/a		
	CMS		58	93	99	99	97	n/a	93	82	n/a	n/a	n/a	97		
	LHCb		n/a	97	97	100	100	n/a	98	98	98	n/a	n/a	n/a		
November 2009																
	OPS		100	97	100	94	79	90	100	99	97	99	82	99		
	ALICE		n/a	98	99	100	86	100	n/a	100	95	n/a	n/a	n/a		
	ATLAS		22	94	91	80	86	97	98	95	91	99	n/a	n/a		
	CMS		75	98	98	100	86	n/a	100	99	n/a	n/a	n/a	99		
	LHCb		n/a	98	99	99	78	n/a	98	99	96	n/a	n/a	n/a		
December 2009																
	OPS		99	99	98	97	100	91	98	99	97	98	99	98		
	ALICE		n/a					100	n/a			n/a	n/a	n/a		
	ATLAS		100	99	98	93	100	98	95	88	95	97	n/a	n/a		
	CMS		96	98	99	97	99	n/a	100	99	n/a	n/a	n/a	97		
	LHCb		n/a	98	98	97	81	n/a	99	97	96	n/a	n/a	n/a		
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	

ID	Date	Milestone	ASGC	CC IN2P3	CERN	DE- KIT	INFN CNAF	NDGF	PIC	RAL	SARA NIKHEF	TRIUMF	BNL	FNAL
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	n/a
			ATLAS					n/a	n/a					
			CMS					n/a			n/a	n/a	n/a	
			LHCb	n/a					n/a				n/a	n/a
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	n/a					n/a				n/a	n/a	n/a
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												
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												

ID	Date	Milestone	ASGC	CC IN2P3	CERN	DE-KIT	INFN CNAF	NDGF	PIC	RAL	SARA NIKHEF	TRIUMF	BNL	FNAL
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					
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%											
WLCG-07-14	Dec 2007	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
			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 98 - 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 Jul 08	Apr 2008	Nov 2008	Apr 2008	CPU OK Disk Nov 08	CPU OK May Disk Jul 08
WLCG-08-04	Sep 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 Jan Install May	Tender Sept Dec Install Apr	Tender Sept Oct 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

ID	Date	Milestone	ASGC	CC IN2P3	CERN	DE-KIT	INFN CNAF	NDGF	PIC	RAL	SARA NIKHEF	TRIUMF	BNL	FNAL		
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													
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														
WLCG-08-11	Apr 2009	VO-Specific Tier-1 Sites Availability Considering each Tier-0 and Tier-1 site (OPS and by VO?)		ASGC	IN2P3	CERN	DE-KIT	INFN CNAF	NDGF	PIC	RAL	SARA NIKHEF	TRIUMF	BNL	FNAL	
			July 2009													
			OPS	97	99	99	99	100	98	99	90	95	99	n/a	99	
			ALICE	n/a	100	100	100	100	100	n/a	92	94	n/a	n/a	n/a	
			ATLAS	82	99	99	88	97	86	100	86	79	99	n/a	n/a	
			CMS	96	99	99	98	100	n/a	90	92	n/a	n/a	n/a	98	
			LHCb	n/a	100	98	100	100	n/a	99	93	83	n/a	n/a	n/a	
			August 2009													
			OPS	100	99	100	99	97	86	97	77	86	99	91	100	
			ALICE	n/a	100	100	100	100	100	n/a	77	84	n/a	n/a	n/a	
			ATLAS	18	98	99	95	96	98	96	75	80	98	n/a	n/a	
			CMS	95	92	99	96	100	n/a	98	77	n/a	n/a	n/a	98	
			LHCb	n/a	100	100	100	99	n/a	100	78	71	n/a	n/a	n/a	
			September 2009													
			OPS	83	87	99	98	99	96	98	92	84	98	100	100	
			ALICE	n/a	77	99	99	100	100	n/a	88	88	n/a	n/a	n/a	
			ATLAS	48	76	98	76	99	96	96	65	79	98	n/a	n/a	
CMS	94	79	97	99	99	n/a	97	87	n/a	n/a	n/a	99				
LHCb	n/a	77	97	99	100	n/a	96	93	89	n/a	n/a	n/a				