



In2p3



LCG-France Project Status

Fabio Hernandez
Frédérique Chollet
Fairouz Malek

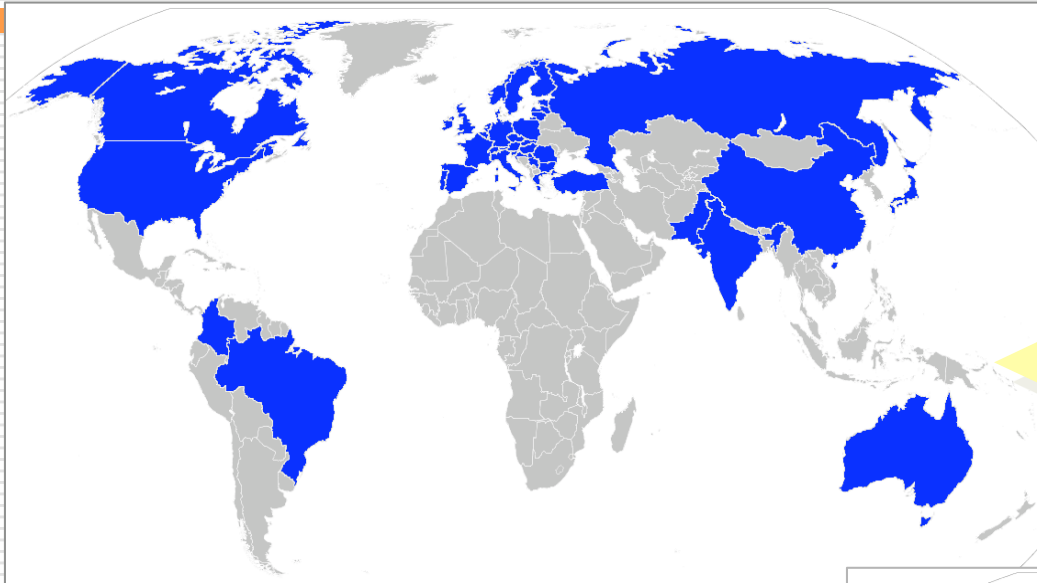
Réunion Sites LCG-France
Annecy, May 18-19 2009



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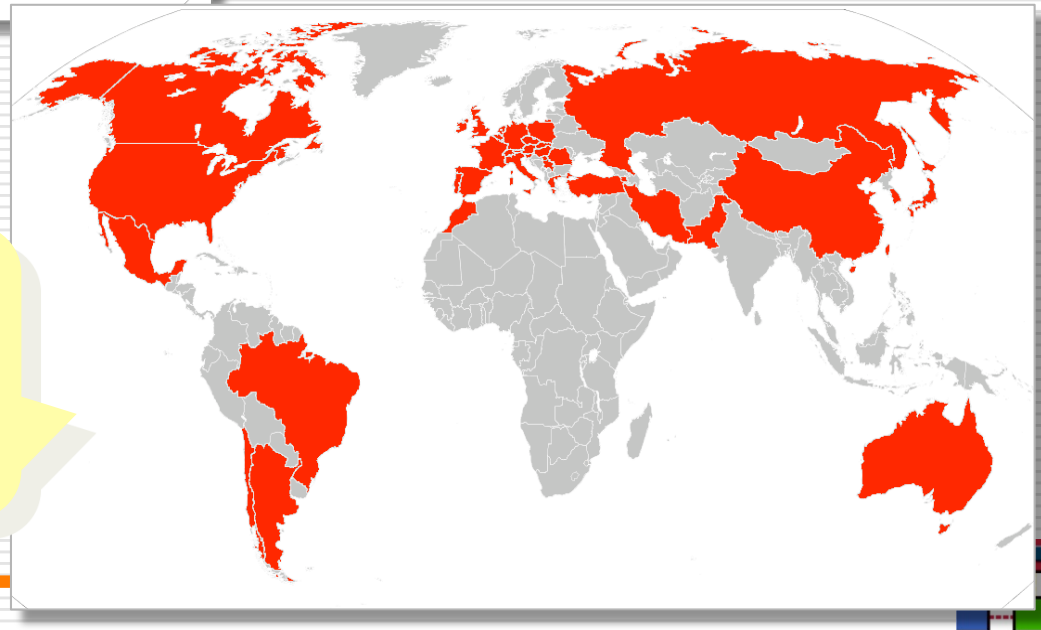
- LCG-France contribution to WLCG
- Ongoing work
- Progress since last meeting
- Questions

Global infrastructure



Location of **sites** connected to a grid infrastructure which provided CPU resources to LHC experiments in 2008 (43 countries)

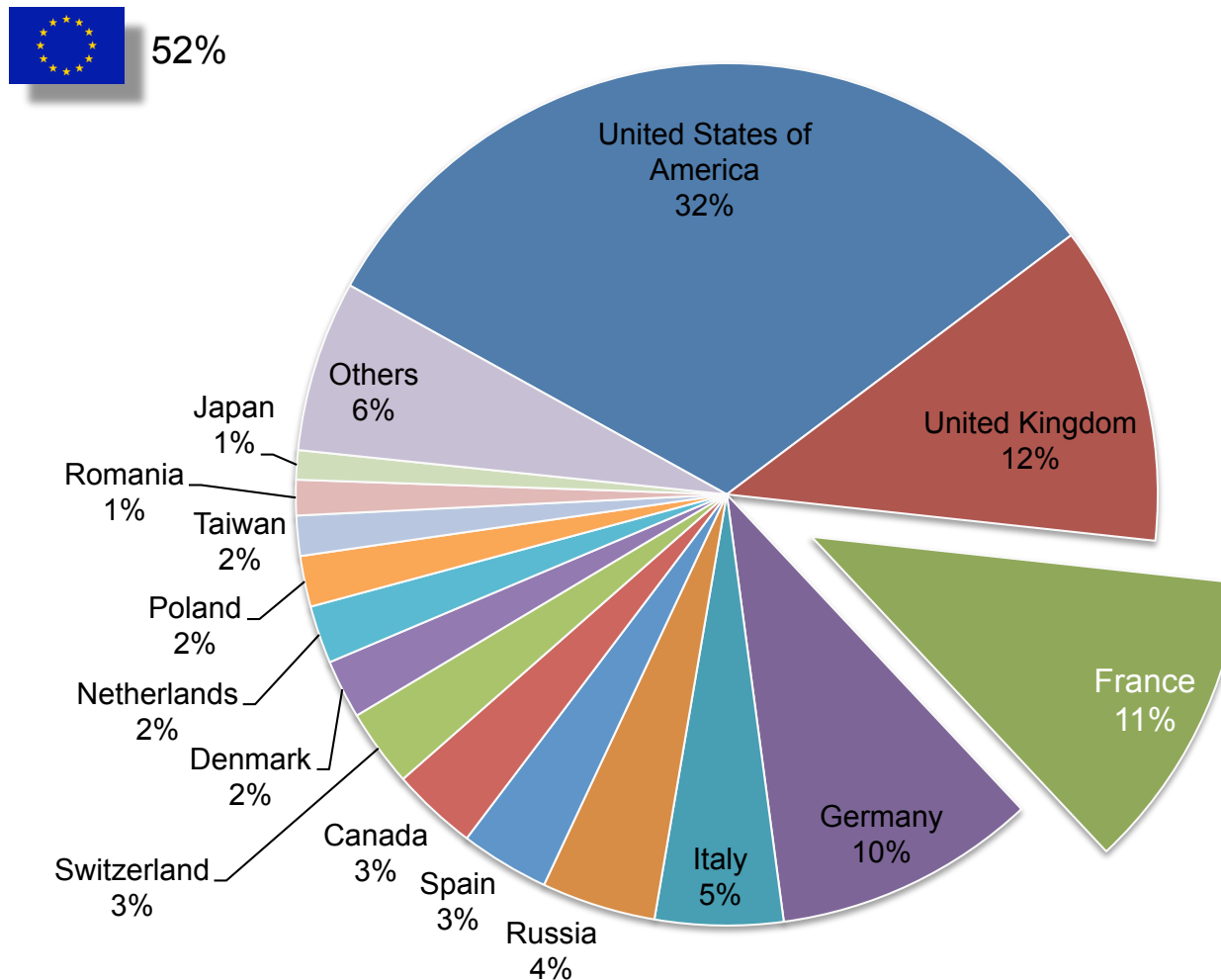
Users currently registered in LHC VOs have certificates issued by authorities in these countries



Actual contribution: CPU All sites

CPU contribution per country

All LHC VOs – Jan 2008-Apr 2009



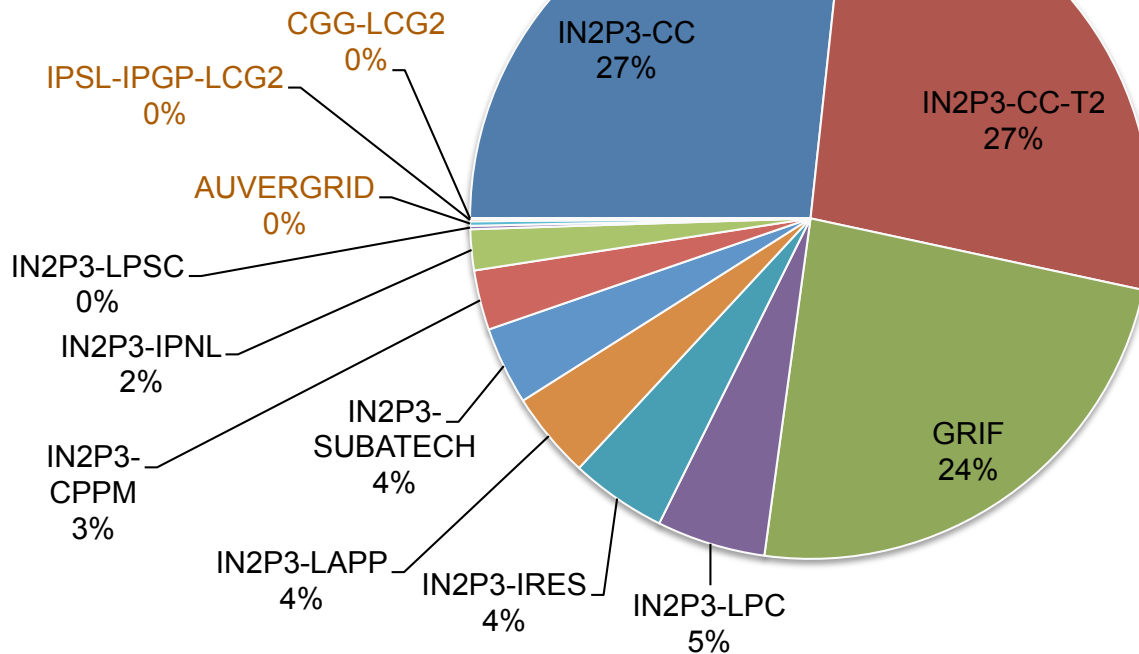
43 countries
contribute
CPU to the
LHC
experiments

Top 10
countries
contribute
85% of
CPU

Actual contribution: CPU All sites (cont.)

LCG-France - CPU contribution per site

All LHC VOs -- Jan2008-Apr2009

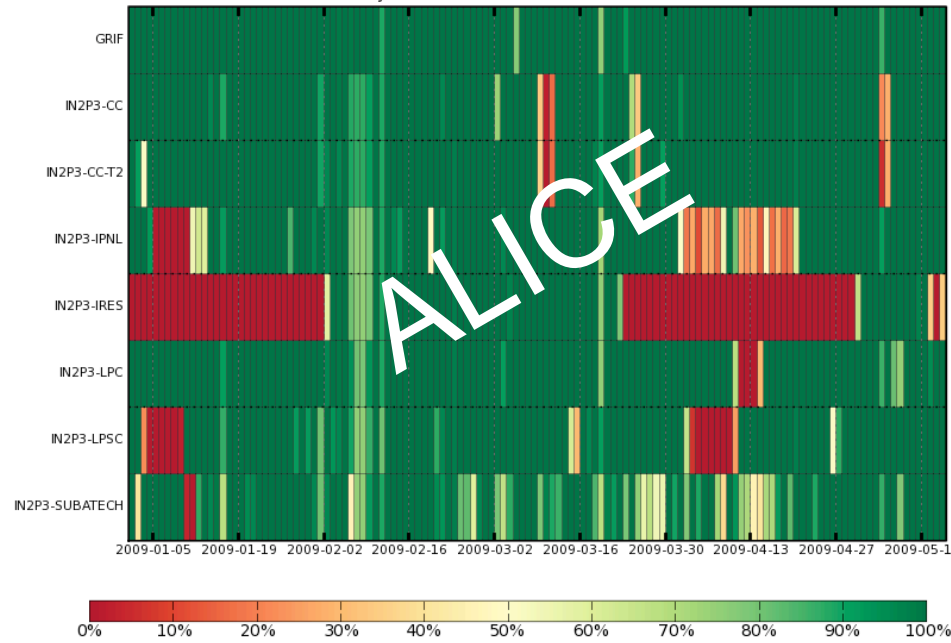


Role	Site	ALICE	ATLAS	CMS	LHCb
Tier-1	IN2P3-CC	✓	✓	✓	✓
	IN2P3-CC-T2	✓	✓	✓	✓
	GRIF	✓	✓	✓	✓
Tier-2	IN2P3-LPC	✓	✓		✓
	IN2P3-IRES	✓		✓	
	IN2P3-LAPP		✓		✓
	IN2P3-SUBATECH	✓			
Tier-3	IN2P3-CPPM		✓		✓
	IN2P3-IPNL	✓		✓	
	IN2P3-LPSC	✓	✓		

Source: [EGEE Accounting Portal](#)

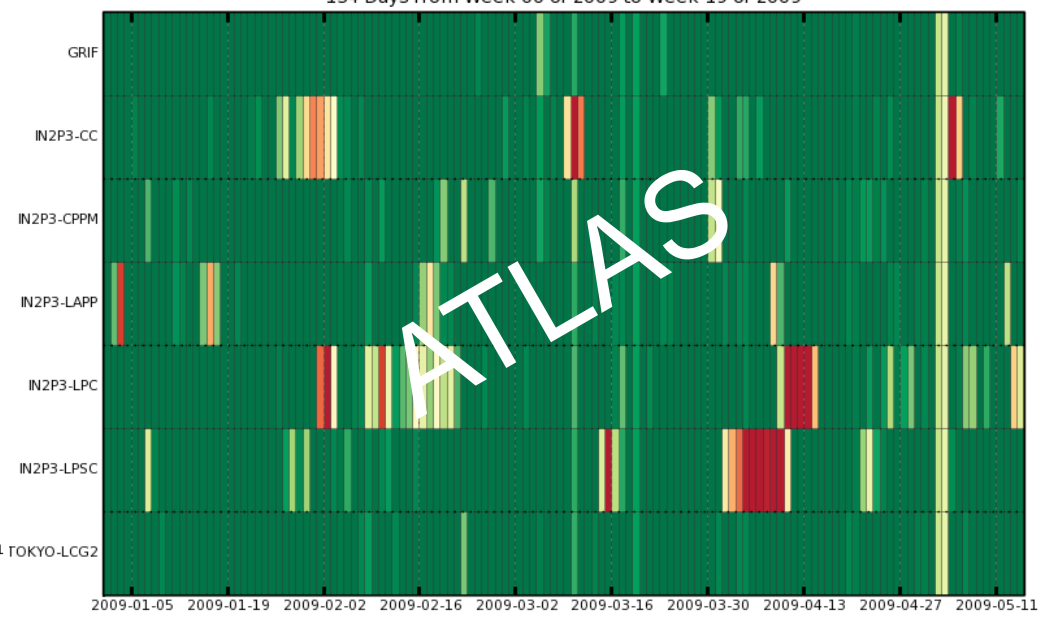
Site Availability using WLCG Availability (FCR critical)

134 Days from Week 00 of 2009 to Week 19 of 2009



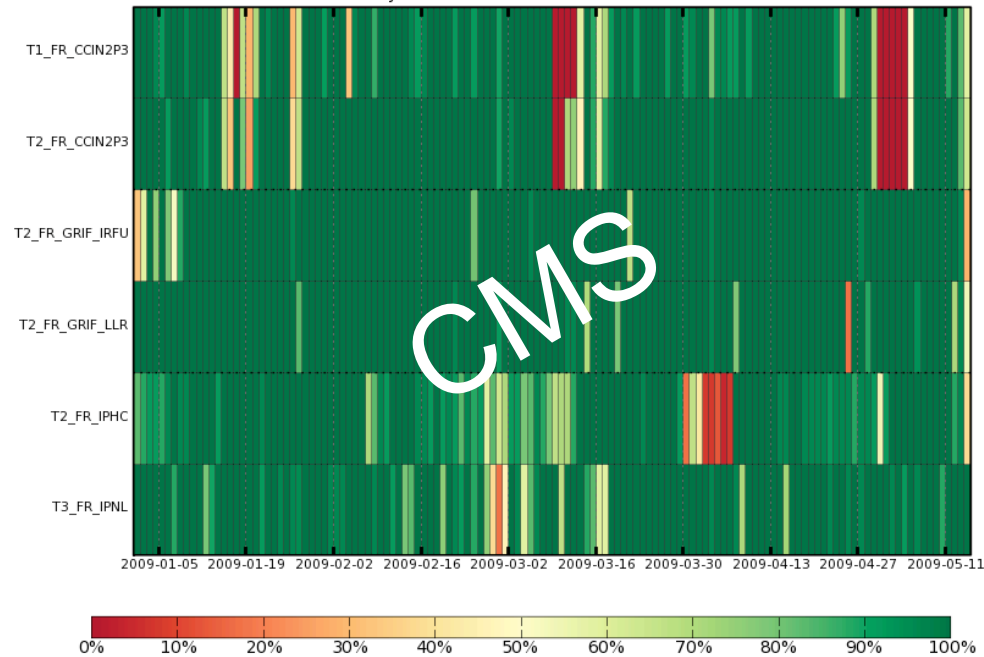
Site Availability using WLCG SRM2

134 Days from Week 00 of 2009 to Week 19 of 2009



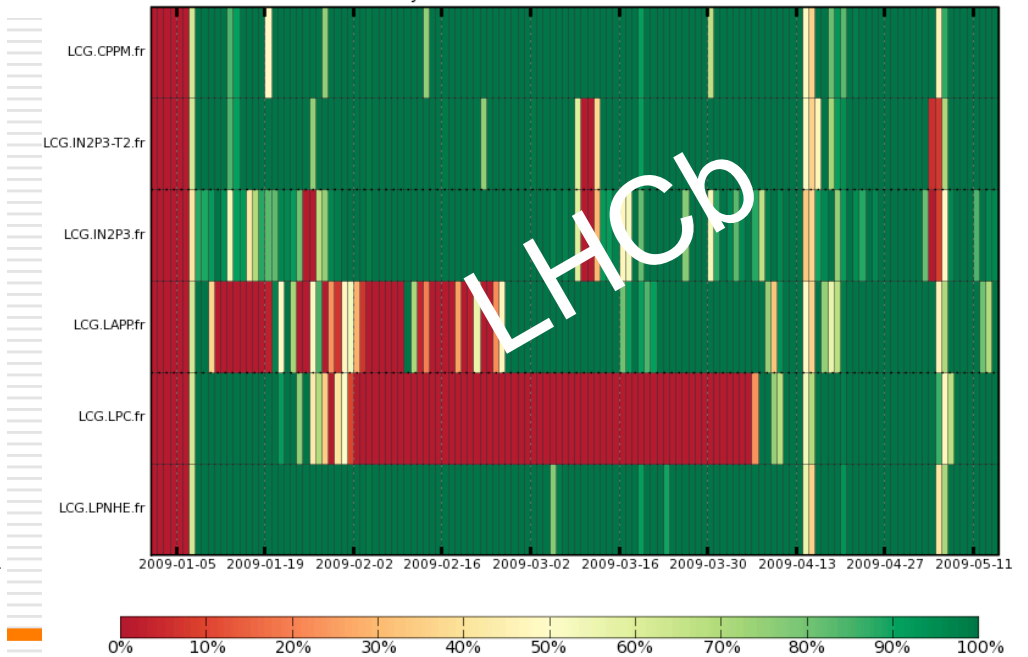
Site Availability

134 Days from Week 00 of 2009 to Week 19 of 2009



Site Availability using LHCb Critical Availability

134 Days from Week 00 of 2009 to Week 19 of 2009



Availability & Reliability – EGEE Regions

Jan 09

Region	Feb 09	Avail-ability	Reli-ability
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Region	Feb 09	Avail-ability	Reli-ability
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Region	Feb 09	Avail-ability	Reli-ability
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Region	Avail-ability	Reli-ability
France	97 %	98 %
SouthWesternEurope	95 %	97 %
UKI	94 %	96 %
NorthernEurope	94 %	96 %
SouthEasternEurope	93 %	94 %
GermanySwitzerland	93 %	93 %
CentralEurope	93 %	93 %
CERN	88 %	88 %
AsiaPacific	80 %	82 %
Italy	78 %	88 %
Russia	60 %	68 %

Source: <https://edms.cern.ch/document/963325>



Availability & Reliability – EGEE France

Apr 09

Ces chiffres paraissent suspects pour certains sites (Phy.CPU = Log.CPU)

Region	Site	Phy. CPU	Log. CPU	KSI2K	Availability	Reliability	Availability History		
France (France)							Jan-09	Feb-09	Mar-09
	AUVERGRID	42	42	75	98 %	98 %	98 %	100 %	98 %
	CGG-LCG2	80	80	49	91 %	91 %	46 %	73 %	96 %
	ESRF	16	16	43	86 %	86 %	83 %	89 %	98 %
	GRIF	3,338	2,180	3,908	100 %	100 %	99 %	100 %	92 %
	IBCP-GBIO	10	10	5	55 %	97 %	60 %	67 %	94 %
	IN2P3-CC	1,074	4,296	3,832	99 %	99 %	97 %	98 %	90 %
	IN2P3-CC-T2	1,074	4,296	3,832	99 %	99 %	96 %	97 %	89 %
	IN2P3-CPPM	358	358	537	98 %	99 %	99 %	97 %	95 %
	IN2P3-IPNL	452	440	656	98 %	99 %	98 %	96 %	98 %
	IN2P3-IRES	664	628	1,526	84 %	84 %	95 %	96 %	93 %
	IN2P3-LAPP	512	512	1,133	96 %	98 %	94 %	100 %	98 %
	IN2P3-LPC	448	448	802	84 %	99 %	94 %	93 %	99 %
	IN2P3-LPSC	120	112	43	71 %	96 %	97 %	99 %	94 %
	IN2P3-SUBATECH	275	380	803	97 %	97 %	99 %	96 %	99 %
	IPSL-IPGP-LCG2	34	34	41	96 %	96 %	94 %	100 %	96 %

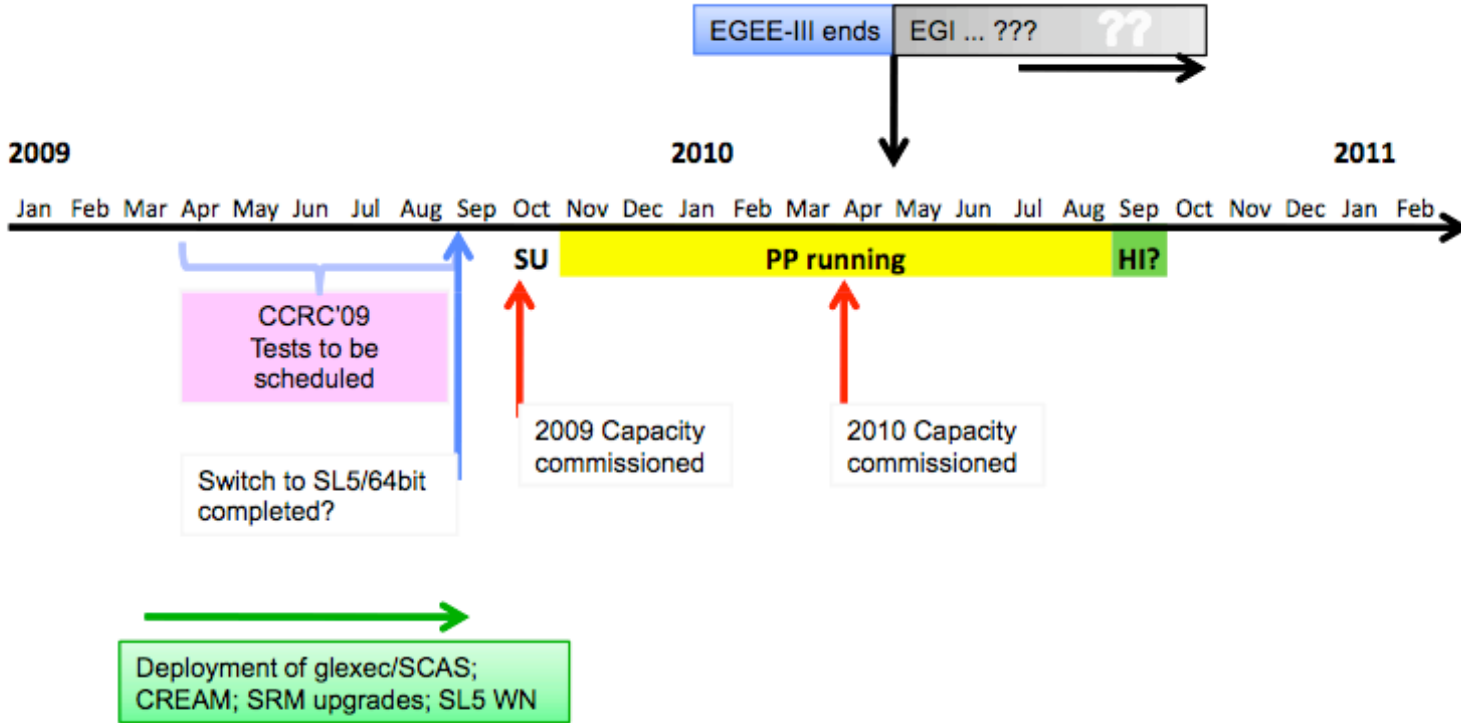
Source: <https://edms.cern.ch/document/963325>



Calendrier



WLCG timeline 2009-2010



Source: lan.Bird.WLCG. Workshop. Prague. 21-22/03/2009



WLCG - Ongoing work

- User-level accounting
- Improving monitoring tools for various users
 - Experiments & sites
- Automated collection of and reporting on installed CPU and storage capacity
- Initial deployment of Scientific Linux v5 for worker nodes, for validation purposes
 - Bulk CPU capacity not expected running SL5 before September 2009
- Switch to new CPU unit SPEC-HEP 2006
 - <https://hepix.caspar.it/benchmarks/doku.php?id=homepage>
- Virtualization
- STEP'09

Progress since previous meeting

- Core of a dedicated farm for end-user analysis in place and tests started (CC)
- Pilot testing or early adopters of some services at several sites
 - WMS (GRIF), CREAM CE (Subatech), glexec & SCAS (CC), ...
- Several software and hardware updates
 - FTS, VO boxes, WMS, CEs, ...

Project Management

- Contribution of LCG-France to the funding of the tier-2s and tier-3s: on time
- Risk analysis: belated
- Quarterly all-sites meetings: first experience seems worth to continue

Concerns

- Connectivity of LAPP to the national network, before LHC starts
- Infrastructure of tier-1
- Performance of the access to mass storage at tier-1
 - Yet to demonstrate that it can cope with requirements by LHC experiments
- Stability of the storage components
- Requirements for data analysis not yet understood
- Lack of sufficient regulation mechanisms
 - Inter-site data transferring
 - Different activities by the same experiment within a single site

This meeting

- Update on tier-1 activities and infrastructure
- Updates on some other sites
- Experiments
- Transition to the French NGI
 - organization and day-to-day operations
- Updates on working groups
 - accounting and monitoring
- Connectivity update
 - WAN and LANs
- LHC data analysis

More Information

- LCG-France website <http://lcg.in2p3.fr>
- Agendas
 - <http://indico.in2p3.fr/categoryDisplay.py?categId=59>

Questions

