

High Energy Physics Session

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WLCG Service Coordination

(EGI InSPIRE SA3)

5th EGEE User Forum, Uppsala, Sweden, April 2010

- 👉 This is the final User Forum of the EGEE project series
 - And this is the introduction to the session...
- ☐ Highlight the progress made during this period – which sets the context for the detailed talks that follow
 - Experience talks that build on the evolving infrastructure...
- Summary of the major achievements of the past 6 years plus a strong link to EGI & the future...

- ❑ Running concurrently with the EGEE project series was an effort to bring the WLCG service to full production status
 - Readiness for data taking from collisions between accelerated protons in the Large Hadron Collider at CERN
 - Started with the Service Challenge programme (proposed May 2004 and running through October 2006)
 - Continued with the “Common Computing Readiness Challenge” (CCRC’08) and “Scale Test of Experiment Production” (STEP’09)
 - And finally injection-energy collisions (2009) followed by 7 TeV centre-of-mass collisions (2010)
- ↳ The status of the service – which builds heavily on EGEE infrastructure together with partners in other regions – can be summarized in a single slide!

WLCG Operations Report – Structure

KPI	Status	Comment
GGUS tickets	No alarms; normal # team and user tickets	No issues to report
Site Usability (SAM-based)	Fully green	No issues to report
SIRs & Change assessments	None	No issues to report

KPI	Status	Comment
GGUS tickets	Few alarms; normal # team and user tickets <i>and/or</i>	Drill-down
Site Usability	Some issues <i>and/or</i>	Drill-down
SIRs & Change assessments	Some	Drill-down

KPI	Status	Comment
GGUS tickets	Many alarms / other tickets	Drill-down
Site Usability	Poor	Drill-down
SIRs & Change assessments	Several	Drill-down

Normally; **Sometimes;** **Rarely / Never**

WLCG Service Summary

↑ **Massive** increase in service usage & deployed resources

= Sum of resources (at any one time) at different tiers ~constant

↘ **Flat** or **decreasing** support load

= Sum of tickets at different tiers ~constant

➤ **Service is now fully delivering:**

- ✓ **Enabling more & better science;**
- ✓ **Encouraging and facilitating inter-disciplinary and international collaboration(s);**
- ✓ **Tangible, long-term benefits to science & society.**

- **LHCb operations: organizations, procedures, tools and critical services;**
 - Roberto Santinelli, CERN IT-ES
- **Distributed Computing and Data Analysis in the CMS Experiment: the Spanish and Portuguese case;**
 - Pepe Flix, CIEMAT
- **The Grid as an Extended Application Service Provider in an Synchrotron Radiation Facility;**
 - PRICA, Milan, *Trieste*
- **ATLAS Distributed Computing in Spain and Portugal: from data challenges to real data;**
 - ESPINAL, Xavier (*PIC/IFAE*)

- **Response of the ATLAS Spanish Tier2 for the collisions collected in the first run at LHC;**
 - GONZALEZ DE LA HOZ, Santiago (*Instituto de Física Corpuscular (IFIC)-Universitat de València-CSIC*)
- **CMS Remote Analysis Builder (CRAB) with the ARC grid middleware**
 - EDELMANN, Erik (*CSC - Finnish IT Centre for Science*)
- **LHC ATLAS users analysing data on the Grid;**
 - LAMANNA, Massimo (*CERN*)
- **Client/Server Grid applications to manage complex workflows;**
 - SPIGA, Filippo (*Dipartimento di Fisica "G. Occhialini"-Universita degli Studi Milano-Bicocca*)

- **Several posters with interesting applications for the High Energy Physics community**
- **Security**
 - [13] *Eliminating and preventing Grid security Vulnerabilities to reduce security risk*
 - GSVG handling Grid Security Vulnerabilities over the last four years
- **Services**
 - [53] *Job Management in gLite*
 - gLite-WMS service as used by the HEP communities - stability and performance are of particular concern
 - [96] *Monitoring CREAM Jobs in RTM and L&B*
 - Uniform monitoring of all grid jobs submitted through the new CREAM CE (via the gLite-WMS or direct submission mode)
- **Site administration**
 - [153] *Configuration and optimization for a gLite Grid computing farm*
 - Common experiences provided by LHC and non-LHC users illustrate the optimization work performed on a mid-sized gLite Grid computing farm
 - [70] *An integrated monitoring system for Grid Data Centres*
 - Monitoring system developed for the data centres used by ATLAS in particular in Napoli and applied to the whole site infrastructure: UPS, cooling, storage, network, etc

Monday 17:00 – 19:00 and Wednesday 16:00 – 18:00