



Current experience with LCG user support for HEP



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<http://agenda.cern.ch/askArchive.php?base=agenda&categ=a043996&id=a043996s1t8/transparencies>



Talk Outline

- **Mandate of EIS Team**
- **EIS Organization**
- **Main Tasks: Integration and Support**
- **Integration during Experiment DC**
- **Support during Experiment DC**
- **Some Remarks**
- **Conclusions**



Mandate of the EIS Team

- EIS : Experiment **Integration** and **Support** Team
- Help LHC Experiments *integrating* their *production environment* with the Grid Middleware and utilities.
- Give support during all steps of the integration process: understanding of the middleware functionality, testing new prototypal components, getting on the LCG Infrastructure.
- **Production** is the main focus.
- **Experiment Support** does not mean **User Support**.
- **Experiment Support** does not mean **GOC**.



EIS Organization

■ One person per experiment

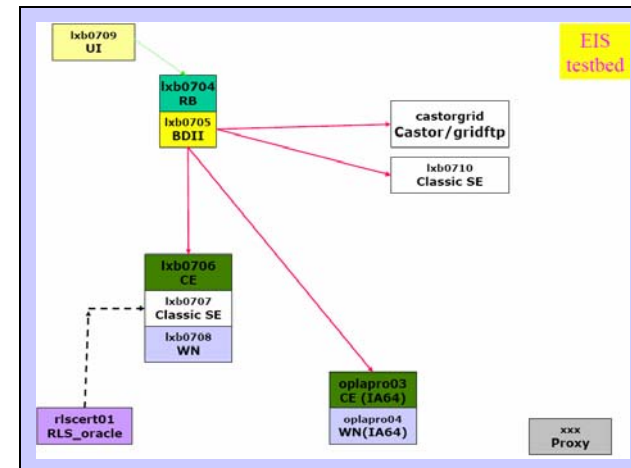
- Patricia Mendez Lorenzo: **Alice**
- Simone Campana: **ATLAS**
- Andrea Sciaba': **CMS**
- Roberto Santinelli: **LHCb**

- Antonio Delgado Peris: **Development and Docs**
- Flavia Donno: **Coordination**

■ Central Repository for Special utilities

- Experiment Software Installation Toolkit
- IS Interface Tools
- Data Management Prototype Utilities
- Special WMS (Integration with exp catalog)
- Authorization APIs
- ...

■ The EIS Testbed



■ Docs, special middleware distributions, examples

Other instructions and examples

- How to manually install a GridFTP client
- Tar distribution of GridFTP client tools
- How to manually install a GridFTP server
- How to install a "fake" Computing Element
- How to install the Replica Manager
- How to install the RLS C++ API
- How to test the experiment software installation area
- How to setup a UI for LHCb



Main Tasks

- We had a different experience with *Integration and Support before and during experiments Data Challenges*
- ***Integration***
 - Help with middleware functionality and usage
 - Perform functionality tests
 - Provide special distributions
 - Provide missing tools where needed
 - Discuss requirements and bring them to the attention of the developers
 - Check problems and understand the origin of them
 - Check how the middleware and infrastructure are used and suggest better ways if appropriate
- ***Support***
 - Provide documentation: Manuals, Guides, User Scenarios, FAQ
 - Provide usage examples
 - Provide and maintain a private testbed
 - Answer first line User Support questions



Integration during experiment Data Challenges

- Everything described up to now
- Active participation to daily organization meetings
- Understanding of experiment specific production environment
- Development of special utilities to use in experiment specific software (Monnalisa sensors, IS APIs, RLS interface, etc.)



▶ Quite intensive activity. It takes one person full time per experiment



Support during experiment Data Challenges

- Everything described up to now
- But also ...
 - Monitoring experiment specific production system (even in shift)
 - Provide full user support
 - Configuring experiment specific utilities (acrontab, etc.)
 - Chasing misconfigured sites and solving site-related problems
 - Suggesting better site configuration for resource usage
 - Monitoring GRID and Experiment Specific Services
 - Provide Security Advice



▶ Not really in the EIS mandate



Some Remarks

EIS activity useful and needed but:

REAL Grid Operation Center needed

Global Grid User Support forwarded questions to our mailing list

We provided some support also to other VOs like D0 via GGUS

We were often overloaded

Experiments sometime tend to “absorb” EIS people

Absolutely needed better debugging and monitoring alarm tools

Overall very nice and constructive experience for us!!!



Conclusions

- EIS provides help integrating VO specific software environment with GRID middleware
- Our organization foresees direct experiment support via a contact person, a testbed, software repository, special middleware distributions, documentation
- Integration and support are quite intensive tasks
- During experiment Data Challenges we covered tasks that are proper of a GOC or GGUS
- Overall a very interesting a productive experience (LHC experiments seem to find EIS team very supportive and needed)

Our mailing list:

support-eis@cern.ch

EIS experiment contacts:

project-lcg-deployment-eis@cern.ch

EIS testbed users:

project-eis-testbed@cern.ch

Our WEB site: <http://grid-deployment.web.cern.ch/grid-deployment/cgi-bin/index.cgi?var=eis/homepage>