



# **LCG/EGEE User Support**

Flavia Donno LCG/INFN-Pisa



Flavia.Donno@cern.ch





## **Discussion Topics**

- User support: what does it mean? What are the most common problems?
- What was the outcome of the LCG Workshop on Operations
- Where are we at?
- Report from GGUS: the ESC committee
- We need to do more!
- Conclusions



## What is Grid User Support?



- Grid Support Concepts and Organization defined for LCG in the document: "LCG Grid Support" v2.1 released on 29 April 2003, H. Bär, R. Pietschmann, W. Thöne
- General approach: 3 main support centers to guarantee coverage 24/7 and 365 day support and provide a single point of contact to customers and to local Grid operations.
- User Support covers: Helpdesk, User Information and training, problem documentation and tracking, Support staff information, measuring and reporting and service level agreements (SLA)
- Portal for problem submission and tracking, knowledge base access and FAQs, status information and contacts, documentation/information/howto's, training for support staff, user training information
- Procedures are missing



# abling Grids for What are the most common problems?



- ▶ Where do I go for help?
- ▶ Users confused by old documentation (too many sources [of "obsolete"] documentation ) or lost in the LCG web pages
- ▶ Procedural problems: finding out the CA of reference, requesting a certificate, getting started, contacting RC, ...
- ▶ Confusion generated by wrong answers or non adequate support: "You should contact your ROC", "your RB does not see your resources", "you should use edg-rm ..."
- ▶ Middleware usage: documentation too long to read
- ▶ Installation/configuration problems, what is best to use, "how do I monitor ?", "where should I look ?", etc.
- ▶ Missing templates and/or example
- **▶** Confusing error messages
- ... and much more



### What does a User expect?



- ► Correct answers and general help with middleware usage (how-to, new features, errors, etc.)
- ► Solving user problems while running on Grid
- ► User support should provide correct documentation, examples, "templates", powerful search engines, links to EGEE infrastructure contacts, e-mailing lists, etc.
- ► A unique way to submit problems/requests for help and receive response. A unique entry point for information, for problem escalation, broadcasting news, ...
- ► User/Site notification about site related problems, Grid status, etc.
- ► User Support is different from VO and Operations Support with a lot of overlap tools are the same



### **GUS: Conclusions of the LCG Workshop**



- Unique access point (for users, VOs, operations): ROC or GGUS
- GGUS responsible for coordinating the effort
- ROCs highly involved in the Support effort
- Central Support committee (VO, ROCs, CICs, NA4, NA3, LCG GD) responsible for:
  - Tools, interfaces, documentation coordination
  - Handling special User Support conditions (transition to gLite)
  - Coverage of all areas of support, procedures for problem escalation
  - VO support at user and operation level
  - Definition of procedures to build expertise with NA4 and NA3
  - Establish the mechanism to collect feedback from Users, Developers, ROCs, etc. React to feedback
- Local Support Committee (ROC) responsible for:
  - Identify local expert, creation of experts communities
  - Report on specific issues with local VO/Operations support
  - Provide documentation, tools, how-to guides, examples
  - Agree on common interfaces, tools, information presentation



### GUS: What is a possible implementation?



# Support Teams within LCG & EGEE

Deployment
Support (DS)
Middleware Problems

Operations Center (CIC / GOC / ROC)
Operations Problems

Resource
Centers (RC)
Hardware Problems

Global Grid User Support (GGUS)
Single Point of Contact
Coordination of UserSupport

Experiment Specific
User Support (ESUS)
VO spec. (Software) Problems

Other Communities (VOs), e.g. EGEE LHC experiments (Alice Atlas CMS LHCb) non-LHC experiments

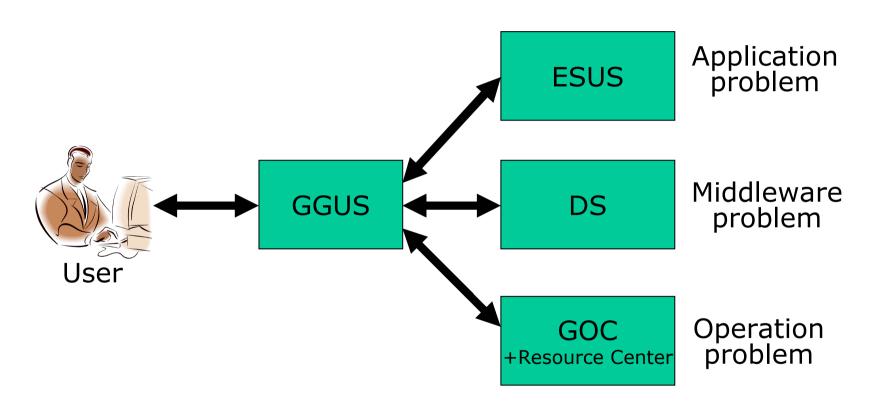
(BaBar, CDF, Compass, D0)



# GUS: What is a possible implementation ?



# Support Workflow (LCG)

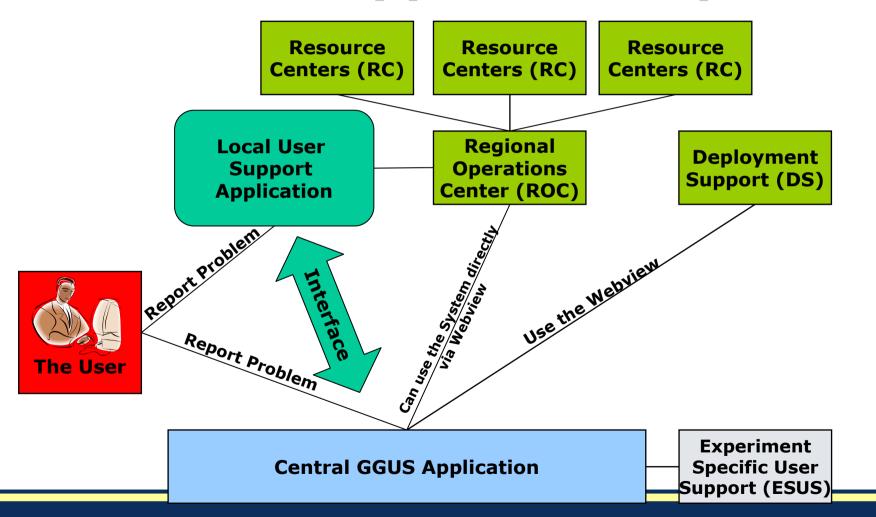




## GUS: What is a possible implementation?



# **EGEE Support Concept**





### GUS: Where are we at ? The User view ...









At present many channels used:

EIS contact people: **support-eis@cern.ch** 

LCG Rollout list: LCG-ROLLOUT@LISTSERV.RL.AC.UK

Experiment specific: atlas-lcg@cen.ch

GGUS: <a href="http://www.ggus.org">http://www.ggus.org</a>

Not a real agreed procedure.

GGUS provides a useful portal and problem tracking tools —

however requests are forwarded, information spread, etc.

http://www.grid-support.ac.uk/





### EIS Tasks



- A procedure still not in place
- Difficult to build knowledge and documentation
- EIS is overloaded with basic User Support and cannot provide satisfactory HEP-Grid integration support
- Integration
  - Help with middleware functionality and usage
  - Perform functionality tests
  - Provide special distributions
  - Provide missing tools/APIs 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, usage ex
- Participate to daily meetings/Understand experiment specific environment
- Provide and maintain a private testbed
- Answer frontline User Support questions



### Report from GGUS: the ESC committee









# Responsibilities of the Executive Support Committee (ESC)

- Lead by GGUS/Chaired by A. Mills (Kick off meeting of ESC at Karlsruhe 27 January 2005)
- **Goal:** To ensure an effective and efficient Grid User Support Service. The ESC organisation has a limited life. It has been formed for a period of 24 week from 28 January 2005 until 14 July 2005. If it is successful, its life may be extended.
- Members: 12 people from CERN, UK, France, Italy, Germany, Czech 4 x 100% (KA) + 8 x 25% => we are increasing the effort being added to GGUS. This does not include the effort which we hope to capture from the ROCs.



# What has been achieved by ESC



### Tasks:

- Identify experts, contacts
- Integrate all of the ROC ticketing systems into the GGUS ticketing system
- Integrate the CIC operations into the GGUS system and eliminate the dependency on Savannah as CERN
- Integrate the VO operations into the GGUS system
- <u>Document the work flows/procedures through the GGUS</u> system for each of the clients (ROC, CIC, VO, User) – <u>deadline 24/2/2005</u>
- Enhance the GGUS portal
- Work with NA3 (or other organisations) to provide training and to enhance training materials
- Enhance the GGUS system to meet the needs





### **Some dates:**

- Agreement on procedures and documentation 24/2/2005
- Tasks Plan definition 24/3/2005
- Montly meetings until the 14/7/2005

#### •GOAL:

Prove a a noticeable improvement by the middle of July

Need to involve more people. Need to find man power in the ROCs.





## What has been achieved by ESC so far

- Working groups getting organized
- New ticketing system released on the 2<sup>nd</sup> of February 2005
- Portal enhanced with new documentation page
- Possible to search through old tickets
- Links to existing knowledgebase in place
- Automatic forward to/from Italian ROC working
- Test system in place for training First training event in Frascati 22-25 February: http://www.grid-tutorial.to.infn.it/?Admin\_Tutorial

### First feedback

- Ticketing system usable for base User Support
- Good documentation page: will be referenced by GridPP
- People interested in Support tutorial



### We need to do more



### Crucial urgent points:

- Identify experts in several areas and place them side by side to current supporters, procedures to train new experts. ROCs should commit human resources to User/VO Support. We do not know how many people are currently involved with User Support.
- Make sure all areas of support are covered
- Decentralize support tasks (portal development, ticketing system integration, search engines, broadcast tools, etc.)
- Documentation working group (Howto's, examples, template, search engine, knowledge base, support docs, etc.)
- Identify a procedure for checking the quality of service offered (ticketing monitoring, usage statistics, user feedback)
- Advertise the service and encourage users to use it, providing efficient feedback (we need not to loose customers)



# nabling Grids for science in Europe What about VO support ...?



### When a VO ask to join EGEE ...

Need for negotiation of VO resources and VO support at the Regional Centers (coordinated by the ROCs). Identify experts and procedures.

For VOs with no VO support, GGUS can provide basic support.

GGUS is the entry point for all kind of problems (User running on Grid, resources miss-configuration, etc.)



# Oling Grids for What about VO support ...?



### Vo supporters commit to:

Possible personal contacts and participation to meetings

Provide help to best use the middleware for specific use-cases

Communication with developers for implementation of specific features

Tools, APIs, specific distributions of single middleware components

Support of a possible testbed to play with, strictly controlled, with prompt support reaction

**Specific Tutorials (addressed to a specific VO)** 

Monitor VO specific services, signal problems

Site monitoring, interact with local site support



### **Conclusions**



Quite some improvement since the time ESC has been put in place. We need to continue and push this effort. A coordination team is absolutely necessary

We need to have the ROCs commitment to User/VO Support. We need to gather man power and expertise.

Decentralization of responsibilities. Coordination needs to be centralized but the User Support infrastructure needs to be distributed.

We need to build confidence in our users, acquire customers and advertise the new service.