# French ROC progress and issues

## *Production grid infrastructure*

At the time being, the French ROC is dealing with 13 grid sites in production and one more that is still in setup.

Among those sites, there are two regional grid initiatives. One is connected to EGEE Grid by the way of one unique name, GRIF. It is composed of six geographically separate sites. As GRIF doesn't behave as a single entity in all aspects, the French ROC may have to deal individually with each of the sites.

Conversely, the other regional grid initiative, called AUVERGRID, of which two production sites are visible on the grid (plus one that should join EGEE grid soon), is centrally coordinated by IN2P3-LPC staff. The resources of five additional sites are also available, as they are logically integrated into the two ones declared on the grid. Geographically those sites are located up to 100 km from one another.

## *Grid services supplied*

The French ROC runs different grid services hosted on several sites:

- 3 VOMS servers that provides membership management for global EGEE VOs, regional VOs, and local VOs used by some sites to manage their local users that access the local computing/storage resources using grid technology.
- 2 central LFCs for 3 global EGEE VOs
- A regional MonBox which is used by different production sites to publish their accounting data.
- 4 regional top BDIIs distributed over the sites for load balancing and backup purposes
- At least, 4 RBs supporting various VOs
- A regional FTS server mainly used by LHC VOs within the LCG project context

In addition there are regional developments for accounting (done at LAPP) and a remake of the information system to take into account MAUI (done at GRIF).

## *Operations support:*

ROC-FR is participating in the CIC-on-Duty rotation. The French team is composed of four persons, who also participate in the COD meetings. The other daily monitoring of sites and the ROC's problem ticket follow up is done for the region by the staff at the tier-1 site in Lyon. The operational support for sites composing GRIF and AUVERGRID is mainly done by the respective staff of these regional grids, except for the follow up of the ROC tickets.

## *Deployment support:*

There are two major cases to distinguish, initial site setup and deployment for new versions of the middleware. In the first case the ROC establishes a privileged contact between the experts for the different phases of setup and the different services, and the new site's administrators. It

might send experienced site administrators to the new RC to help, if appropriate. These experts might come from any of the French grid sites.

In the second case, the support is much more lightweight. Essentially, the new versions are announced using various communication channels. The deployment is then coordinated via mailing lists and video conferences.

While the communication between the French ROC and the other instances of the EGEE grid is mainly guaranteed by the staff in Lyon, some technical coordination is assured by the staff from other sites, for example for the coordination of the non-tier-1 sites of LCG by LAPP, or for any topic related to the use and development of the Quattor deployment tool by GRIF. To appreciate the importance of this work, it should be noted that Quattor is used by the large majority of French EGEE sites.

## *User support*

### Regional helpdesk:

At IN2P3-CC, we switched from a home-made local user-support to XOOPS/xhelp. Problem reports concerning IN2P3-CC are sent directly to this user-support system. However it is not interfaced with GGUS. This is ongoing work. Two persons deal with the majority of tickets assigned to the French ROC through the GGUS Support Staff interface, but others intervene as necessary.

The French ROC has no regional support system yet. As a consequence, all grid issues within the French federation are handled through the GGUS interface to be assigned to the concerned French site. Each site or regional grid initiative then deals with the tickets through e-mails or GGUS interface.

No local tickets have been escalated to GGUS. French submitters create directly tickets in GGUS. The extension of the XOOPS/xhelp system to a regional system (dedicated to EGEE, in parallel or not to the site's own system as chosen by the site itself) is planned but depends on the interface to GGUS and also on the availability of support from the side of the developers of this tool.

Various persons do support for the VOs present in France. For any VO, main efforts come from the sites supplying the major part of their resources to that VO. IN2P3-CC mainly supports the LHC VOs but also D0 and Biomed, CGGVeritas supports EGEODE, AUVERGRID mainly Biomed, and so on.

### Contributions to overall GGUS/TPM:

The French ROC has been represented at almost all meetings of the ESC. France is participating to WP1, leading WP2 (CIC integration) and is deeply involved in ENOC integration to GGUS (in cooperation with SA2).

The French ROC provided four people for TPM until end of 2006. From beginning of 2007, only one person remains for this task. One person left IN2P3-CC to FZK, and the two other ones cannot do TPM anymore.
As there is only one person, TPM minimum task is done i.e. assigning the new ticket to the correct unit. The follow up of already assigned tickets cannot be done. This is clearly not sufficient.

## ROC Communication channels

The French ROC has set up two main channels of communication.

The first one is a mailing-list that gathers together all the French SA1 actors and some French VO representatives that are interested in operation matters. That mailing list is useful to spread over official announcement and documents, and also to discuss some technical points.

The second one consists in organizing video-conferences twice a month. During those conferences, the ROC reports on the latest news coming from WLCG/EGEE operations, informs the sites of current events, and on the other hand, sites report on their current status, bring up the current technical/operational problems they encounter.

Beyond several Grid training sessions (at least 4 in 2007), the ROC organizes also different workshops in which sites are invited to discuss some specific topics related with the Grid project. For 2007, the topics below have been or will be addressed:

- Management of the production within a Grid context
- Advanced management of Torque/Maui LRMS
- Security within a Grid context

In addition there are more specific mailing lists for the sites supporting the LHC VOs. They deal with specific technical problems or serve as a coordination tool for the non-tier-1 sites.

Yet another means is the EGEE broadcast tool which is used quite frequently to communicate between sites, between sites and VOs, between VOs and the ROC and so on.

## Resource allocation

There are no specific procedures for resource allocation to new VOs except those foreseen on the Operations Portal for data challenges and normal production runs in the context of the OAG procedures.

In the case of the LHC VOs, there is a regional negotiation between the sites, the funding agencies, and the VO management for the long term equipment of the participating computing centres. Persons from the sites are largely also involved in general site management for EGEE.

## VO management

No specific procedures exist for the general case. However, due to the activity of the French ROC in the OAG the workflow of the EGEE VO registration procedure has been implemented on the CIC portal as well as additional procedures to simplify the communication between VOs and sites about the needs of the VOs.

## Setup of a National Grid Infrastructure

There is currently no national grid initiative. However, recently one partner of the French federation, CNRS, has created a Grid Institute (“Institut des Grilles”) which will try to

concentrate the various grid initiatives in the country. The director of that institute is also the representative of EGEE France, one of his two deputies is the director of the French tier-1, the EGEE site in Lyon. In the current state it is difficult to say what kind of role the French ROC will play in a national grid, but seen the starting point chances are that it will stay important for daily grid operations in France.

The French ROC could certainly continue to maintain the CIC portal if there is adequate funding. As the CIC portal is a general service for all the grid, not only for the French ROC or a national French grid, this funding should probably come from a central organization like EGI.

## *Conclusion*

The major successes of the French ROC are the development of the CIC portal and the COD coordination. Both complement one another. The portal itself helped to structure the COD work but goes beyond this by facilitating EGEE's VO management and even the work of the security team (OSCT) of EGEE. It has become a reference for the sites and the VOs for several parts of their technical and management work, like specifying the VO needs, or setting up a site according to the VO's specifications, or again contacting the right people when a site goes into maintenance. The weekly Operations phone conferences rely on it for the reporting part.

The participation in the OAG work has lead to a higher automatization of the VO registration process, but hasn't succeeded to find a viable procedure for resource allocation.

Major concerns are the participation in the TPM work in GGUS and the contribution to the OSCT. For the first item, internal discussions are taking place at the Lyon site to solve the problem, for the second one a solution is searched which might involve other sites.