



Enabling Grids for E-science

Resource Allocation in EGEEIII

Overview & Related Activities

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From EGEEII periodic report (SA1 part):

*„VO must get access to resources [...]. Until now this **allocation of resources to new VO is not working very well**. For the smaller VOs, it is very difficult to negotiate with the resource centres separately”*

Current VO Registration Procedur, <https://edms.cern.ch/document/503245>:

„Once a VO registration has been approved by the OAG,...”

„The OAG will work with you in parallel to arrange more permanent resources and other grid services for the VO.”

„To obtain more resources, the VO manager will have to interact with the OAG and the ROCs. The OAG will drive this process to ensure that the VO has the necessary resources”

- **Hand-over activities of Operational Advisory Group:**
 - decide the way the activities will be continued in EGEEIII
 - update procedures (especially VO registration) accordingly
 - monitor if the activities are running properly
- **Organize the central seed-resources pool**
 - prepare conditions for a tender
 - prepare and update all related procedures
 - prepare SLD related to a VO running on central seed resources pool and to sites contributing to this pool,
 - support VOs allocated to central-pool of seed resources in the process of resource allocation,
 - monitor activity and development of VOs allocated to seed resources

- **Work-out a scalable model of resources allocation for the EGEE infrastructure that would be applicable both to large and to small VOs and cover all areas listed below:**
 - core infrastructure services for the VO (e.g. VOMS, LFC, ...);
 - seed resources (both central and regional pools),
 - "permanent" resources (i.e. VOs that would like to expand the number of sites/resources supporting them),
 - "campaign" resources (i.e. large-scale resources for short-term calculation campaigns).
- **Providing reports about:**
 - resources allocation process,
 - usage of seed resources both in central and regional pools based on accounting and related commitments.

- **NA4 representative(s),**
- **OCC representative,**
- **All ROCs representatives responsible for "Application - Resource Provider Coordination" (subtask 1.1.4),**
- **Representatives of sites maintaining central pool of seed resources**

- The pool works as a ‘*VO incubator*’
- The resources will be used to be made available to new user communities not linked to the partners of the EGEE consortium
- VO allocated to the pool can use it for maximum 6 months
- VO is expected to evolve towards more permanent resources

- **Money (51k EUR) should be allocated to two or three sites which have experience in operation (including grid core services for VO) and agree to follow the requirements defined in the tender**
- **Winning offers should guarantee:**
 - substantial number of CPUs, storage and a full set of core services,
 - possibility to set-up the pool within one month after announcing results of this tender (it is crucial to be
 - independent from won money transfer and hardware acquire procedures).
- **Money won in the tender should be spent on hardware only (not personnel), but sites need to provide relevant man-power for maintaining services and collaborate on operation of seed-resources pool.**

What is missing:

- Clear view on VOs demands for resources
- Well defined procedures for negotiations, agreement, re-configuration and approval
- Support for the communication between people
- Possibility of tracking contracts changes
- Easy way to negotiate agreement conditions/SLD
- Feedback

A challenge for RA Group is to change previous heading into „What we have”

- **Bazaar – a tool supporting resource management**
 - Supports communication between sites and VOs
 - Integrated with CIC-Portal
 - No cost of entry – data obtained from GOCDDB and CIC-Portal VO-card
 - Easy in use
- **The most important features of Bazaar v1.0:**
 - Call and contract between VOs and RCs management
 - Clear view on VOs demands for resources
 - Support for the process of resource negotiation
 - E-mail notifications for VO and RC Managers
 - Tracking of contract changes

- **Resources Allocation it is recognized as less developed 'service' in EGEE-grid**
- **We have few urgent actions**
 - Reorganize VO registration
 - Organize central-seed resources pool
- **A challenge is to work-out solution that would be substantially better.**
- **<https://twiki.cern.ch/twiki/bin/view/EGEE/RAG>**

- **Who will 'do the work' in Resources Allocation?**
 - Evaluation of new VO registration, decisions
 - Managing the central-pool
 - Organize communication in resource allocation process between VOs and ROC/sites
 - Maintaing and update tools (VO-cards, automatization of the process)
 - Collect information about active VOs and efficiency of allocation process