

The Life-Science Grid Community

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LSGC presentation

Federation of Virtual Organizations (~500 users)

- biomed (~20 countries): bioinformatics, medical imaging, drug discovery
- Isgrid (NL): bioinformatics
- medigrid (DE): German biomedical and LS community
- pneumogrid (DE): chronic obstructive pulmonary disease
- vlemed (NL): Bioinformatics and Medical Imaging

Supporting NGIs

- Official: Dutch, French, Italian, Spanish (Ibergrid) and Swiss
- + numerous CE/SE providers

Organization

- Open community of grid users (not a project)
- Hosted by the HealthGrid association
- Monthly phone meetings

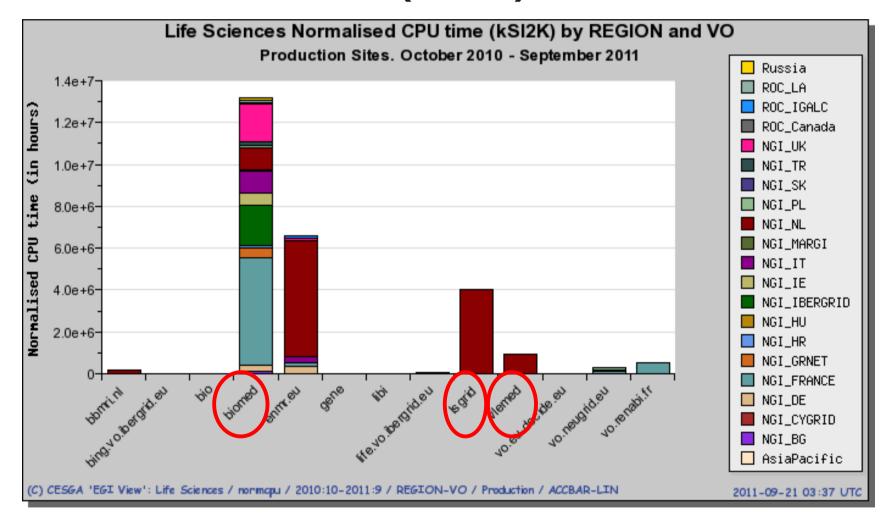
Timeline

- June 2010: open workshop at the HealthGrid conference
- Summer 2010: agreed on a statement of goals and missions
- June 2011: MoU signed with the European Grid Initiative



EGI LSGC VOs in 2010/2011

Normalized CPU time (hours) of LS VOs



Notes:

- What about aggregating accounting information by VRC?
- What about non-EGI VOs?

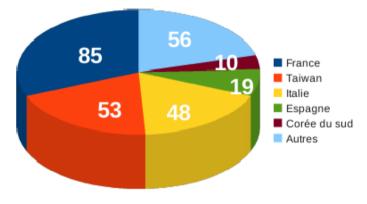


Close-up on biomed

International catch-all VO for Life-Sciences

Users

- 300+ users from ~20 different countries
- Two SMEs (non commercial activities)
- Application fields
 - Bioinformatics
 - Drug discovery
 - Medical Imaging



Repartition of biomed users in 2010

Resources

- 238 CEs (batch queues) from 129 sites; 114 Storage Elements
- No formal agreement with sites; best effort support

Tools used to access the infrastructure

- No central job submission control point
- Heterogeneous tooling: DIANE, DIRAC, WISDOM, OpenMole, Moteur, etc



Virtual Research Communities

What is a VRC?

- Community of researchers with common technological interests
- Implementation: group of VOs

Motivations for being a VRC

- Benefit from EGI user support through helpdesk (GGUS)
- Promote requirements to middleware development via EGI UCB
- Non EGI VOs?

Constraints to be a VRC

- Involve significant VOs, i.e., represent users
- Receive support from NGIs (grid resources, manpower, development)



LSGC Goals

Represent Life-Science grid users

- Negotiate resources
- Promote their requirements
- Liaise with the European Grid Initiative

Coordinate actions

- Serve as a contact point for new users
- Share expertise, resources, data and tools; avoid replication of efforts
- Define common requirements

Provide technical services

- Operate and support common VOs
- Operate shared services
- Provide targeted user support and application porting

Training and induction

- Organize community-specific training events
- Smooth the learning curve, lower the start-up cost

Dissemination

- Transfer knowledge among VRC partners
- Advertise actions
- Liaise with other groups of interest



Current activities

User representation

- Collected, submitted and following up on 19 technical requirements to EGI
- Negotiated MoU with EGI

Coordination

- Catalog of software and applications used by VOs
- Requirements and recommendations for VO dashboard

Technical

- Study and document VO operational issues (e.g. service redundancy)
- Monitor VO resources (Nagios)
- Organize technical teams
- Application porting support centers
 - Grid Application Support Service (University of Westminster)
 - Grid Application Support Center (MTA SZTAKI, Budapest)

Training

- Collect training material
- Review training requirements and offers



Challenges

Develop domain-specific activities

- Current effort is mostly devoted to technical general-purpose issues
- Support application services, databases, etc
- Foster scientific collaborations in / across Vos

Liaise with scattered user communities

- Collect requirements, issues, publications, usage scenarios
- Low response rate... except when technical issues occur

Ensure sustainability of the VRC model

- Currently most effort is "volunteer"
- No formal agreements with (manpower) contributors
- Usefulness of the VOs is their main motivation



More information

Contact

- Wiki page: http://wiki.healthgrid.org/LSVRC:Index
- Mailing list: lsvrc@healthgrid.org

How to benefit from the LSGC?

- Established VOs
 - Discuss technical issues with other VOs.
 - Submit requirements to the EGI
 - · Advertise your services; use others'
- New communities
 - Join an existing VO and benefit from its expertise
 - Get information on related applications and porting efforts
 - Get application porting support
 - Browse training material and events

Open access (also to non-EGI VOs): just join!