Life Sciences Research Community Workshop: Dutch NGI Contribution

HealthGrid 2010, Paris 28 June 2010

Questions

The workshop proposes to gather opinions and positions on the future of the LS community, related, but not limited to the following questions:

- Do we need a European structure for grid-related Health and LS communities ?
- What would be its role ?
- Who would be the targeted user communities ?
- What would be the supporting infrastructures ?
- How would it be organized and how would it interact with the existing initiatives ?
- Proposed additional questions:
 - Where do we want to be
 - In one year?
 - In five years?
 - What does it take to get there?
 - How much money do we need?
 - Who will take the lead?

Our answers as...

- Regional VO managers (vlemed, lsgrid)
- Healthgrid researchers
- Intermediates with user communities
 - AMC (medical imaging, genomics)
 - Bioinformatics NL (NBIC)
- Participants in Dutch NGI (BIG Grid)
- Participants in esfri initiatives







The Dutch LS situation

- Did not participate in EGEE-N4 (BIOMED)
- Various regional initiatives related to infrastructures for LS:

	Field	Orgs	Software	Status	Grid VO
VL-e Medical	Medical imaging	AMC, VUMC	gLite, VBrowser, MOTEUR, MDM, Nimrod, VLAM	Ended 2009 (tbc)	vlemed
E-Bioinfra	Biomedical sciences	AMC	VBrowser, MOTEUR, Diane, P-Grade	Started 2009	vlemed, Isgrid
NBIC Bioassist	Bioinformatics	NL	gLite, TOPOS, web portals, Taverna, custom	On going	lsgrid
СТММ	Translational Medicine	NL	caBig, custom	Starting?	none
Parelsnoer	Biobanking	Academic hospitals	ORACLE+IBM	On going	none
BBMRI-NL	Biobanking	NL	?	Started 2009	?

• International initiatives with significant Dutch participation

– e-NMR, NeuGrid, LifeWatch, ?

Do we need a European structure for gridrelated Health and LS communities ?

- YES, we need (to continue) to collaborate
 - Expertise, data, methods, infrastructure, funding, education, political influence, ...
- Collaboration inside and outside EU is needed at various levels for big biomedical challenges
 - From small to big science
- Efficient collaboration (ALWAYS) requires investment
 - Organization
 - Coordination
 - Specific funding
- Effort is still required to 'convince' the biomedical researchers about the benefit of grid technology

Examples (Half-full Glass)

• Scientific collaboration

- E-NMR, NeuGrid, LifeWatch
- Next generation sequencing and medical imaging @ EU
- Heathgrid research (workflows, front-end, monitoring)
- Workshops (MICCAI-Grid, CCGrid-Health)

• Technical

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What would be its role ?

- Promote and guarantee (sustainable) mechanisms for
 - Resource sharing (compute, data, applications)
 - Knowledge transfer (how to use grids for LS research)
 - Continuation/maintenance/development of common/ interoperable software platform

• Provide services to facilitate access to grid infrastructure

- Training and dissemination actions
- User support
- Represent LS community for grid-related interests
 - Strengthen strategic position (political, societal weight)
- Attract more biomedical researchers

Who would be the targeted user communities ?

- ESFRI and other EU level projects
 - Medical imaging
 - Bioinformatics
 - Genomics
 - Biobanking..
- Researchers
 - academia and industry



What would be the supporting infrastructures ?

- Note:
 - assuming "regional-european-global distributed infrastructures"
- Grids (EGI)
- Supercomputing (DEISA)

How would it be organized?

- (paid) Membership
 - Organizations (country, domain)
 - Individuals
- Coordinating body (EU-level)
- Executive body
 - "VO management"
 - Support
 - Training

How would it interact with the existing initiatives?

- Membership
- Provide contact body/person for
 - Users (individual, esfris and other organized user communities)
 - Service providers (MOTEUR, web portal, app registry..)
 - Infrastructures (EGI, NGI, ..)

Where do we want to be in 1 year?

- Shared software platform still usable
 - Upgrades, bug fixes
- At least one dissemination event
 - Summer/winter school?
- Specialized user support in place
 - Resource/activity monitoring
 - Application porting
 - Support team (shifts)
 - FAQ
 - Registry of applications/examples/best practices
- Resources are shared
- Governance and Coordination board in place

Where do we want to be in 5 years?

- Sustained funding
- Own "FPx call"
- Large number of members
 - Organizations (500+?)
 - Individuals (5000+)
- Large grid activity
- Large conference (500+)

What does it take to get there?

- Organization
 - Inside/strongly related to Healthgrid?
- Coordination
 - Selected scientific and executive boards
- Commitment
 - Membership
 - Support and promote the organization (future proposals)
- Funding
 - Own
 - European Commission (VRC, e-infrastructures, Marie Curie)
- NL is willing to
 - Contribute existing 0.5 FTE from BiGGrid/e-Bioinfra for participation in European activities
 - NGI Resources
 - Participate in organizational effort

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