Contribution ID: **114**   Type: **Workshop**

outGRID Workshop on DCI Interoperability, Special Focus on Neurosciences

Thursday, 14 April 2011 14:00 (3h 30m)

Overview

The EU FP7 outGRID project aims at promoting interoperability between 3 international neuroscientific infrastructures, with the goal of offering an integrated set of computing resources, data and applications. outGRID makes it possible for stakeholders from neuGRID in the EU (www.neuGRID.eu), CBRAIN in Canada (www.cbrain.mcgill.ca), and LONI in the USA (www.LONI.ucla.edu) to interact with, raise the attention of and impact on political decision makers.

outGRID is evaluating interoperability requirements between the 3 infrastructures while fostering a set of technical guidelines and promoting joint approaches worldwide, to support researchers in their further understanding of and progress against neurodegenerative pathologies, such as the Alzheimer's disease.

This workshop aims at demonstrating outGRID's achievements, opening the discussions to outside contributors in the field of DCIs. Other relevant initiatives will be consulted in the formulation of a preliminary set of guidelines.

Impact

This workshop aims to provide European and international stakeholders in the field of e-Infrastructures a fruitful collaborative environment where to promote the exchange of technical information to direct the development of the infrastructures towards full interoperability, and to promote awareness on the timeliness of having International efforts.

The ultimate objective of the workshop is to create a horizontal working group in the community to give a framework to interoperability brainstorming and awareness raising. outGRID will thus aid in better understanding the eventual slight technological mismatch between the infrastructures, outline an interoperability and integration roadmap, and identify key steps forward. In order to achieve interoperability, new technical solutions will need to be developed. A document will be produced summarizing the conclusions of the workshop including a Roadmap of activities that should be carried out to achieve the full interoperability of the infrastructures involved.

outGRID will pioneer a global network called for by and made of top neuroscientists that will represent a model for other communities. This disruptively novel potential will prompt other communities (cardiologists, geneticists, etc.) to follow the lead and develop similarly innovative initiatives.

Description of the work

To demonstrate the benefits of infrastructural interoperability, outGRID has designed a prototype architecture, which the concerned projects/initiatives have started taking into consideration in their respective development roadmaps. outGRID intends to demonstrate the resulting interoperability prototype and to use it as a guinea pig in the brainstorming discussions. The demonstrator shows the added value of integrating

infrastructures data and applications portfolios in the specification of innovative new biomarker workflows. This workshop will support the exchange of technical information, the identification of interoperability standards and activities required by the infrastructures to converge. Participants will be able to share updates on ongoing activities of respective projects, allowing a shared monitoring of recent developments at the European level. Ultimately, the workshop will provide feedback to the participants involved while disseminating the aims and results of outGRID to global stakeholders, exemplifying convergence in front of outside communities.

The workshop will be structured in 2 sessions of 2 hours each. The 1st session will aim at reporting on a number of initiatives starting with those involved in outGRID, then expanding to similar ones and ultimately to enabling Research Infrastructures (RI). Thanks to these presentations and the special emphasis onto neurosciences, participants will have a concrete overview of all DCI layers involved from the users'needs to its translation into services and underlying RIs substrates. The 2nd session will setup a forum for stakeholders to debate on interoperability requirements and their translation into technical guidelines. The latter will be formulated as the basis of public deliverable D2.2 of the outGRID project. Participants to the workshop who are part of the Life Science Grid Community (LSGC) will be interacting on the technical requirements with projects from Heavy User Communities (HUCs).

URL

www.outgrid.eu

Conclusions

outGRID will exemplify convergence and exercise interoperability of e-Infrastructures encouraging others to join forces. Calling into action the major players will represent a strategic massl substantiating the claim of the opportunity of developing a large interoperable infrastructure and persuade minor players to join forces. Time will be devoted to evaluate all possible technological solutions, protecting developers from the lure of the "sexiest"technology of the moment. The outGRID recommendations will be based on the requirements coming from the Neuroscience community as well as the SHARE roadmap, meant to lead feasibility studies and projects to achieve exploitable results. Last but not least, outGRID will introduce the up-coming LInked Neuroscientific Grand chAllenge (LINGA), in collaboration with EU FP7 SHIWA, demonstrating the joint and collaborative operation of the largest ever executed neuroscience data challenge involving 4 international infrastructures.

Primary authors: Mr MANSET, David (Maat); Dr FRISONI, Giovanni (IRCCS Fatebenefratelli)

Co-authors: Mrs BARATTIERI DI SAN PIETRO, Chiara (IRCCS Fatebenefratelli); Mr KEUCHKERIAN, Samuel (HealthGrid)

Presenters: Mrs BARATTIERI DI SAN PIETRO, Chiara (IRCCS Fatebenefratelli); Mr MANSET, David (Maat); Mr KEUCHKERIAN, Samuel (HealthGrid)

Session Classification: Tutorials: Users & Developers

Track Classification: Other