

## **Users, Usability and Grids: Introducing Pegasus, a social study of the development and use of GridPP.**

*Wednesday 9 May 2007 17:30 (20 minutes)*

**Describe the scientific/technical community and the scientific/technical activity using (planning to use) the EGEE infrastructure. A high-level description is needed (neither a detailed specialist report nor a list of references).**

Pegasus ([www.pegasus.lse.ac.uk](http://www.pegasus.lse.ac.uk)) is a project looking at the development and use of GridPP by the particle physics community as it prepares for the LHC experiment. The research studies the techniques, practices, and infrastructure involved in the development of GridPP with the aim of providing qualifying guidance to others contemplating the development of complex Grid infrastructure. Our study is qualitative, with the aim of discussing and understanding how Grids come into being and

**Report on the experience (or the proposed activity). It would be very important to mention key services which are essential for the success of your activity on the EGEE infrastructure.**

The Oxford English Dictionary defines 'user' as "one who uses or employs a thing", or "a person who takes narcotic drugs". Both these definitions suggest a passive, accepting role for the 'user' as a person who employs and is controlled by a thing; only able to employ (or reject) the features it affords. Indeed in the case of narcotics (and many computer systems) the user is a passive, subdued, and manipulated victim.

For Grids however we argue that this relationship between the 'user' and technology is far too simplistic. Through a discussion of a social science study of the development and use of GridPP for users of the LHC particle physics experiments, we aim to unpick and question the role of 'users', and subsequently the aspiration to make Grids 'usable', in terms of the working practices of scientists shaping Grids to reflect their needs.

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NEXT BOX)**

**With a forward look to future evolution, discuss the issues you have encountered (or that you expect) in using the EGEE infrastructure. Wherever possi-**

**ble, point out the experience limitations (both in terms of existing services or missing functionality)**

We discuss how the experiments conducted as the LHC impose themselves on the requirements for Grids, and act as an organising vision (Swanson & Ramiller, 1997) for Grid innovation and development. We discuss the negotiation process inherent in the development of any standard, and we explore the importance of 'power-users' as spanning the gap between developers and so called users.

Swanson, E. B. and Ramiller, N. C. (1997) The organizing vision in information systems innovation. *Org Sci.* 8-5

**Describe the added value of the Grid for the scientific/technical activity you (plan to) do on the Grid. This should include the scale of the activity and of the potential user community and the relevance for other scientific or business applications**

Pegasus draws on the Information Systems field, which itself consists of a range of disciplines. We draw on the social sciences to provide qualitative research methods which enable us to understand the working practices, collaboration and communication involved in developing GridPP. We also draw on Software Engineering as it provides us with comparisons with existing methods and practices for developing complex IT infrastructure (for example Open-Source, Agile Methods and Globally distributed development practices).

At the User Forum we propose to provide a presentation based on the argument that in order to consider usability we need to reconsider what we mean by Users in the context of the Grid. **(CONTINUED IN NEXT BOX)**

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**Session Classification:** Poster and Demo Session