

UTF Workshop on Requirements Capture and Analysis

Marina Jirotko, Sharon Lloyd, Rob Procter

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Thursday 2nd September 2004, 14.10-15.50

Aims and Objectives

This workshop will discuss how the process of requirements is currently achieved in e-Science projects with the aim of identifying guidelines for 'best practice'. We wish to investigate the importance of requirements capture and analysis to e-Science projects and to explore and identify relevant methods and toolkits for various types of e-Science project requirements activities, based on current experiences of the e-Science community. Through discussion, we will make recommendations on how to approach the requirements exercise for e-Science technologies. The workshop will bring together participants from a broad spectrum of e-Science projects to discuss the following issues:

- What demands does e-Science place on requirements capture and analysis?
- Who are the potential users? How are they identified? How should they be involved in the requirements process?
- How can users, stakeholders and participants expectations be managed?
- How do organisational concerns and practices impact on the requirements process?
- How important is usability?
- How should requirements be documented and articulated to others in the development process?
- On what basis are requirements prioritised and who should be involved in the process?
- How should e-Science projects be structured to accommodate requirements activities?
- Should proposal descriptions and funding models take account of the requirements activity?

Provisional Programme

Chair *Tom Rodden*

- 14.10 Introduction *Marina Jirotko*
- 14.15 User requirements for UK e-Science grid environments *Bruce Beckles*
Rapporteur *Mustafizur Rahman*
- 14.35 Enterprise specification of the NERC DataGrid *Andrew Woolf*
Rapporteur *Ajay Sharman*
- 14.55 Gathering Requirements for an Integrative Biology Project *Sharon Lloyd*
Rapporteur *m.c. schraefel*
- 15.15 Towards Understanding Requirements for e-Science: the eDiaMoND case study *Marina Jirotko*
Rapporteur *Dipak Kalra*
- 15.35 Discussion and Summary

Biographies

Tom Rodden

Professor of Interactive Systems
Chair, UK e-Science Usability Task Force
University of Nottingham

Tom Rodden is Professor of Interactive Systems at the Mixed Reality Laboratory (MRL) at the University of Nottingham and Director of the Equator IRC a six-year programme of research to explore new technologies that interweave the physical and digital worlds. Prof Rodden's research interests are centred on how users interact with and through computer systems. He has published widely in the areas of Computer Supported Cooperative Work (CSCW), HCI and Ubiquitous computing. He is a member of the UK e-Science Steering Committee and currently Chairs the UK e-Science Usability Task Force.

Bruce Beckles

e-Science Specialist
University of Cambridge Computing Service

Bruce Beckles has worked in the IT field in a variety of user support, system administration, and network management roles, specialising in security and network design and implementation, since 1994. As Systems Manager at the Cambridge e-Science Centre, he had a lead role in developing and deploying grid infrastructures in the University of Cambridge. In his current role at the University of Cambridge Computing Service he is one of the main designers of the University's proposed high throughput computing facility, which will be based on Condor. He regularly advises academic projects on how they can best employ high throughput computing or computational grid technologies to meet their computing needs. Amongst his specific concerns are the particular problems of security, usability and deployment which are posed by computational grid architectures.

Andrew Woolf

Rutherford Appleton Laboratory

Andrew Woolf works in the e-Science Centre of the Rutherford Appleton Lab. His responsibilities include data modelling and formal architecture for the NERC DataGrid project. Prior to joining RAL he was based at the University of Reading, working on the 'GODIVA' e-Science project. He has a degree in theoretical physics from the University of Sydney, and a PhD in physical oceanography from the University of Tasmania.

Sharon Lloyd

Project Manager
Oxford University Computing Laboratory

Sharon Lloyd is currently the project manager on both the eDiaMoND and Integrative Biology e-Science projects. She has over 17 years of project management experience of scientific and commercial IT development projects both in the UK and overseas. Her previous posts include Operations Director and European Projects Manager at Integra, and Business Development Manager at Blackwells. Her experience of working on the delivery of solutions to clients in industry as well as experiencing the complexities of research projects and gathering requirements in a 'product engineering' environment has encouraged an interest in exploring methods and techniques for e-Science.

Marina Jirotko

University Lecturer and Associate Director Oxford e-Science Centre

Marina Jirotko has been involved in research into novel methods and techniques for requirements capture focussing on user and practice-driven requirements. She specialises in the study an analysis of highly complex activities requiring significant collaboration between participants, electronically mediated communication, computer supported distributed working, and safety and security properties of complex working practices involving information support. In recent years her research has focussed on developing requirements for e-Science applications and she was responsible for producing user requirements for the eDiaMoND project.

