Provisional Program For PharmaGRID 2004

Event Aims and Objectives

Following the success of the first PharmaGRID Retreat in 2003, the PRISM Forum has decided to stage the PharmaGRID Retreat again. This extraordinary workshop represents a valuable opportunity to bring together industry professionals, stakeholders and leading GRID practitioners to capitalize on the opportunity represented by GRID to the pharmaceutical industry.

The GRID, also known as *e-science* or *cyberinfrastructure*, in different regions of the world, is a fast moving technology that is rapidly finding applications across the pharmaceutical value chain. Solutions for CPU cycle scavenging have enabled companies to ask questions that were previously impossible to answer with current investment in IT architecture. Work is ongoing within GRID to deliver transparent provision of a wide range of services that offers the potential to build powerful, complex problem-solving environments, providing access to diverse information sources and rigorous analytical tools.

The meeting will bring together leading authorities from academia and industry to present the latest developments in GRID technology, including:

Intelligent middleware that facilitates the transparent submission of tasks for the user

High quality security features, enabling large databases to be accessed via GRID solutions

Sophisticated semantic and contextual systems to enable diverse sources of data to be related for knowledge discovery

The meeting will also showcase leading pharmaceutical GRID implementations including compute GRIDS, collaborative GRIDS and knowledge GRIDS that are being deployed within and beyond the enterprise.

The meeting will present a current overview of GRID, its future vision and direction and some of the pilot projects in areas relevant to bio-pharma. The event will also serve as an opportunity to identify the major sources of funding, the standardization activities including working groups in integration and problem solving environment, and focus the industry's interest in GRIDS.

The Venue

The 2004 PharmaGRID Retreat will be held at the Seminarhotel Unterhof in Diessenhofen, Switzerland. Originally a castle dating from the 12th century, the hotel on the banks of the Rhine, offers a compelling mix of tradition, technology and convenience located 35km from Zurich's international airport.



Day 1, Latest Developments in GRID Computing

14:00 Welcome and Opening Remarks, Rene Ziegler Chairman of the PRISM Forum

14:10 Logistics Briefing,

Rowan Gardner Biolauncher Ltd

14:20 GRID Scene Setting and Briefing, Chris Jones
CERN and PRISM Forum Secretary

14:45 Applications in Systems Biology, a vision of the future of GRID

Prof. Denis Noble

Professor Denis Noble, Department of Physiology, University of Oxford, where his research is focussed on using computer models of biological organs and systems to interpret function through from the molecular to the whole body levels. With its international collaborators, his team has used supercomputers to create the first virtual organ, the virtual heart. For more information see:

http://noble.physiol.ox.ac.uk/People/DNoble/

15:30 GRID Architectures to support data integration and federation

Denise Ecklund, PhD

Denise Ecklund is the GRID Architect, eDIKT project, NeSC, University of Edinburgh. EDIKT is an initiative to construct novel data management and interpretation software tools, tools which will underpin the seamless linking, management and interpretation of the vast amounts of data available on global networks. For more information see: http://www.nesc.ac.uk/projects/http://www.edikt.org/current_activities.htm

16:00 Coffee Break

16:30 CaBIG, The Cancer BioMedical Informatics GRID

Ken Buetow, PhD

Professor Ken Buetow is the Director, Center for Bioinformatics, National Cancer Institute. CaBIG is an informatics infrastructure that will connect teams of cancer and biomedical researchers together to enable them to better develop and share tools and data in an open environment with common standards. For more information see: http://cabig.nci.nih.gov/

17:15 The Role of Semantic Technologies in the Evolution of the GRID

John Wilbanks

John Wilbanks is an I3C Fellow for Semantic Web in Life Sciences. Working with the World Wide Web Consortium (W3C), he is exploring the application of new W3C standards to life science informatics needs. John was previously founder and CEO of Incellico, Inc., a provider of semantic database and ontology networking solutions. For more information, please see:

http://www.w3.org/2001/sw/

http://www.i3c.org

18:00 Finish

18:45 Aperitifs

19:30 Dinner

Day 2, Real World Experience of GRID, what have we learnt so far?

- 8:30 Members' Introduction, Howard Bilofsky, PRISM Forum Member
- 8:45 BIRN, BioMedical Informatics Research Network

Prof. Mark Ellisman

Professor Mark Ellisman, Department of Neurosciences, UCSD, and Principal Investigator, Biomedical Information Research Network (BIRN). For more information see: http://www.nbirn.net/http://www-bioeng.ucsd.edu/wibe/faculty/ellisman.html

9:30 AstroGRID

Prof. Andy Lawrence

Professor Andy Lawrence is Regius Professor of Astronomy and Head of School of Physics at Royal Observatory Edinburgh and Institute for Astronomy, University of Edinburgh. He is also the project leader of AstroGRID, a data-grid for UK astronomy, which will form the UK contribution to a global Virtual Observatory. http://www.astrogrid.org/http://www.roe.ac.uk/ifa/people/al.html

10:00 Virtual Laboratories

Prof. Bob Hertzberger

Professor Louis O. (Bob) Hertzberger, Group Leader, Computer Architecture and Parallel Systems Group, University of Amsterdam, where he is professor in Computer Science. His current research interests are GRID computing and Virtual Laboratories and their application in experimental science. For more information see:

http://www.science.uva.nl/research/arch/

10:45 Tea/Coffee

11:15 First Hand Experience of GRID in the Pharmaceutical Industry

Industry practioners describe their experience of deploying production GRIDs in industry.

- 11:15 Novartis, Pascal Afflard
- 11:35 Eli Lilly, John Saalwaechter
- 11:55 Johnson and Johnson, Patrick Marichal
- 12:15 Company and Speaker to be confirmed
- 12:35 Lunch
- 13:45 Delivering on the promise of GRID

Prof. Carol Goble

Professor Carole Goble, Department of Computer Science, University of Manchester, and leader of the myGRID project a virtual laboratory workbench that will serve the life sciences community. For more information see:

http://www.cs.man.ac.uk/~carole/

http://www.mygrid.org.uk

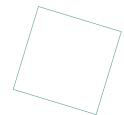
14:30 Rare Disease GRID

Howard Bilofsky

15:00 Prepare for breakouts

The organisers propose to stage two or possibly three breakout sessions according to delegates' interest and demand. Suggested topics include:

- The Impact of Semantic Web,
- GRID applications in R&D,
- Specifying the Rare Disease GRID,
- Database GRID what is possible?
- 15:20 Tea/Coffee
- 15:45 Breakout Sessions
- 17:30 Reports (2 x 30mins or 3 x 20 mins)
- 18:30 Finish
- 19:00 Aperitifs
- 19:30 Dinner



Day 3, The Way Ahead

08:30 Chairman's Remarks

Rene Ziegler

- 08:45 Oracle PharmaGRID Response
- 09:15 Hewlett Packard PharmaGRID Response
- 09:45 United Devices PharmaGRID Response
- 10:15 Coffee
- 10:45 Nirvana Storage PharmaGRID Response "Nirvana®'s Experience With 100th SRB® Data Grid Implementation"

11:15 The PharmaGRID 2004 Round-up

Prof. Manuel Peitsch

Dr. Manuel Peitsch, Head of Informatics and Knowledge Management, Novartis. He has direct experience of the changing pharmaceutical value chain and the implication for information flow across the enterprise.

For more information see:

http://www.nibr.novartis.com/AboutNIBR/SeniorManagement/ManuelPeitsch.shtml

12:00 Meeting Round-up:

Chris Jones & Howard Bilofsky

- 12:45 Wrap up
- 13:00 Buffet Lunch
- 14:00 Departures

