

GridConnections July 2008

News and Information for the Open Grid Forum Community



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OGF Updates Statement of Mission

As a result of a sub-committee launched by the OGF Board of Directors last fall, OGF released an updated statement of its mission during OGF23 in Barcelona. The updated mission statement clearly confirms the long-term OGF commitment to applied distributed computing in the context of more recent developments that have added to the suite of tools for making applied distributed computing possible.

Mission:

OGF is an open community committed to driving the rapid evolution and adoption of applied distributed computing. Applied Distributed Computing is critical to developing new, innovative and scalable applications and infrastructures that are essential to productivity in the enterprise and within the science community. OGF accomplishes its work through open forums that build the community, explore trends, share best practices and consolidate these best practices into standards.

Scope:

The OGF community reflects the near universal interest in and applicability of distributed systems, and includes leaders and practitioners drawn from academia, enterprises, vendors and government organizations. OGF is open to everyone who is willing to participate, to discuss trends, share experiences, solve problems, and develop standards that accelerate the adoption, use and development of applied distributed computing technologies and environments.

Steven Newhouse (Microsoft) elaborates on the updated mission on behalf of the OGF Board of Directors



Applied distributed computing environments include everything from distributed high performance computing resources (traditional 'Grids') to horizontally scaled transactional systems supporting Service Oriented Architectures to Clouds, across all scales and for all application domains.

Applied distributed computing environments take advantage of many technologies,

e.g. virtualization, multi-Core, web services, SOA, etc. OGF will, where necessary, develop expertise in these areas in support of its mission, either through direct activity or through partnerships with other organizations.

Delivery:

By bringing a global community of vendors, researchers, architects and users together within an open forum, business and science requirements can be translated into best practices and, where appropriate, relevant and timely industry standards that enable interoperability and integration within and across organizational boundaries. This process is facilitated by regular meetings, ranging from large multi-track events held several times a year that bring the broad community together in workshops to smaller, more tightly focused group meetings. All OGF activity is underpinned by a web presence that enables communication within the various OGF working groups and the sharing of their work with the broader community.

FAQs surrounding the evolution and updated mission can be found at http://www.ogf.org/About/OGF_Mission_FAQ.php.

OGF23 in Review

Over 500 attendees from around the globe gathered in Barcelona, Spain, for the 23rd Open Grid Forum meeting (OGF23), OGF-Europe's first international event co-located with the BEinGRID Industry Days and hosted by Barcelona Supercomputing Center which was held June 2 – 6, 2008.

The week began with a full-day dedicated to the core OGF community and included plenary updates from OGF functional leaders from eScience, enterprise and standards, a keynote by Les Robertson (CERN) and of course the community gathered during the Town Hall lunch led by Steven Newhouse. Many thanks to Wolfgang Gentzsch for leading the OGF23 Program Committee.

Tuesday's opening keynote was conducted by Mario Campolargo (Acting Director in the European Commission, DG INFSO/F "Emerging Technologies and Infrastructures) who discussed the European e-Infrastructure Initiative. Invited talks were also conducted by Carlos Henrique de Brito Cruz (São Paulo Research Foundation) and Dieter Kranzlmüller (European Grid Initiative).

In addition to traditional standards and best practice group sessions, the OGF23 program showed how grids have become a key enabling technology in a broad spectrum of IT environments. Participants discussed how researchers and scientists in both academic and commercial settings find grids useful to scale their compute capabilities and data analysis while enhancing their ability to collaborate across organizational boundaries. OGF23 also provided a unique forum for discussion on how grids form a necessary underpinning for emerging technologies such as virtualization and clouds.

The highest-attended session of the week was the joint BEinGRID/OGF23 keynote session where Dr Werner Vogels (CTO, Amazon.com), gave a talk entitled "A Head in the Cloud - The Power of Infrastructure as a Service," and Diego Pavia (CEO Atos Origin Iberia) gave a talk entitled "From grid to utility. Enterprise IT evolution." This joint keynote session marked the launching point to the BEinGRID Industry Days event by hosting speakers to provide a more commercial view of grids and related distributed computing technologies.

A joint social reception held on Tuesday evening allowed attendees the opportunity to peruse the Exhibition and Poster area which showcased the many achievements by EU-based and international organizations as well as displayed various offerings of many technology solution providers.

The BEinGRID Industry Days program addressed grid as a business solution by demonstrating real-world applications of grid in a wide range of sectors including finance, supply chain management, media, leisure and environmental sciences, among others.

OGF23 also featured program components exclusively organized by OGF-Europe including a day-long Community Outreach Seminar on Digital Repositories (see this month's OGF-Europe Feature), and a tutorial program featuring sessions designed to transfer practical skills in implementing and deploying grid solutions.

Barcelona upheld its reputation for knowing how to please the big majority with rich history, charming hosts and a variety of artistic treasures. Despite some technical issues, overall positive comments about the facilities, staff, program content and food were heard in abundance.

For the presentations from any of the sessions, visit the schedule page at http://www.ogf.org/gf/event_schedule/index.php?event_id=10 and browse the program for sessions and topics of interest.

Throughout OGF23, local organizers from BSC offered tours of the impressive supercomputing facility known as MareNostrum which was constructed in the chapel Torre Cirona. OGF23 attendees learned about the functionalities of the supercomputer and tour guides were available to answer questions posed about the machine and its scientific applications.

Group of OGF23 attendees posing upon completion of a tour of the Barcelona Supercomputing Center



OGF-Europe Feature:

Connecting Developers & Users of Digital Repositories
By Stephanie Parker, OGF-Europe

OGF-Europe is aligned with OGF's mission of working towards applied distributed computing that is open and barrier free. OGF-Europe aims to give the EU a stronger voice in the drive towards standardisation. In order to respond to specific sets of requirements, it is important to connect user groups and build a consensus on the best way forward. OGF-Europe is planning a series of Community Outreach Seminars that showcase best practices in diverse scientific domains and vertical markets with the aim of achieving this key goal.

OGF-Europe's first Seminar, which took place at OGF23, brought together 70 people, particularly developers and representatives from several communities, such as Earth, Space, Natural Resource Sciences and the Humanities. This multi-faceted event explored Digital Repositories used in these specific domains and broader, horizontal issues for future development and deployment. Special emphasis was placed on use case studies, best practices, interoperability, standardisation and funding for DRs. David De Roure, Southampton University and OGF e-Science Area Director, who chaired the seminar, says "I was really pleased to see communities coming together in this way. It demonstrates the value of creating this kind of forum".

The talks pointed to a real need for increased mediation between user requirements and the infrastructure, which should be agnostic to specific user environments, yet ensure that needs easily filter into the system, either by individual users or the mediator. Discussions centred on:

- Standardisation of storage interfaces for data grids.
- Metadata, audit trails, versioning and data life cycle.
- Usability.

Metadata, audit trails (provenance), versioning, data life cycle have been largely discarded by the community because they have been viewed to be too domain specific, whereas a number of communities actually share the same requirements. This gap could be bridged if universal terms of reference were used by the various user groups to enable them to meet on a common ground.

"Virtualisation of repository systems on a storage (shared infrastructure) as well as a content level (shared collection) is clearly a key evolutionary step for all user domains. This seminar was hugely important in terms of connecting the activities of the grid with the repository community to move towards a common goal and pave the ground for fruitful future debate and co-operation," comments Andreas Aschenbrenner, Göttingen University.

Co-operation was widely seen to offer a number of exciting opportunities, including standards compliance, bringing also a number of challenges, such as tapping into unexplored resources and experiences to create a core set of synergies. There was also a general consensus that the environment grid should aim for a shift towards services, similar to the semantic grid and service oriented knowledge utilities, as well as digital objects. Several talks demonstrated the value of grid for DRs, though how they can benefit from the computational grid remains an open question. Some examples cited include large-scale migration efforts, analysis of primary data managed by repositories, linking publications and primary data and workflows, though these examples should be backed up with fully-fledged use cases. Systems stemming from the grid community are increasingly providing some repository functionality, such as gCube, the D4Science project, and iRODS, while repository systems are assuming "grid-like" functionalities, with Fedora performing journaling and making plans for replication.

"The dedicated data infrastructure used as an environment to share the deluge of information (data and results) accumulated by specific science communities like Earth Science will enable us to explore unprecedented multidisciplinary applications, specially when such data infrastructures are interoperated with open grid resources", says Luigi Fusco, European Space Agency, referring to the GENESI-DR project. Such

a world-wide collaborative science framework will also enable large scale co-operation across companion Earth Science related projects.

With regards to future visions, views were mixed. Some experts believe there will ultimately be one federated repository, whereby isolated systems will be superseded. Some views focused on the speed in which new repositories can be set up, featuring functionalities that are added with simple interfaces. Others believe that the next 10-20 years will be a test-ground for DRs and show how grid and repositories might be used in areas that have not yet been suggested. For that to happen, the community needs to nurture unexpected applications and new niches. However, one message is clear: it is vital that DRs flourish, they must contain reliable information, be sensitive to user-community needs and be interoperable. "This is a hugely important area that is only going to become more important as time goes on. The seminar was valuable because it offered a forum for discussion about a world of multiple repositories, rather than people just thinking about the repositories they use in their own projects - this is the challenging world we are moving into", remarks David De Roure.

The seminar demonstrated how the people of OGF, OGF-Europe and user groups are actively gathering and disseminating best practices in distributed computing as part of the vanguard of the knowledge based economy. A number of follow-up initiatives are in the pipeline to build on the momentum of the seminar. Specific actions include a meeting between seminar participants and other experts to discuss the topic of federated repositories as well as discussions exploring future synergies between OGF and the Digital Repositories community.

**Looking Ahead: The 24th Open Grid Forum - OGF24
Singapore
September 15-19, 2008**



After successful events in the US and Europe, OGF returns to Asia-Pacific for OGF24 in beautiful Singapore. Co-located with the GridAsia 2008 event, and hosted by Singapore Grid Forum, OGF24 will offer a unique opportunity for distributed computing experts, builders, and users to meet with OGF's global community to discuss emerging trends and success stories of grid deployments, and collaborate on standards. In addition to high-profile keynote speakers, participants can expect a wide variety of program content ranging from hot technologies like cloud and virtualization to practical uses of grids in scientific and industrial settings. A commercial exhibition will also be an important part of this multi-faceted event. Participants will learn about products and services and see demonstrations of successful projects that have leveraged OGF technologies and standards. Contact us for more information on sponsorship and exhibition opportunities.

Hotel accommodations:

Sleeping rooms must be reserved by mid-July.

See <http://www.ogf.org/OGF24/lodging.php>

Due to other high-profile events in Singapore immediately following the conference, attendees are highly encouraged to make reservations as quickly as possible. Shuttle service will be provided to the meeting location from all OGF-recommended hotels.

Call for Participation:

Session proposals are being accepted until July 25. See

<http://www.ogf.org/OGF24/cfp.php>

Registration:

Advance registration is available until July 25. See <http://www.ogf.org/OGF24/registration.php>

Member Updates

Special thanks to the following organizations that renewed their organizational membership in during the month of June:

**Dutch Grid Forum
Grid Consortium Japan
XtreemOS**

**Hitachi Ltd.
IBM**

Please visit http://www.ogf.org/Members/members_become.php if you are interesting in joining OGF as an organizational member.

If you are employed by any organization that is a member of OGF, you are entitled to special discounts on OGF events. Please contact khamilton@ogf.org for information on how to obtain reduced event fees to OGF24!

Upcoming Events

OGF25

co located with the EGEE User's Forum
March 2-6, 2009 (tentative)
Le Ciminiere
Catania
ITALY

OGF26

June 8-12, 2009
The Friday Center
Chapel Hill, North Carolina USA

OGF27

Co-located with WestGrid's Annual Conference & Grid 2009- hosted by Cybera
October 12 – October 16, 2009
The Banff Centre
107 Tunnel Mountain Drive
Banff, Alberta CANADA

Other Events

eScience 2008 Conference, Indiana University/Purdue University Campus (IUPUI), Indianapolis, IN, December 7-12, 2008 - <http://escience2008.iu.edu/>

Photos compliments of Mario Antonioletti (EPCC) and Joel Replogle (OGF).