



RI031675

EuroVO-DCA

The European Virtual Observatory Data Centre Alliance

COORDINATION ACTION

RESEARCH INFRASTRUCTURE

COMMUNICATION NETWORK DEVELOPMENT

D12 - Euro-VO Computational Grids Workshop

Due date of deliverable: 31/01/2008 – Postponed to 31/04/2008
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INAF

Final version

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

The "**Euro-VO – Computational Grids Workshop**", organized by EuroVO-DCA WP5, was held at the Max-Planck-Institut für extraterrestrische Physik (MPE) in Garching bei München, Germany, on April 9-11, 2008. This Workshop was held back-to-back with the "Euro-VO Theory Workshop", organized by EuroVO-DCA WP4.

Initially scheduled in January 2008, the "**Euro-VO – Computational Grids Workshop**" was postponed to April 2008. The main reason for the change in date was that the date of the Astronomical cluster in EGEE-II was setup and it was possible for astronomers to have support from EGEE-II and then from EGEE-III via the cluster. The cluster setup and usage has been an important issue addressed during the Workshop.

The main goal of the workshop is to contribute to the integration of the Virtual Observatory and Grid e-science infrastructures and to the development of new Grid-aware astronomical applications. This workshop aims at contributing to the adoption of Grid and Virtual Observatory technologies by the Astronomical Data Centers.

The Virtual Observatory (VOs) is rapidly evolving as a fundamental tool for the astronomical community. It may be seen as a Grid of federated astronomical databases. The VOs allows global electronic access to the available astronomical data archives of space and ground-based observatories and to simulation databases as well. It also aims at enabling data analysis techniques through world-wide network access, state-of-the-art analysis tools, and a coordinating entity that provides common standards. To process the huge amount of data residing in the VOs it is necessary to provide adequate resources.

On the other hand, Grid infrastructures are deployed with high investments in this kind of facilities, both at the national and European levels. This provides a geographically distributed e-infrastructure available to European scientists. Actually some astrophysical applications, mainly in the theoretical and modeling fields, are already making use of the computing power the computational Grid is able to offer.

The workshop aims at building the bridge between the VOs and the standard Grid infrastructures, making developers from the different fields meet and exchange experiences and solutions.

To achieve its goals the workshop has targeted two main audiences:

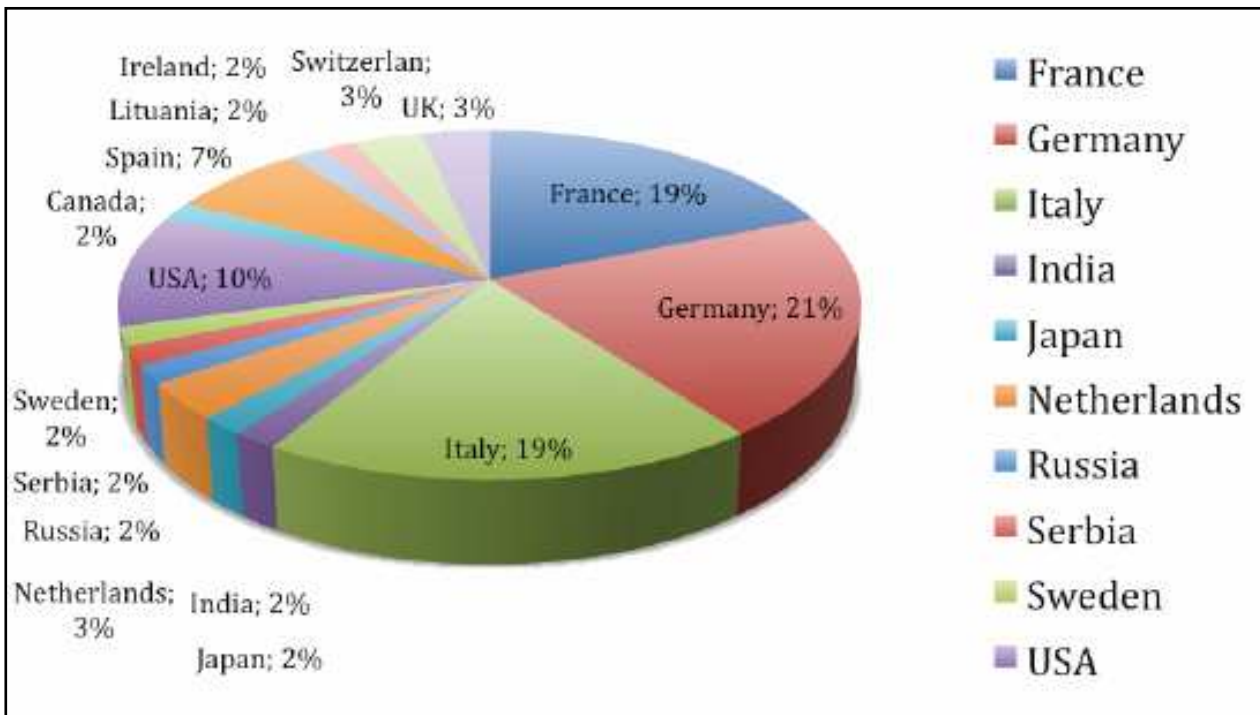
- The first is the community of Grid and VOs **developers** that contribute to the suite of standard facilities and web services of the VOs and Grid middleware and tools.
- The second audience comprises Grid and VOs **users**. This includes current and potential users both in the Astronomers Community and in other scientific areas. A particular goal is to identify and then support those who are willing to do pilot work using the new tools provided both by the VOs and Grid technologies to work on a specific scientific problem.

The Workshop topics were current Research advances in Grid and Virtual Observatory systems, European and National e-Infrastructures, applications in Astronomy and other scientific fields, Data Centres experiences, Data and Databases virtualization in e-science infrastructures and Interoperability and long term sustainability.

The Workshop website is available at: <http://www.si.inaf.it/eurovow2008/index.htm>, and a Workshop TWiki page including abstracts of the talks and presentations is available at: <http://cds.u-strasbg.fr/twikiDCA/bin/view/EuroVODCA/Wp5Workshop>.

A total of 55 participants attended to the Workshop (see distribution per country in Figure 1).

Figure 1 - Participants distribution per country



Invited speakers:

- Edwin VALENTIJN (NOVA)
- Erwin LAURE (CERN, EGEE)
- Charles LOOMIS (EGEE, CNRF)
- Claudio GHELLER (Cineca, DEISA)
- Francoise GENOVA (CDS)
- Ugo BECCIANI (COMETA, Italy)
- Masatoshi OHISHI (NAO Japan)
- Guy RIXON (AstroGrid)
- Ruben ALVAREZ TIMON (ESAC)
- Luigi FUSCO (ESRIN)
- Claudio VUERLI (EGEE Astro Cluster)
- Fabio PASIAN (IGI)
- Mattias STEINMETZ (AstroGrid-D)
- Franck CAPELLO (Grid5k)
- Giuseppe LONGO (Univ. Federico II)
- Franck LE PETIT (Observatoire de Paris)
- Richard HOOK (ESO)

Concertation aspects:

- With other VO projects and the International Virtual Observatory Alliance (IVOA): D. DE YOUNG (IVOA Chair), M. OHISHI (Japan VO and IVOA Astro-RG Interest Group – relations with OGF).
- With other EC-funded projects:
 - EGEE: C. LOOMIS, E. LAURE
 - DEISA: C. GELLER
 - Baltic Grid: G. TAUTVAISIENE
 - GENESI-DR: L. FUSCO
 - VO-TECH FP6 Design Study: G. RIXON, A. SCHAAFF, K. BENSON

- With National Grid projects:
 - France: Grid 5k
 - Germany: D-Grid and AstroGrid-D
 - Italy: IGI
 - The Netherlands
 - Spain