



SEE-GRID-SCI Newsletter

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Regional Meteorologists workshop collocated with SEE-GRID-SCI PSC03 in Bucharest

SEE-GRID-SCI organized the Regional Meteorologists Workshop on the 15th of January 2009. The Workshop was collocated with the 3rd PSC Meeting of the SEE-GRID-SCI project in ICI, Bucharest, Romania.

The Workshop attracted all the meteorologists from the South East European region that work towards porting meteorological applications in the Grid, in the frame of the NA4 activity of the project. The VO manager Vassiliki Kotroni from the National Observatory of Athens, Greece presented the overall aims and status of developments of the regional collaboration of meteorologists.

Meteorology VO' s two main applications that are already being ported and using the SEE-GRID infrastructure are: "Regional scale Multi-model, Multi-analysis ensemble forecasting system" and the "Study of the interaction of airflow with complex terrain."

The "Regional scale Multi-model, Multi-analysis ensemble forecasting system" will comprise the use of four different weather prediction models (multi-model system). Namely the state-of-the-art numerical weather prediction models BOLAM, MM5, NCEP/Eta, and NCEP/WRF-NMM will be ported on the Grid infrastructure. The above models will be run for the region of South East Europe many times, each initialized with various initial conditions (multi-analysis). With this procedure not only one deterministic forecast, but a multitude of forecasts will be produced.

The Study of the interaction of airflow

with complex terrain will be focused over Croatia and Bosnia - Herzegovina, using the WRF (Weather Research & Forecasting) model. The results of the application will be used in estimating the effect of improved resolution on the numerical weather prediction quality, and consequently in improving the forecasting skill, and also in the air-pollution dispersion modeling over complex terrain.

Collaborating partners for the deployment of these applications from the SEE region presented the status of porting the different meteorological models (BOLAM, MM5, NCEP/Eta, NCEP/WRF-NMM and WRF) on the Grid and had the opportunity to discuss commonalities as well as the details of their software as well as the infrastructure needs with the application and infrastructure support members of the project.

The meteorology VO was represented by partners from all the collaborating countries, namely: Greece (National Observatory of Athens (NOA), Serbia (South Environment and Weather Agency of Serbia), Montenegro (Hydrometeorological Institute of Montenegro), Croatia ('Ruđer Bošković' Institute of Zagreb, the department of Geophysics - 'Andrija Mohorovičić' Geophysical Institute of the University of Zagreb, the faculty of Graphical Art of the University of Zagreb), and Bosnia - Herzegovina (Federal Hydro-Meteorological Institute of Bosnia and Herzegovina) as well as Moldova who showed interest into the meteorology VO activities.

Inside this issue:

SEE-GRID-SCI Regional Meteorologists workshop collocated with SEE-GRID-SCI PSC03 in Bucharest	1
SEE-GRID-SCI National Grid Initiative Experiences Disseminated Widely in International Communities	2
News from partners	2
SEE-GRID-SCI JRA1 Develops Applications Services	3

SEE-GRID-SCI National Grid Initiative Experiences Disseminated Widely in International Communities

The project's NGI experiences have been disseminated to various international communities. Two crucial project deliverables, "NGI Metrics Specification" and "NGI cookbook" have been circulated to a large number of related regional projects. The presentation of the paper "National Grid Initiatives Setup and Monitoring Guidelines", published in the proceedings of the First

EELA-2 Conference, was followed up by support actions targeted at a number of Latin American nascent NGIs.

SEE-GRID-SCI work was presented in detail at the BSI (Black Sea Interconnection) project Caucasus link inauguration in Tbilisi, Georgia, in March 2009, where Caucasus and wider Central Asian community was addressed.

News from partners

MD-GRID CA Certification Authority Inauguration Event & Grid Security Training Workshop took place in Moldova

The inauguration event of the MD-Grid CA Certification Authority & the grid security training workshop was jointly organized in Chisinau by RENAM and MD-Grid NGI on April 3, 2009. The event was held at the premises of the Center for Graduate, post-Graduate Education & Advanced Training of the Academy of Sciences of Moldova and was dedicated to train national grid infrastructure users, especially those activating in the framework of SEE-GRID-SCI project. New National Certification Authority structure and functions were presented and explained, as well as the structure & usage of the new web site - ca.grid.md. The training was focused on general grid security concepts and aspects, together with practical procedures of grid certification. The event opened with welcome speeches by acad. A.Andrieș - RENAM General Director, I.Cojocaru - Director of the Information Society Development Institute and Dr. C.Gudima - Institute of Applied Physics of ASM. Presentations and practices on the National Grid Infrastructure, its security aspects, users certification procedures were made by RENAM's specialists V.Sidorenco, V.Pocotilenco and A.Altuhov. The event was attended by about 20 scientists, teachers and students.

Regional SEE-GRID-SCI Training for Site Administrators at IPB

As a part of SEE-GRID-SCI NA3 activities, the Scientific Computing Laboratory of the Institute of Physics Belgrade organized a two-day site administra-

tor's training event on 5-6 March 2009. More than 20 site administrators from the following institutions participated in this event: UOB (Belgrade), ETF (Belgrade), MFKG (Kragujevac), PMF (Kragujevac), FTN (Kosovska Mitrovica), HMI (Montenegro), II (Skopje), GPBI-BAS (Sofia), IPP-BAS (Sofia), PMF (Sarajevo), ETF (Sarajevo), RBI (Zagreb), UPT-FTI (Tirana), MTA SZTAKI (Budapest), ICI (Bucharest), RENAM (Chisinau), IPB (Belgrade).

The first day of the training started with detailed description of SEE-GRID-SCI operations and monitoring tools, followed by hands-on demonstrations and their relation to analogue EGEE tools. These sessions covered site downtime and upgrade procedures, Grid-Operator-On-Duty responsibilities and Service Level Agreement requirements.

As a result of the training, a new SEE-GRID-SCI site AEGIS08-PHY-DEMO was installed from scratch. The technical part of the training started with Operating System installation and configuration, and was continued by User Interface, Computing Element, site BDII, Workers Node, Storage Element, Monitoring System Collector Server, Top-level BDII and Workload Management System installation and configuration. During the live site setup all technical issues have been solved and participants were able to see how typically troubleshooting of operational issues is done.

The training was closed with a presentation on virtualization, with emphasis and demonstration of Xen virtualization in Grid computing.



Contact

SEE-GRID-SCI Project Management Office
56, Mesogion Av.
GR 115 27

Phone: +30 210 7474283
Fax: +30 210 7474490
E-mail: see-grid-pmo@seegrid.eu

www.see-grid-sci.eu

SEE-GRID-SCI(SEE-GRID eInfrastructure for regional eScience) is a 2 year project co-funded by the European Commission, starting on 01/05/2008.

SEE-GRID-SCI stimulates widespread eInfrastructure uptake by new user groups extending over the region, fostering collaboration and providing advanced capabilities to more researchers, with an emphasis on strategic groups in seismology, meteorology and environmental protection. The initiative thus aims to have a catalytic and structuring effect on target user communities that currently do not directly benefit from the available infrastructures.

In parallel, it aims to enlarge the regional eInfrastructure to cater for demands of the communities by increasing the computing and storage resources and involving new partner countries in the region.

Finally, SEE-GRID-SCI targets to help mature and stabilize the National Grid Initiatives in the region, allowing them to join the new era of longer-term sustainable Grid infrastructure in Europe.



SEE-GRID-SCI JRA1 Develops Applications Services

SEE-GRID-SCI JRA1 activity addresses issues common to several user communities and their applications trying to provide extended services not currently offered by the grid middleware, contributing to the enhancements of services provided to grid application developers and end users.

During the 1st year of the project JRA1 has identified and develops several Application Services in the following service areas: Data management and Data Access, File Management, Logical Files, Development Environments and portals, Job Management, Informa-

tion Services and Workload Management, Interactive and pilot jobs, Workflows, Image Rendering services and Application level event and performance logging. Eleven specific Application Services are under development tackling the applications commonalities described above. Four of those have already finished at least their first version and are already used or ready to be used by the SEE-GRID-SCI user communities' applications, four of them are under development and three of them have been specified, and their development is expected to start soon.

