



Enabling Grids for E-scienceE

EGEE Applications Registry

Current status & latest developments

<http://appdb.eu-egge.org/>

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www.eu-egge.org



Information Society



- **Main aim:**

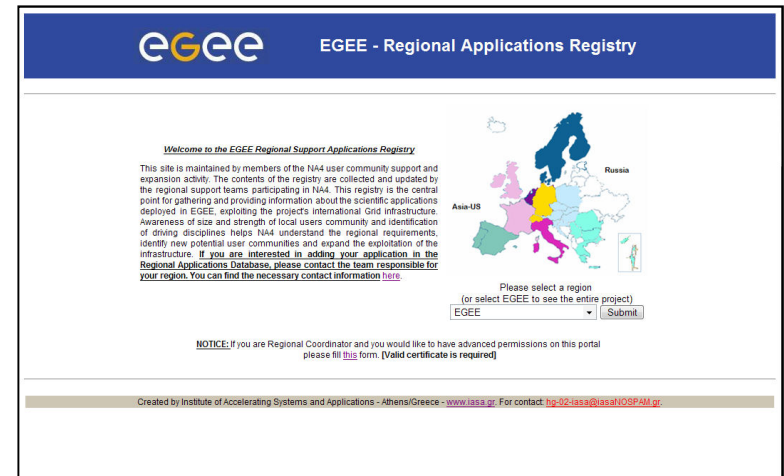
Acts as the central point for providing information on the scientific applications running on the grid infrastructure.

This allows new or potential users to search for similar applications; it also facilitates the setup of new collaborations among different user communities.

- **Another perspective:**

Awareness of size and strength of local users community and identification of driving disciplines helps EGEE to understand the user requirements, identify new potential communities and expand the exploitation of the infrastructure.



- First released at October 2008, developed by GRNET/IASA team
- Provides a region-centric view of the applications database
- Covers every identified discipline within EGEE infrastructure, including:
 - Earth Sciences
 - Astronomy, Astrophysics, and Astro-Particle Physics
 - Life Science
 - Computer Science and Mathematics
 - Computational Chemistry
 - High Energy Physics
 - Fusion



- For every registered application it provides information on:

- Acronym
- Application Name
- Discipline
- Sub-Discipline
- Description
- Scientific Contact(s)
- Web Site (URL)
- VO used

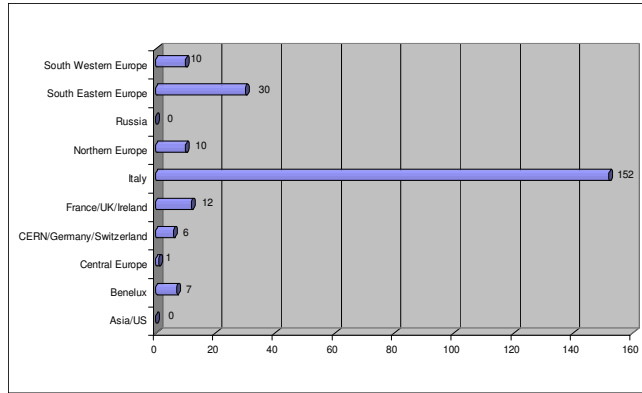


ID	Logo	Acronym	Application Name	Discipline	Sub-Discipline	Description	Scientific Contact	Web Site	Region
48		LWEP-GRID	Localized Area Weather and Environmental Forecasting on a Grid Platform	Earth Sciences	Meteorology	This application is targeted to produce early warnings related with hazardous weather events. Such real time operations are accomplished using the WRF based dihybrid weather forecasting system for short time periods (3-6 hours forecasting horizon). Using the concept of 'nowcasting', the system is daily integrated on a very high resolution domain (5-10 km) covering the wider area of Eastern Mediterranean. The normal operation of the computational model runs in a deterministic mode under Grid.	View	View	SEE
50	N/A	AMAS	A Model Independent Analysis Scheme (MIAS) for Extracting Multiple Amplitudes.	Life Sciences	Other	A novel method for extracting multiple amplitudes in the micron resonance region from electroproduction data is applied. The method is based on statistical concepts and it relies heavily on Monte Carlo and simulation techniques. It produces precise identification and determination of the contributing multiple amplitudes in the resonance region and for the first time, a rigorous determination of the associated experimental uncertainties. The results are demonstrated to be independent of any model.	View	View	SEE
51	N/A	AI-QISModule	Academy of Athens-NASA-Goddard Institute for Space Studies module	Earth Sciences	Meteorology		View	View	SEE
53		DAMI-LIDA	Numerical simulations of meteorology and atmospheric pollution	Earth Sciences	Meteorology		View	View	SEE
49	N/A	STFCAPP	Simulation of three-dimensional folding to prediction of critical amino acid positions in proteins	Life Sciences	Biophysics		View	View	SEE
54	N/A	In Silico Oncology	Development and customization of an in silico (computational) oncology application in Grid environment	Life Sciences	Other		View	View	SEE
55		RAMS	Modeling in Meteorological and Climate Applications	Earth Sciences	Meteorology	In the present work, the advantages of using the Grid services for meteorological applications will be presented. The main use of Grid will be for development of the RAMS modeling system. RAMS model has been widely implemented in many meteorological applications for weather prediction. In the present time, RAMS is evaluated for predictions of Saharan dust transport in Greece and climatic changes that we occur due to the dust transport. The usage of Grid is necessary for evaluating RAMS as a...	View	View	SEE
52	N/A	SWF-NDA	The use of Grid computing for space weather forecast to using advanced	Astronomy; Astrophysics and	Other	The build-up of intense particle radiation during geospace magnetic storms is among the core space weather issues of interest and concern to scientists, engineers and users. Space-time plasma convection is driven by the large scale convection electric field and the...	View	View	SEE

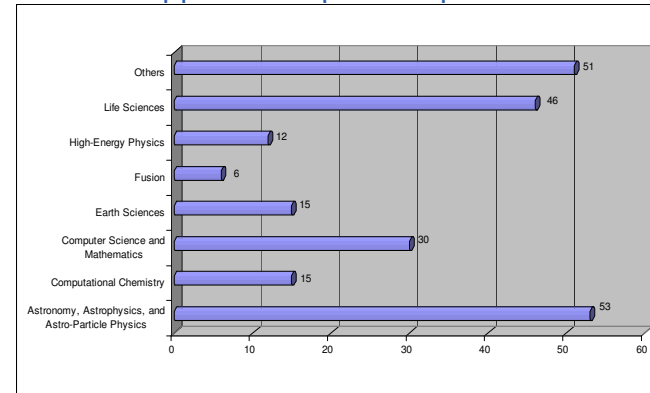
- Advanced searching mechanism
- Secure authentication mechanism for regional coordinators using X.509 digital certificates
- An advanced front-end, for regional coordinators, in order to insert, modify or delete applications

- Currently: almost **230** applications have been registered into the Applications Registry

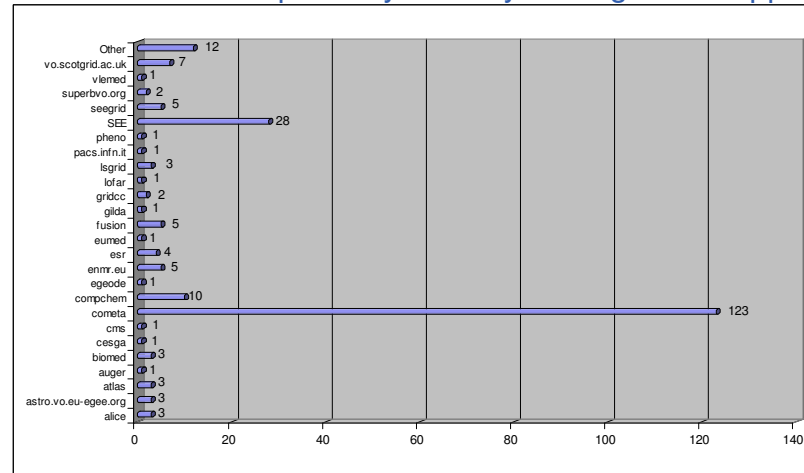
Applications per region



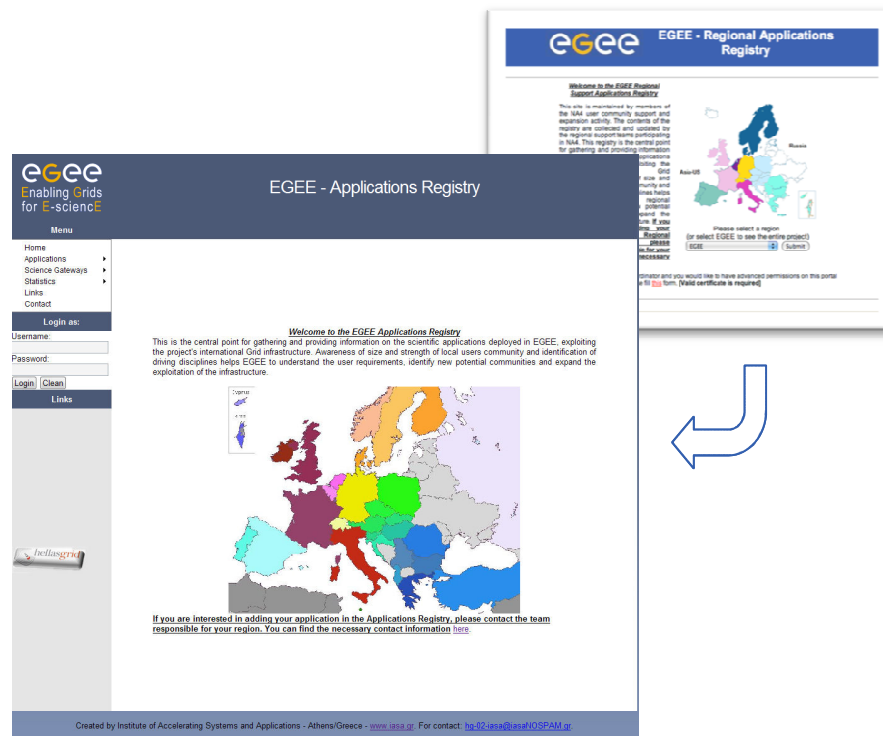
Applications per discipline



VO resources which are primarily used by the registered applications



The new/upcoming release of the Application Registry



EGEE - Applications Registry

Menu

- Home
- Applications
- Science Gateways
- Statistics
- Links
- Contact

Login as:

Username:

Password:

Links

EGEE - Regional Applications Registry

Welcome to the EGEE Regional Applications Registry

This site is maintained by members of the IAEA user community support and expansion activity. The contents of the reports are concise and accessible for the regional support teams participating in IAEA. This registry is the central point for gathering and providing information on the size and priority and new future regional projects.

Please select a region (or select EGEE to see the entire project)

Information and you would like to have advanced permissions on this portal, please contact us. (Valid certificate is required)

EGEE - Applications Registry

Welcome to the EGEE Applications Registry


This is the central point for gathering and providing information on the scientific applications deployed in EGEE; exploring the projects international Grid infrastructure. Awareness of size and strength of local users community and identification of driving disciplines helps EGEE to understand the user requirements, identify new potential communities and expand the exploitation of the infrastructure.

If you are interested in adding your application in the Applications Registry, please contact the team responsible for your region. You can find the necessary contact information [here](#).

Created by Institute of Accelerating Systems and Applications - Athens/Greece - www.iasa.gr For contact: ha-02.iasa@iasa.forth.gr

- The Applications Registry portal, is currently going through some significant improvements in order to adopt the upcoming **EGI/NGI** model
- Some new features:
 - Grouping the registered applications per NGI and per discipline (SSC)
 - Provision of advanced statistical information on the registered applications, such as:
 - Applications that are running on each identified scientific discipline (and/or SSC)
 - Statistics on the applications that are developed (or partially developed) by each NGI
 - Regional statistics
 - Sub-discipline statistics
 - Numerous other projections of information
 - More advanced front-end for the NGI representatives, for inserting or modifying information related to each registered application.

More applications (for US, Europe, Asia, Africa, Oceania) or Regions (the capability)



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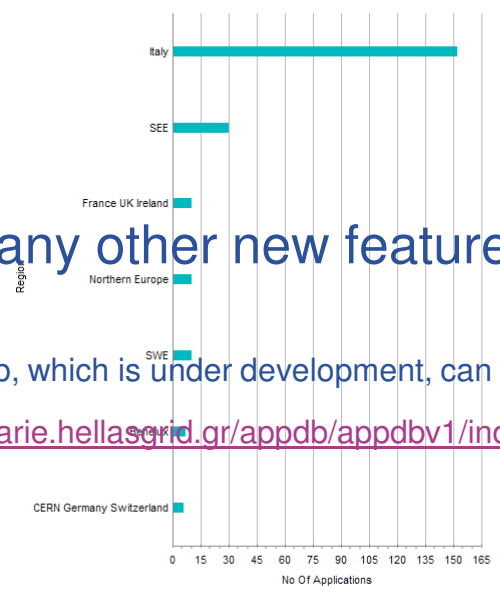
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Links


Applications Per Region



Region	No Of Applications
Italy	150
SEE	30
France UK Ireland	15
Northern Europe	10
SWE	5
CERN Germany Switzerland	5

... and many other new features

The new version of the appdb, which is under development, can be inspected at:

 <https://na4rs.marie.hellasgrid.gr/appdb/appdbv1/index.php>

Created by Institute of Accelerating Systems and Applications - Athens/Greece - www.iasa.gr. For contact: hq-02-iasa@iasa.NOSPAM.gr.

- Workflow: Application porting case studies

Plans to enable a mechanism to provide written documentation of the porting process followed for each registered application.

These applications will constitute a “**library of case studies**”, which will be accessible through the Application Registry and will serve as a set of useful guidelines for the future porting of similar, or even different, applications.

Requirement: We should have access to the necessary information needed for writing the case studies. Initial negotiations/proposals towards this direction have already started with the applications support representative.

- **Workflow: Science Gateways/Portals registry**

The Application Registry Portal could also act as a registry for the Science Gateways/Portals, which are being, or will be, developed within the identified scientific communities (SSCs).

This kind of development will be promoted within the communities of interest, in three possible ways:

- In a “**bulletin form**”, through the Application registry portal.
- In a “**periodic updates form**” – through periodic informative emails
- In a “**news form**” – via the creation of discipline-based (and/or SSC-based) RSS channels

There are two assumptions for this:

- The actual design, build and maintenance of the Science Gateway/Portals will be part of the SSCs, and
- There will be one contact person per SSC; this person will be authorized to maintain the corresponding information into the database.

Milestones of the new release

Redesign of the users front-end	Done
Development of the users front-end	Almost done, it will be finalized in Nov09
Redesign of the portal, in order to satisfy the requirements for the new admin interface (NGI-rep oriented)	Done
Development of the admin interface	It will be finalized in Jan10
Gathering requirements for the "Application Porting Use Cases" workflow	Ongoing task. It will be finalized in Feb10
Minor changes in order to satisfy the "Application Porting Use Cases" workflow	It will be ready, in the mid of Mar10
Final tests - Release of the version 1.0	April 2010
Gathering requirements for the "Scientific Gateways/Portals registry" workflow	It is an ongoing task. It will be finalized in May10
Major/significant changes in the code and the database in order to satisfy the "Scientific Gateways/Portals registry" workflow	During Jun10
Final tests - Release of the version 2.0	July 2010

