

EGI Community Forum 2014 - Helsinki

Monday, 19 May 2014 - Friday, 23 May 2014

Helsinki University, Main Building

Scientific Programme

<big>COMMUNITY FORUM 2014 - *Advancing excellent science*</big>

The Community Forum 2014 will focus on EGI's contribution to advancing excellent science in the European Research Area through the use of innovative services for data and computing.

The conference includes a new richer set of user-orientated tracks that will provide opportunities for existing and new user communities to present their requirements, report on success stories, get support in porting their application environment to the EGI grid and cloud services and to network with technical providers and other partners.

Submissions that support the Tracks described beneath are sought in the format of:

Sessions

Workshops

Training sessions and tutorials

Oral presentations

Posters and demonstrations (see front page link to separate INDICO entry)

In addition, for the first time the EGI Community Forum will feature:

Networking sessions: they provide an easy way to share ideas, receive feedback, be exposed to the views, perspectives of other participants and engage in a constructive dialogue with them.

Technology provider's networking sessions allow to get in touch with user communities and showcase the latest advancements of service capabilities.

User's networking sessions allow Users to meet Technology providers to discuss the solutions that are needed.

Hackathons: conference sessions aiming at prospective user communities where practical 'hands-on' application porting activities are performed bridging new user communities to EGI services. The EGI Hackathon will bring together distributed computing experts from across EGI's scientific communities to tackle scientific software challenges collaboratively. Members of the new EGI Distributed Competence Centre (go.egi.eu/dcc) will support scientific groups getting their applications and data ported to EGI grid and cloud services.

SUBMISSION DEADLINES

Sessions, workshops, training sessions and tutorials: **15 January 2014** (EXTENDED DEADLINE)

Presentations, networking sessions, hackathons: **21 February 2014** (EXTENDED DEADLINE)

Posters and demonstrations: **16 March 2014**

Success stories in using e-Infrastructures for research (Track Leaders: E. Katragkou, P. Castejon)

The aim of this track is to increase the awareness of the solutions that e-Infrastructures can offer to the scientific community. We seek contributions for presentation of e-Infrastructure-enabled research from the full breadth of scientific disciplines. Emphasis is on the implementation of specific applications on the e-Infrastructure, the resources used and the technical expertise applied. Key scientific findings and their societal impact should also be highlighted.

Big data analysis through grid and cloud computing for large scale projects (Track Leaders: M. Girone, G. Taffoni, J. Tarus, T. Nyronen, H. Heller)

This track aims to discuss the requirements and experiences of research communities from all fields of science and industry in handling big data through grid and cloud computing. The focus is on data analysis tasks, special software or frameworks such as Hadoop, and on the infrastructure to provide and distribute the necessary software components. We also seek contributions from the user communities on how to measure and optimise the performance of their global computing infrastructures.

Requirements and solutions for data management and computing (Track Leaders: B. Konya, H. Heller, S. Tarkoma)

This track focuses on the following topics: (i) bulk data transfer, (ii) data sharing with individuals or groups or the public, (iii) what are your data privacy requirements, (iv) what are your data storage requirements: long time storage, huge discs, etc., (v) metadata management, (vi) data dissemination services, (vii) data services for citizen scientists, portals, (viii) compute and data interoperability: data access, (ix) computing requirements: single core, parallel, MPI, GPGPU, RAM, meta scheduling, and (x) computing solutions: We seek submissions covering what have you done, what you plan to do, what worked, and where did you encounter problems.

Data and knowledge preservation and curation (Track Leaders: J. Shiers, A. Fresa)

This track focuses on applications in data and knowledge preservation and curation and discusses best practices, lessons learnt, shared solutions and common challenges, covering all fields of research. The track will also address the technical and non-technical aspects of using e-infrastructures for data preservation and curation. The convenors are looking for submissions concerning, for example, workflow management, skills improvement, global services, solutions with multidisciplinary applications, business cases, amongst others. Contributors are encouraged to present their experiences, also in terms of concrete stories to be shared with other participants. Demonstrations are particularly welcome.

Virtual Research Environments, gateways and workflow engines (Track Leaders: J. Montagnat, G. Sipos)

This track will cover Virtual Research Environments (VREs) and their key enabling technologies (e.g. gateways, workflow engines) that are available within the broader EGI community. VREs provide customised environments for specific user groups by connecting and abstracting infrastructure resources from EGI for discipline specific data and compute intensive applications.

VREs combine and facilitate access to grid, cloud, data and application services made available by e-infrastructure and community providers. We are looking for contributions about experiences about existing VRE solutions, to reflect on their impact on user communities, and to discuss the future of VREs.

Porting applications to the grid and cloud platform (Track Leaders: G. Sipos, D. Wallom)

EGI offers grid and cloud platforms that federate more than 370,000 logical CPUs and 170 PB of disk capacity from 56 countries. These resources support various types of applications from different fields of sciences. This track is organised by members of the EGI Distributed Competence Centre (go.egi.eu/dcc) for new communities to help the integration of new applications with the EGI grid and cloud platforms. The track will include presentations about successful application integration projects detailing the methodologies and reusable porting frameworks that made these projects a success, and will include tutorials that provide engagement opportunities between experienced, and new EGI users.

Advanced cloud services (Track Leaders: D. Wallom, M. Drescher, K. Nordlund)

With the EGI Federated Cloud Platform maturing into a productive IaaS offering for any interested user community to consume, the EGI community needs to further investigate how it wishes to make use of this new resource type. Not every user community, however, can afford the responsibility and freedom of a IaaS platform. In this track, we are looking for best practices of Cloud Computing, how to make use of the EGI Cloud infrastructure, VM image packaging, VM Image lifecycle management, and much more.

Integrated AAI services (Track Leaders: P. Solagna, A. Bonvin, J. Kewley)

A pan-European integrated authentication and authorization infrastructure (AAI) is one of the key tools to enable researchers to use services provided by e-infrastructures, while reducing barriers to new users. This track will collect contributions from user communities, service or identity providers about their requirements of and experiences on AAI. Examples of relevant topics for the track are: 1) Policies and experiences in federating identity and attribute authorities. 2) Solutions for attributes management and attributes and credentials translation, and the possible integration of these solutions with the existing EGI services. 3) Single sign on solutions across multiple e-infrastructures.

Integrated e-Infrastructure services (Track Leaders: K. Kurowski, A. Parodi)

This track covers the users' requirements for an easy access to integrated services and heterogeneous resources (HPC, HTC, cloud platforms, desktop grids, data) from different e-Infrastructures at a European level and internationally, enabling technologies and standards, support services like accounting, monitoring, service discovery, tools and best practices for service

management in a federated environment.

Open innovation, policies and business models (Track Leaders: S. Andreozzi, W. Los)

This track focuses on three main aspects: 1) open innovation fostering initiatives and experience to support both collaborative development and much better adoption of new technologies by user communities; 2) business models to explore how services could better meet the needs of user communities and also sustain these services; 3) the implications for policies that may drive the preferred innovation and the preferred business models. Implications include the effects on scientific excellence, open access, and tackling the grand societal challenges.