

Introduction

Monday, 14 March 2016 14:00 (1h 30m)

The EGI Federated Cloud (<http://go.egi.eu/cloud>) is a standards-based, open cloud system that federates institutional clouds to offer a scalable computing platform for data and/or compute driven applications and services. The infrastructure is already deployed on 20 academic institutes and offers access to approx. 6000 CPU cores, 8000 GB RAM and 430 TB storage. The infrastructure is available for free at the point of access through various interfaces and environments that are customised to the specific needs of users from research and education.

The technologies that enable the infrastructure are based on open solutions and are maintained by the EGI community. These technologies are available for institutes and research communities worldwide to federate cloud services and applications into large-scale infrastructures.

The tutorial will consist of short presentations and hands-on exercises that demonstrate the EGI Federated Cloud from the user perspective. By covering the following topics the tutorial can be relevant to those who want to become users of the service, and/or want to design cloud applications and cloud infrastructures to support users from academia:

- List item

Introduction to compute clouds and to the distinguishing features of the EGI Federated Cloud.

- List item

Porting applications to the EGI Federated Cloud: Virtual Machines, Image Marketplace, Virtual Organisations.

- List item

Managing applications and data in EGI Federated Cloud: IaaS interfaces, PaaS and GUI environments.

- List item

Next steps to become active user of the EGI Federated Cloud, and/or member of the community.

Intended audience and prerequisites

- List item

Application developers, IT support teams from academia and industry who require access to cloud systems to develop, deploy and operate 'big data' applications and frameworks for researchers and research communities.

- List item

Researchers who would like to understand the basics of cloud computing and gain experience in using cloud resources and applications.

- List item

Representatives of scientific projects and collaborations who want to establish a cloud 'ecosystem' to support community applications and workloads.

Basic understanding and knowledge of cloud computing is a benefit, but not a prerequisite for this tutorial. Each attendee should have access to a PC with internet connection, an SSH client and a Web browser.

Instructor

Gergely Sipos (gergely.sipos@egi.eu) works as Technical Outreach Manager for EGI.eu, the coordinator institute of the EGI community. Gergely coordinates user engagement activities within the EGI community and supports communities exploit EGI services to push the boundaries of science. Since 2015 Gergely coordinates the 'Knowledge Commons' Work Package of the EGI-Engage project. This WP includes eight Competence Centres that support high-impact Research Infrastructures/communities with joint development of customised e-infrastructure services, training and consultancy. Since 2012 Gergely coordinates the training

and technical user support of the EGI Federated Cloud infrastructure. Gergely holds PhD in computer science from the University of Miskolc, Hungary. Prior to EGI, Gergely worked in training and user support for the EGEE project from his base in Budapest, where he promoted grid technology and distributed computing practices to scientific communities.

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Session Classification: EGI Federated Cloud for Open Science Tutorial

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