

Introduction to the EGI Federated Cloud –the user perspective

Tuesday, 10 November 2015 13:30 (2 hours)

This tutorial is a 3h long introductory course to the EGI Federated Cloud infrastructure from the user perspective. The course will consist of short talks and hands-on exercises using the training.egi.eu VO of the EGI Federated Cloud. During the tutorial attendees can learn the basic concepts of cloud computing, cloud federations, and gain experience in interacting with the EGI federated cloud infrastructure at the IaaS layer through its rOCCI command line interface. The course primarily targets developers of high level cloud environments (PaaS and SaaS) and scientific applications who –after this course –would become able to integrate their system with the EGI IaaS solution.

The EGI Federated Cloud is a standards-based, open cloud system as well as its enabling technologies that federates institutional clouds to offer a scalable computing platform for data and/or compute driven applications and services. The EGI Federated Cloud is already deployed on more than 20 academic institutes across Europe who together offer 6000 CPU cores and 300 TB storage for researchers in academia and industry. This capacity is available for free at the point of access through IaaS, PaaS and SaaS capabilities and interfaces that are tuned towards the needs of users in research and education. The technologies that enable the cloud federation are developed and maintained by the EGI community, and are based on open standards and open source Cloud Management Frameworks.

Outline of the course is (for 2x90 minutes)

- Introduction to clouds, cloud federations and the EGI Federated Cloud
- Application porting best practices and examples
- Introduction to training infrastructure and first exercises
- Exercise –compute and storage management
- Introduction to contextualisation
- Exercise –Contextualised compute instances
- Creating your own Virtual Machine Image
- Next steps - How to become a user

The content will be based on similar tutorials that have been delivered to international audiences in the UK and NL.

Primary author: Dr SIPOS, Gergely (EGI.eu)

Co-authors: SCARDACI, Diego (EGI.eu/INFN); Dr FERNANDEZ, Enol (EGI.eu)

Presenters: SCARDACI, Diego (EGI.eu/INFN); Dr FERNANDEZ, Enol (EGI.eu); Dr SIPOS, Gergely (EGI.eu)

Session Classification: Tutorial: Introduction to the EGI Federated Cloud