Science Gateway session introduction

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SGP-VT Project

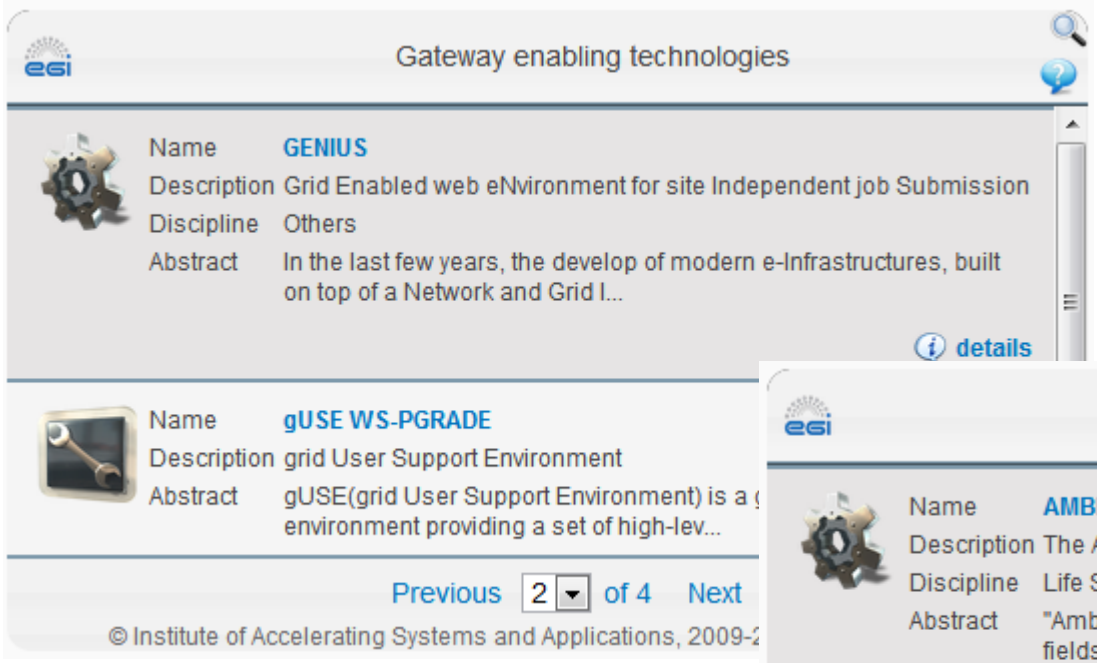
- **General project info**
  - **Start :** 16 May 2012
  - **End :** 15 Nov 2012
  - **Wiki :** http://go.egi.eu/sgp-vt

- **What is a Science Gateway?**

  EGI science gateway is a community-specific set of tools, applications, and data collections that are integrated together via a web portal or a desktop application, providing access to resources and services from EGI.

- **Motivation**
  - How to identify the right set of technologies to build a science domain specific gateway? Dedicated webpages to present basic information about ready to use SGs and about SG enabling technologies are in place.
  - This VT aims to **help gateway developers and provide an 'EGI gateway primer'**, a manual that collects useful and up to date information from the EGI community about science gateway development.

EGI AppDB


Gateway enabling technologies
Name GENIUS
Description Grid Enabled web eNvironment for site Independent job Submission
Discipline Others
Abstract In the last few years, the develop of modern e-Infrastructures, built on top of a Network and Grid I...
details
Name gUSE WS-PGRADE
Description grid User Support Environment
Abstract gUSE(grid User Support Environment) is a g environment providing a set of high-lev...
Previous 2 of 4 Next
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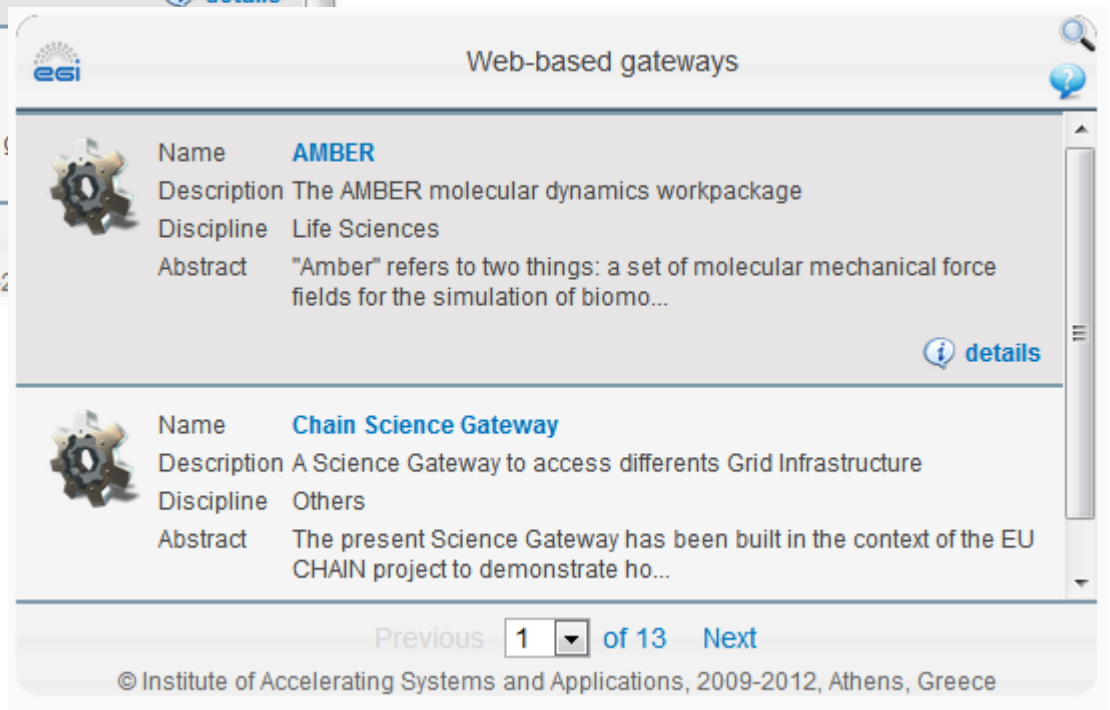
Web-based gateways
Name AMBER
Description The AMBER molecular dynamics workpackage
Discipline Life Sciences
Abstract "Amber" refers to two things: a set of molecular mechanical force fields for the simulation of biomo...
details
Name Chain Science Gateway
Description A Science Gateway to access differents Grid Infrastructure
Discipline Others
Abstract The present Science Gateway has been built in the context of the EU CHAIN project to demonstrate ho...
Previous 1 of 13 Next
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Project and members

- **Goals?**
  1. Provide a comprehensive document, an **'EGI science gateway primer'**, that collects information about technologies, policies, solutions that exist from the EGI community for gateway developers,
  2. Up to date and complete information in the **EGI Application Database** about EGI science gateways and science gateway enabling technologies,
  3. Recommendations on how to improve the data structure of the EGI Application Database and the **EGI website** to better support science gateway developers.

- **Who?**
  - 34 individuals (including 5 NILs) from Armenia, France, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Serbia, Malaysia, Spain, Switzerland, Taiwan, UK, and Ukraine

Progress and plans

Achievements	Status
Wiki site, regular WebEx meetings, etc.	DONE
Learning from the others, e.g. XSEDE	DONE
Focus on the Primer ToC	READY
Draft of Primer with several chapters	AVAILABLE for the VT members
Organize and advertise a double session at the EGI.TF.2012	DONE

Next steps	When
Presentations and discussion on SG double session @ EGI.TF.2012	20th Sep.
More contributions based on the presentations and discussions	Mid Oct.
EGI AppDB / EGI website improvements	Last month

SG Primer – current status

1 INTRODUCTION

2 DEFINITIONS

- 2.1 Distinction Between "Enabling Technology", "SG Framework", and "SG Instance"
- 2.2 Front-end, Back-end
- 2.3 Roles: Gateway User (Community), Developer, and Operator; Middleware Operators and Developers

3 SG FUNCTIONAL FEATURES/FUNCTIONALITIES (e.g. Data management)

4 SG LIST AND COMPARISON

5 SG QUALITIES (from different points of view)

- 5.1 SG Developers
- 5.2 SG Operators
- 5.3 Application Developers
- 5.4 End-users

SG Primer – current status

6 FOR SG (FRAMEWORK) DEVELOPERS AND OPERATORS

- 6.1 What is their Role?
- 6.2 What is Expected from Them?
- 6.3 Who are these Players in Europe?

7 FOR SG (INSTANCE) DEVELOPERS AND OPERATORS

8 STEPS OF BUILDING YOUR SG

- **8.1 Create an Exact List of Requirements your SG Should Meet**
- **8.2 Choose Technologies based on Resources and Time**
- **8.3 Building Portals from Reusable Components**
- **8.4 Select a Development Team with User Interface (UI) Experience**
- **8.5 Plan for the Long Term**
- **8.6 Develop in Stages**

9 INTEGRATION WITH EGI INFRASTRUCTURE → next slide

INTEGRATION WITH EGI INFRASTRUCTURE

- EGI.eu policies (VO Portal, Service Operations Security, Traceability and Logging, Security Incident Response Policy)
- How to keep track of user identities and activities inside the portal and on the grid
- **How to integrate EGI portals with identity federations**
- **How to integrate portals with EGI monitoring system**
- **How to integrate portals with EGI accounting system**
- **How to integrate portals & enabling technologies with EGI Applications Database**
- The future of science gateway and EGI support

Thank you!

Science Gateway Primer – Virtual Team

http://go.egi.eu/sgp-vt