Contribution ID: **52**   Type: **Workshop/Training**

WS-PGRADE/gUSE and its customization methodology for creating scientific gateways

Tuesday, 27 March 2012 14:00 (1h 30m)

Description of the Work

We would like to give a tutorial consisting of two parts about WS-PGRADE/gUSE and its customization methodology. The tutorial will target both application developers and portal developers.

During the first part of the tutorial we would like to introduce application developers to the WS-PGRADE/gUSE portal technology. They will learn about the most important features of WS-PGRADE and its backend, gUSE:
- workflow concept of WS-PGRADE,
- parameter study features within workflows
- available portlets to ease the life of a grid "newcomer",
- access to 11 different DCIs supported by gUSE,
- areas where WS-PGRADE/gUSE is used.

After the first part of the tutorial application developers will get the necessary knowledge to start experimenting with WS-PGRADE. Together with the product's detailed user manual, they will be able to create the workflows they need for their research.

Within the second part of the tutorial we are addressing portal developers. We present a customization methodology called Application Specific Module (ASM) that enables creating very simple user interfaces for end-users. The methodology offers a way to hide all the features of WS-PGRADE/gUSE behind an easy-to-use, application-specific user interface. During this part portal developers will learn how to create customized science gateways based on WS-PGRADE/gUSE and the ASM module.

We aim two 90 minutes slots, the first part for the application developers tutorial, and the second part for the ASM tutorial.

Conclusions

The tutorial will give an overview of the WS-PGRADE/gUSE technology, and its customization methodology, ASM.

The presented technology has been selected as the core of the EU-funded SCI-BUS project, which aims to create a number of application-specific gateways.

The targeted audience of the tutorial is diverse: it offers new knowledge both for application developers and portal developers.

Impact

WS-PGRADE/gUSE and ASM are adopted as the base portal technology of the SCI-BUS FP7 project, which aims to create at least 17 customized science gateways for various European user communities in the field of chemistry, astro-physics, seismology, helio-physics, biotechnology, etc.

With our tutorial we are aiming a wide range of audience: application developers (e.g. scientists) and portal developers. Thus, we expect that the tutorial will cover a relatively big subset of the Community Forum audience.

URL

http://guse.hu/
http://guse.sf.net/
http://www.sci-bus.eu/
http://guse.sztaki.hu/

Overview (For the conference guide)

WS-PGRADE/gUSE is a feature-rich, open-source, web-based workflow management tool enabling its users to exploit different grid systems' computing power through an easy-to-use interface. It has been selected as the core portal technology within the FP7 SCI-BUS project for creating customized science gateways.

The tutorial focuses on using WS-PGRADE/gUSE and its customization methodology.

The first part is recommended for end-users and portal developers who are willing to learn about the features of WS-PGRADE/gUSE. They will get an overview of WS-PGRADE's workflow concept and the user interface.

The target audience for the second part are portal developers. During the second session of the tutorial they will be introduced to the Application Specific Module (ASM), a handy API for creating customized science gateways. The second part will give an overview on how to use the ASM for developing application-specific, easy-to-use interfaces for creating scientific gateways.

Primary authors: Prof. KACSUK, Peter (MTA SZTAKI); FARKAS, Zoltan (MTA SZTAKI)

Presenter: FARKAS, Zoltan (MTA SZTAKI)

Session Classification: PGRADE/gUSE - Tutorial