Press Release

April 11, 2013

**New versions of WS-PGRADE/gUSE and the CloudBroker Platform
provide extended cloud access for science gateways**

The Computer and Automation Research Institute, Hungarian Academy of Sciences (MTA SZTAKI), CloudBroker GmbH, and the SCIentific gateway Based User Support (SCI-BUS) project are happy to announce new versions of the two SCI-BUS base technologies, WS-PGRADE/gUSE and the CloudBroker Platform, which together considerably extend the cloud access for science gateways.

WS-PGRADE/gUSE is an open source framework to build community gateways based on Liferay. It provides scientific workflow management for application developers and end users, and supports various Distributed Computing Infrastructures (DCIs) including clusters, grids and clouds. For cloud access, it uses the CloudBroker Platform, an application store for offering and running compute-intensive applications on public and private cloud infrastructures. The platform widely automates resource and software handling, job execution as well as user accounting and billing, and can be accessed as a service both through the web as well as programmatically.

Thanks to the new WS-PGRADE/gUSE 3.5.4 release and the recent CloudBroker Platform updates to version 1.1.4.7, adopters of the SCI-BUS technology can now provide a complete set of services for those of their users who would like to run workflows on cloud systems instead of or in addition to grid systems. Only a few clicks to reconfigure the existing WS-PGRADE/gUSE workflows are needed, and they will run on open source and free cloud resources. With the customization methodologies provided by WS-PGRADE/gUSE, end users are able to exploit clouds without even being aware of using them.

With the new WS-PGRADE/gUSE release, users get a cleaner portal interface and optimized data and virtual machine image handling, hidden from the users. Both Software as a Service (SaaS) and Platform as a Service (PaaS) cloud usage models are now supported, that is, not only pre-registered applications, but also applications provided by the users during workflow configuration can be run. Besides the already earlier supported commercial cloud resources (Amazon Web Services and IBM SmartCloud Enterprise) and open source cloud tools (OpenStack and Eucalyptus), the CloudBroker Platform incorporates a new adapter to clouds based on OpenNebula. Different Amazon S3-compatible storage solutions can now also be used (OpenStack and Ceph RADOS), and platform usability and performance have been further improved.

Within the SCI-BUS EU FP7 project, the following academic partners provide cloud resources:

- The OpenNebula and Ceph RADOS-based cloud at MTA SZTAKI in Hungary (already in production mode).

- The OpenStack cloud at the Institute for Biocomputation and Physics of Complex Systems (BIFI) at the University of Zaragoza in Spain (currently under testing)

- The OpenStack cloud at the University of Westminster in the UK (SCI-BUS integration in preparation)

Access to the public WS-PGRADE/gUSE portal (provided by MTA SZTAKI) for creating and submitting workflows to clouds is possible at https://guse.sztaki.hu. To build own science gateways, the open source WS-PGRADE/gUSE software can be downloaded under http://sourceforge.net/projects/guse/. As underlying cloud service the public version of the CloudBroker Platform (provided by CloudBroker GmbH) under https://platform.cloudbroker.com is used, which allows user and organization registration for free and has no surcharges for free cloud resources and application software. Hosted and licensed commercial versions of the CloudBroker Platform are also available. Further information about the cloud integration in the SCI-BUS project can be obtained from its home page http://www.sci-bus.eu, and will also be presented at the EGI Community Forum in Manchester on April 8-12, 2013.

About

MTA SZTAKI: MTA SZTAKI (http://www.sztaki.hu) is a research institute of the Hungarian Academy of Sciences located in Budapest, Hungary. It performs basic and application-oriented research in the fields of computer science, engineering, information technology, intelligent systems, process control, wide-area networking and multimedia. Its Laboratory of Parallel and Distributed Systems (LPDS) is focusing on tools and services for scientific applications, workflows and gateways, and thereby has established MTA SZTAKI as a key research institute in grid technologies.

CloudBroker GmbH: CloudBroker (http://www.cloudbroker.com) is a spin-off company of the ETH Zurich located in Zurich, Switzerland. It offers scientific and technical applications as a service in the cloud, for usage in fields such as biology, chemistry and engineering. Its flagship product, the CloudBroker Platform, provides on-demand and pay-per-use web access to application software on top of compute and storage resources in the cloud.

SCI-BUS: SCI-BUS (http://www.sci-bus.eu) is a European project supported by the FP7 Capacities Programme under contract no. RI-283481. It aims at developing gateway technology and community gateways to provide researchers seamless access to major computing, data and networking infrastructures and services, with focus on scientific workflows. SCI-BUS is a collaboration of 15 consortium members, six subcontractors, and a growing number of associated partners, supporting various science gateways in different disciplines.

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SCI-BUS

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