

Cloud Service Brokerage - Towards the Multi-Cloud Ecosystem

The 2nd International Workshop on Cloud Service Brokerage (CSB 2014), co-located with the 3rd European Conference on Service-Oriented and Cloud Computing (E SOCC 2014), Manchester, UK, 2-4 September, 2014.



Call for Papers

The workshop series on Cloud Service Brokerage is the premier workshop focusing on enabling technology for realising the multi-cloud ecosystem, in which cloud service brokers will play a pivotal role in supporting cloud service providers and consumers. CSB 2014 is the second workshop in the series, co-hosted by the EU FP7 projects Broker@Cloud and PaaSAGE, and will be held at ESOCC 2014 in Manchester. It focuses on enabling technology for the multi-cloud ecosystem. The first CSB 2013 workshop was held in conjunction with ICSOC 2013 in Berlin, and focused on methods and mechanisms for cloud service brokerage.

CSB 2014 Workshop Website: <http://csb2014.modelbased.net/>

ESOCC 2014 Conference Website: <http://esocc2014.cs.manchester.ac.uk/>

Broker@Cloud Project Website: <http://www.broker-cloud.eu/>

PaaSAGE Project Website: <http://www.paasage.eu/>

Background

This workshop looks to a future in which a multi-cloud ecosystem exists, within which many cloud providers and consumers interact to create, discover, negotiate and use software services. Supporting this ecosystem are cloud brokers, whose role is to bring together providers and consumers, by offering service portals with added value for all parties. A central feature of the broker's role will be to assist with software service generation (from abstract models to platform-specific deployments), multi-cloud translation (model-driven adaptation and deployment of services) and assure quality control (governance; functional testing and monitoring), service continuity (failure prevention and recovery; service substitution) and market competition (arbitrage; service optimization; service customization).

To promote the creation of this kind of ecosystem, it is necessary to develop common standards, service models, methods and mechanisms that will operate across a wide variety of platforms and infrastructure, and across disparate service protocols, which currently include: WSDL/SOAP-based services, RESTful services and Rich Client/AJAX applications.

Topics of Interest

We solicit original research papers covering the following topics of interest:

Abstract service models – current service description languages are only up to the task of describing the service interface; what is needed are abstract models to describe the complete behaviour and performance of services, such that model-translation algorithms can generate equivalent services on different platforms.

Model-driven generation – current software services are designed in vendor-specific ways that prevent them being ported onto different platforms; what is needed are sets of translation algorithms for converting abstract service models into platform-specific applications, or sets of equivalent applications deployed across multi-clouds.

Service behaviour certification – current quality control is mostly achieved by in-house developer-based testing; what is needed is a means of determining whether alternative services are equivalent, certified by generating standard test sets from functional specifications of services, and grounding these for each of the service protocol technologies described above;

Service performance monitoring – current service monitoring technology is limited to SLAs for response-times and availability of end-points; what is needed is a more sophisticated data fusion approach, such as complex event processing, with trend prediction, supporting service optimisation and substitution.

Service optimization – current service platforms offer single-vendor services with failover substitution, or manual selection from several providers; what is needed is a means of offering multi-vendor services on a competitive basis, with automatic arbitrage between different providers, to support constrained optimization of cloud performance.

Service governance – current services and platforms are developed following in-house software processes; what is needed are explicit standards and methods for governing the whole service lifecycle, ensuring common quality standards and interfaces, supporting convergent service development and service customisation.

This list is not exhaustive; other topics relevant to the *Consumer*, *Provider* and *Broker* roles (NIST cloud role definitions) will be considered. Please note that service security is out of scope, being a matter for the *Auditor* role. Please note also that only design-time adaptation will be considered, since another ESOC workshop will be devoted to run-time adaptation issues.

Important Dates

- Paper submission: 30 May 2014
- Reviews completed: 30 June 2014
- Camera-ready copy: 15 July 2014

Submission Process

Authors are invited to submit original, previously unpublished research papers written in English. We invite (i) full research papers up to 12 pages in length; and (ii) short vision, or position papers up to 6 pages, both including all references and figures, on a topic within the remit of the workshop.

All submissions must be prepared in the Springer LNCS format. The Springer formatting guidelines are available at: <http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>

All submissions will be peer-reviewed by members of the international program committee. Paper acceptance will be based on originality, significance, technical soundness, and clarity of presentation. Please submit papers in PDF via EasyChair, following instructions to be published on the CSB 2014 website: <http://csb2014.modelbased.net/>

We anticipate a 50% acceptance rate after reviewing has been completed. Accepted full papers will be allowed up to 15 pages; and short vision/position papers up to 8 pages. At least one author of each accepted paper must register and participate in the workshop. Please see details to be published on the ESOC website: <http://esocc2014.cs.manchester.ac.uk/>

It is anticipated that publication will be in the Springer CCIS series (Communications in Computer and Information Science), in proceedings shared jointly with other ESOC workshops and the PhD symposium.

Workshop Organisation

ESOC 2014 Organisation: Workshop Chairs

- Guadalupe Ortiz, University of Cádiz, Spain
- Cuong Tran, The University of Manchester, UK

CSB 2014 Workshop: Organising Chairs

- Iraklis Paraskakis, SEERC, Thessaloniki, Greece
- Anthony Simons, University of Sheffield, UK
- Alessandro Rossini, SINTEF, Oslo, Norway
- Jens Jensen, STFC, Didcot, Oxfordshire, UK

CSB 2014 Workshop: Programme Committee

- Gregoris Mentzas, ICCS NTUA, Athens
- Symeon Veloudis, SEERC, Thessaloniki
- Kleanthis Mokios, SEERC, Thessaloniki
- Yiannis Verignadis, ICCS NTUA, Athens

- Raluca Lefticaru, University of Sheffield
- Brice Morin, SINTEF, Oslo, Norway
- Franck Fleurey, SINTEF, Oslo, Norway
- Andreas Friesen, SAP, Karlsruhe, Germany
- Antonia Schwichtenberg, CAS Software, Karlsruhe, Germany
- Volker Kuttruff, CAS Software, Karlsruhe, Germany
- Panagiotis Gouvas, SingularLogic, Athens, Greece
- Christian Pérez, INRIA, Lyon, France
- Nikos Parlavantzas, INRIA/IRISA, Rennes, France
- Jorg Domaschka, University of Ulm, Germany
- Lutz Schubert, University of Ulm, Germany
- Craig Sheridan, Flexiant, Edinburgh, UK
- Anthony Sulistio, HLRS, Stuttgart, Germany