

# Third International Workshop on Web APIs and Services Mashups (Mashups'09)

<http://www.mashup-oopsla.org/>

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## Abstract

The Web is now programmable. Part of this programmability comes from the many Web APIs available from Web sites, services, and data feeds. An interesting consequence of these APIs is the ability to combine the resulting data and process into new data and processes achieving higher-level value than originally exposed by the initial APIs. A classic example is to combine mapping APIs (e.g., Google Maps) and the Atom data APIs from Craigslist or the REST API from Eventful database to have a new service that displays listing or events on the map. These resulting new Web applications, or mashups, add value to the initial Web APIs so that the value of their combination is greater than the sum of its parts. While nowadays thousands of mashups have become available, there remains various research challenges and opportunities, that if addressed would make mashups even more widely available and accessible on the Web. In this third installment of the International Mashups Workshop we will solicit contributions addressing these issues. We plan to continue the tradition of the two previous Mashups workshops (2007 in Vienna and 2008 in Sydney) of not only selecting a broad range of papers but also inviting keynote speakers from leading industry groups that are currently offering mashups tools and platforms for wide-consumption and availability.

**Categories and Subject Descriptors** D.2.6 [Programming Environments]: Graphical, Integrated, Interactive environments; D.3.2 [Programming Languages]: Specialized Application Languages, Very high-level languages; H.3.5 [Online Information Services]: Web-based services

**General Terms** Design, Economics, Experimentation, Human Factors, Languages, Legal Aspects, Performance, Reliability, Security, Verification.

**Keywords** Web 2.0, Mashups, Web Service Composition, Web Application Programming Interfaces, REST, End-User Software Engineering.

## 1. Introduction

Services computing and Web 2.0 computing are converging into a programmable Web today. Within this trend, the Mashups'09 workshop looks specifically at mashups: end-user-oriented compositions of Web services and data sources. Mashups and the interaction and integration of services computing and Web 2.0 technologies, however, expose various complexities that have to be faced. Main research challenges covered by the workshop include:

- Devising programming models (languages, frameworks, platforms) for the composition of Web-accessible services and data of all kinds and architectural styles (REST, Atom, RSS, AtomPub, and SOAP/WSDL) and development of integrated user-interfaces
- Ensuring quality of service for mashups, including performance, reliability, and security
- Understanding social and economic factors in the creation, acceptance, and sustainability of services mashups, including software-as-services markets, services marketplaces and intermediaries, digital communities, and pricing, incentive and contracting models
- Integrating mashups into social computing platforms, such as Facebook and OpenSocial-enabled social networks, which provide a huge user base with profile and social graphs data
- Scaling mashups, possibly taking advantage cloud computing infrastructure

- Providing the necessary primitives to secure resulting data from mashups and also maintain privacy concerns of the original data and APIs
- Simplifying mashup platforms, languages and tools to a point that they could be developed by end-users with minimal programming
- Extending mashups to run on mobile platforms, such as smartphones, so that mashups can take advantage of new kind of information such as location and user profile data.

## 2. Topics of Interest

- Languages, frameworks, and platforms for the design, implementation, testing and maintenance of services mashups, including dynamic languages and frameworks such as Ruby/RoR and Javascript/Ajax, and solutions such as Yahoo! Pipes or IBM Mashup Center
- New approaches to mashup construction: dataflow, spreadsheet and process-oriented mashups, end-user mashup development
- Novel applications of mashups, e.g., mobile mashups, location-aware mashups, wiki-based mashups
- Specific services mashup application and technology examples: design, architecture, implementation, usability and user-experience
- Mashups within and using social software platforms, e.g., OpenSocial or the Facebook platform
- Mashups within enterprises and across enterprises
- Mashups on the cloud
- Quality of service and mashups: performance, reliability, security, and other non-functional aspects
- Analysis of and experience with services mashups (creation, deployment, and usage) from social and economical perspectives; services markets and marketplaces, digital communities, pricing and contracting models
- Experience reports on short-term and long-term maintenance and evolution of mashups
- Mashup technology demonstrations

## 3. Activities and Format

Mashups'09 welcomes all the OOPSLA participants who are interested in Mashups. Mashups'09 will continue the tradition of the previous editions (Mashups'07 [1] and Mashups'08 [2]) of not only selecting a broad range of research papers but also in hosting keynote speakers from leading industry groups that are currently offering state of the art mashups tools and platforms, thus encouraging discussion and exchange within a balanced mix of industry practitioners, researchers, and academia.

## 4. Organizers

### 4.1 Program Chairs

- Michael Maximilien, IBM Almaden Research Center
- Cesare Pautasso, University of Lugano, Switzerland
- Stefan Tai, Karlsruhe Institute of Technology, Germany

### 4.2 Program Committee

- Mehmet Altinel, Anvato, Inc.
- M. Brian Blake, Notre Dame University
- Christoph Bussler, MercedSystems, Inc, USA
- Florian Daniel, University of Trento, Italy
- Schahram Dustdar, Vienna University of Technology, Austria
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- Amit Sheth, Wright State University
- Kunal Verma, Accenture Research
- Erik Wilde, UC Berkeley, USA
- Eric Wohlstadter, UBC, Canada
- Christian Zirpins, KIT, Germany

## References

- [1] E. Michael Maximilien, Stefan Tai, Proc. of the 1st International Workshop on Web APIs and Services Mashups (Mashups'07), in: Elisabetta Di Nitto, Matei Ripeanu (Eds.) IC-SOC 2007 Workshop Proceedings, Sydney, Australia, LNCS 4907, Springer, September 2007.
- [2] Cesare Pautasso, Stefan Tai, E. Michael Maximilien, Proc. of the 2nd International Workshop on Web APIs and Services Mashups (Mashups'08), in: George Feuerlicht, Winfried Lamersdorf (Eds.) IC-SOC 2008 Workshop Proceedings, Sydney, Australia, LNCS 5472, Springer, December 2008.