



CALL FOR PAPERS

Second ACM Workshop on Hot Topics in Software Upgrades (HotSWUp'09)



Association for
Computing Machinery

Orlando, Florida

October 25, 2009

<http://www.hotswup.org>

Important Dates

Submission deadline	September 4, 2009
Acceptance notification	October 4, 2009
Camera-ready deadline	October 16, 2009
Workshop date	October 25, 2009

Program Co-Chairs

- Tudor Dumitraş, *Carnegie Mellon University, USA* (main contact)
- Iulian Neamtiu, *University of California, Riverside, USA*
- Eli Tilevich, *Virginia Tech, USA*

Program Committee

- Sameer Ajmani, *Google, USA*
- Gustavo Alonso, *ETH Zürich, Switzerland*
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- Jason Nieh, *Columbia University, USA*
- Manuel Oriol, *University of York, UK*
- Mark E. Segal, *Laboratory for Telecommunications Sciences, USA*
- Peter Sewell, *Cambridge University, UK*
- Liuba Shrira, *Brandeis University, USA*

Objectives

The goal of HotSWUp is to identify cutting-edge research ideas for implementing software upgrades. Software must be upgraded regularly to incorporate bug fixes and security patches or to keep up with the evolving requirements. Whether upgrades are applied offline or online, they significantly impact the software's performance and reliability. Recent studies and a large body of anecdotal evidence suggest that, in practice, upgrades are failure-prone, tedious, and expensive.

HotSWUp is an interdisciplinary workshop, based on synergies among the areas of programming languages (e.g., as reflected at conferences such as OOPSLA or PLDI), software engineering (e.g., as reflected at ICSE or FSE) and systems (e.g., as reflected at SOSP or OSDI). By seeking contributions from both academic researchers and industry practitioners, HotSWUp aims to combine novel ideas with experience from upgrading real systems. The workshop builds on the success of HotSWUp'08, where the paper presentations and lively discussions attracted a diverse audience of researchers.

The topics of interest include, but are not limited to:

- Programming language / operating system / database support for software upgrades.
- Improving the reliability of upgrades (e.g., support for upgrade validation and for rollback after failures).
- Support for system restructuring (e.g., evolving APIs, changes to database schemas).
- Identifying dependencies between components and guaranteeing safe interactions among mixed versions.
- Coordinating and disseminating upgrades in large-scale distributed systems.
- Tools for preparing, testing, and applying software upgrades.
- Human factors in software upgrades (e.g., usability of upgrading tools, common operator mistakes).

Submission Guidelines

We solicit position papers that fall into one of the following categories:

- Suggest how a successful approach can be applied in a different context (e.g., static dependency analysis applied to distributed-system upgrades).
- Refute an old assumption about software upgrades (e.g., by presenting negative results).
- Describe a new problem or propose a novel solution to an old problem.
- Present empirical evidence related to the practical implementation of software upgrades.

Papers must not exceed 5 pages, in the ACM SIGPLAN 10 point format, and must be submitted electronically at <http://www.hotswup.org>. The workshop proceedings will be published in the ACM Digital Library.