Second Workshop on Hot Topics in System Dependability (HotDep '06)

Sponsored by USENIX, The Advanced Computing Systems Association

http://www.usenix.org/hotdep06

November 8, 2006

Seattle, WA, USA

HotDep '06 will be held immediately following the 7th Symposium on Operating Systems Design and Implementation (OSDI '06), November 6–8, 2006.

Important Dates

Paper submissions due: *July 15, 2006 (firm deadline, no extensions)*
Notification of acceptance: *August 31, 2006*
Final papers due: *September 18, 2006*

Workshop Organizers

Program Co-Chairs

George Candea, *EPFL* and *Aster Data Systems*
Ken Birman, *Cornell University*

Program Committee

Lorenzo Alvisi, *University of Texas at Austin*
David Andersen, *Carnegie Mellon University*
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Andrew Myers, *Cornell University*
David Oppenheimer, *University of California, San Diego*
Geoff Voelker, *University of California, San Diego*
John Wilkes, *Hewlett-Packard Labs*

Overview

Authors are invited to submit position papers to the Second Workshop on Hot Topics in System Dependability (HotDep '06). The workshop will be co-located with the 7th Symposium on Operating Systems Design and Implementation (OSDI '06), November 6–8, 2006. The HotDep '05 program is available at http://hotdep.org/2005.

The goal of HotDep '06 is to bring forth cutting-edge research ideas spanning the domains of fault tolerance/reliability and systems. HotDep will center on critical components of the infrastructures touching our everyday lives: operating systems, networking, security, wide-area and enterprise-scale distributed systems, mobile computing, compilers, and language design. We seek participation and contributions from both academic researchers and industry practitioners to achieve a mix of long-range research vision and technology ideas anchored in immediate reality.

Position papers of a maximum length of 5 pages should preferably fall into one of the following categories:

◆ describing new techniques for building dependable systems that represent advances over prior options or might open new directions meriting further study
◆ revisiting old open problems in the domain using novel approaches that yield demonstrable benefits
◆ debunking an old, entrenched perspective on dependability
◆ articulating a brand-new perspective on existing problems in dependability
◆ describing an emerging problem (and, possibly, a solution) that must be addressed by the dependable-systems research community

The program committee will favor papers that are likely to generate healthy debate at the workshop, and work that is supported by implementations and experiments or that includes other forms of validation. We

recognize that many ideas won't be 100% fleshed out and/or entirely backed up by quantitative measurements, but papers that lack credible motivation and at least some hard evidence of feasibility will be rejected.

Topics

Possible topics include but are not limited to:

- automated failure management, which enables systems to adapt on the fly to normal load changes or exceptional conditions
- techniques for better detection, diagnosis, or recovery from failures
- forensic tools for use by administrators and programmers after a failure or attack
- techniques and metrics for quantifying aspects of dependability in specific domains (e.g., measuring the security, scalability, responsiveness, or other properties of a Web service)
- tools/concepts/techniques for optimizing tradeoffs among availability, performance, correctness, and security
- novel uses of technologies not originally intended for dependability (e.g., using virtual machines to enhance dependability)
- advances in the automation of management technologies, such as better ways to specify management policy, advances on mechanisms for carrying out policies, or insights into how policies can be combined or validated

Deadline and Submission Instructions

Authors are invited to submit position papers by 11:59 p.m. PDT on July 15, 2006. **This is a hard deadline—no extensions will be given.**

Submitted position papers must be no longer than 5 single-spaced 8.5" x 11" pages, including figures, tables, and references; two-column format, using 10-point type on 12-point (single-spaced) leading; and a text block 6.5" wide x 9" deep. Author names and affiliations should appear on the title page.

Papers must be in PDF format and must be submitted via the Web submission form, which will be available on the Call for Papers Web site, http://www. usenix.org/hotdep06/cfp.

Authors will be notified of acceptance by August 31, 2006. Authors of accepted papers will produce a final PDF and the equivalent HTML by September 18, 2006. All papers will be available online prior to the workshop and will be published in the Proceedings of HotDep '06.

Simultaneous submission of the same work to multiple venues, submission of previously published work, and plagiarism constitute dishonesty or fraud. USENIX, like other scientific and technical conferences and journals, prohibits these practices and may, on the recommendation of a program chair, take action against authors who have committed them. In some cases, program committees may share information about submitted papers with other conference chairs and journal editors to ensure the integrity of papers under consideration. If a violation of these principles is found, sanctions may include, but are not limited to, barring the authors from submitting to or participating in USENIX conferences for a set period, contacting the authors' institutions, and publicizing the details of the case.

Authors uncertain whether their submission meets USENIX's guidelines should contact the program co-chairs, hotdep06chairs@usenix.org, or the USENIX office, submissionspolicy@usenix.org.

Registration Materials

Complete program and registration information will be available in September 2006 on the conference Web site. The information will be in both HTML and a printable PDF file. If you would like to receive the latest USENIX conference information, please join our mailing list: http://www.usenix.org/about/mailing.html.