

4th USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage '12)

Sponsored by USENIX, the Advanced Computing Systems Association

<http://www.usenix.org/hotstorage12>

June 13–14, 2012

Boston, MA

HotStorage '12 will take place during USENIX Federated Conferences Week, June 12–15, 2012.

Important Dates

Submissions due: *March 12, 2012, 9:00 p.m. PST*

Notification to authors: *April 14, 2012*

Electronic files of final papers due: *May 10, 2012*

Workshop Organizers

Program Chair

Raju Rangaswami, *Florida International University*

Program Committee

Irfan Ahmad

Mohit Aron, *Nutanix*

Randal Burns, *Johns Hopkins University*

Ajay Gulati, *VMware*

Umesh Maheshwari, *Nimble Storage*

Ed Nightingale, *Microsoft Research*

Himabindu Pucha, *IBM Research—Almaden*

A.L. Narasimha Reddy, *Texas A&M University*

Rob Ross, *Argonne National Laboratory*

Brandon Salmon, *Tintri*

Steve Schlosser, *Avere Systems*

Margo Seltzer, *Harvard School of Engineering and Applied Sciences and Oracle*

Steve Swanson, *University of California, San Diego*

Nisha Talagala, *Fusion-IO*

Akshat Verma, *IBM Research—India*

Kaladhar Voruganti, *NetApp*

Andrew Warfield, *University of British Columbia*

Youjip Won, *Hanyang University*

Tong Zhang, *Rensselaer Polytechnic Institute*

Xiaodong Zhang, *Ohio State University*

Overview

In its 4th edition, HotStorage will continue to showcase the cutting edge in storage research. Over the past few years, storage has been changing like never before. Architectures are evolving rapidly, with many fundamental shifts. Disk-based networked storage is embracing hybrid and tiered models. Meanwhile, we are seeing disruption in multiple forms: flash-only networked storage, node-local low-latency storage, and the emerging No-SAN and NoFS paradigms. Flash continues to change the storage landscape and new memory storage technologies are poised to disrupt the storage stack even further. Virtualization and multi-core hardware continue to place increasingly greater demands on storage, and public and private clouds raise many new questions. “Big Data,” the rise of distributed key-value stores (such as NoSQL), and the proliferation of storage devices in consumer electronics all offer exciting opportunities and challenges.

We expect that workshop submissions will advocate fresh, unorthodox approaches advancing the state of the art in file and storage systems design. Ideas presented in the workshop are expected to lead to work that will appear in top-tier systems conferences in the future. The HotStorage workshop aims to provide a forum for the cutting edge in storage research where researchers can exchange ideas and engage in discussions with their colleagues.

Topics

Topics of interest include but are not limited to:

- Archival storage
- Cloud storage
- Caching, replication, and data consistency
- Energy-efficient storage
- File system design
- Key-value and NoSQL storage
- Mobile storage
- New memory hierarchies
- New storage architectures
- Solid-state storage
- Storage at home
- Storage security
- Storage performance modeling and prediction
- Storage quality of service
- Storage usability
- The challenges of “Big Data”
- Transactional database storage

Logistics & Submission Instructions

This will be a 1.5-day workshop. At least one author of each accepted paper must attend the workshop to present the paper. The presentations should stimulate healthy discussion among the workshop participants. Presentation details and guidelines will be communicated to the authors of the accepted papers.

Submitted papers must be no longer than five two-column pages, including all figures and references. They should be submitted electronically via the Web submission form on the HotStorage '12 Call for Papers Web site, <http://www.usenix.org/hotstorage12/cfp>, as PDF documents that are viewable by standard tools. Submissions must follow the USENIX formatting guidelines: 10 point type on 12 point (single-spaced) leading, with the text block being no more than 6.5" wide by 9" deep. See the detailed formatting requirements on the CFP Web site.

Simultaneous submission of the same work to multiple venues, submission of previously published work, or plagiarism constitutes dishonesty or fraud. USENIX, like other scientific and

technical conferences and journals, prohibits these practices and may take action against authors who have committed them. See the USENIX Conference Submissions Policy at <http://www.usenix.org/submissionpolicy>. Questions? Contact your program chair, hotstorage12chair@usenix.org, or the USENIX office, submissionpolicy@usenix.org.

The review process is not blind. The names and affiliations of the authors should be included on the first page. The names of the reviewers, however, will remain anonymous. Papers accompanied by nondisclosure agreement forms will not be considered. Accepted submissions will be treated as confidential prior to publication on the USENIX HotStorage '12 Web site; rejected submissions will be permanently treated as confidential.

All papers will be available online to registered attendees before the workshop. If your accepted paper should not be published prior to the event, please notify production@usenix.org. The papers will be available online to everyone beginning on the first day of the workshop, June 13, 2012.