

5th USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage '13)

Sponsored by USENIX, the Advanced Computing Systems Association

www.usenix.org/conference/hotstorage13

June 27–28, 2013

San Jose, CA

HotStorage '13 will take place during USENIX Federated Conferences Week, June 24–28, 2013.

Important Dates

Submissions due: *March 11, 2013, 9:00 p.m. PDT*

Notification to authors: *April 15, 2013*

Final paper files due: *May 14, 2013*

Workshop Organizers

Program Chair

Ajay Gulati, *VMware*

Program Committee

Andrea Arpaci-Dusseau, *University of Wisconsin—Madison*

Eli Collins, *Cloudera*

Peter Desnoyers, *Northeastern University*

Binny Gill, *Nutanix*

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Ken Salem, *University of Waterloo*

Raja Sambasivan, *Carnegie Mellon University*

Steven Swanson, *University of California, San Diego*

Nisha Talagala, *Fusion-io*

Renu Tewari, *IBM Almaden Research Center*

Sandeep Uttamchandani, *VMware*

Kaushik Veeraraghavan, *Facebook*

Hakim Weatherspoon, *Cornell University*

Steering Committee

Irfan Ahmad, *CloudPhysics*

Brian Noble, *University of Michigan*

Raju Rangaswami, *Florida International University*

Erik Riedel, *EMC*

Jiri Schindler, *NetApp*

Eno Thereska, *Microsoft Research*

Overview

In its 5th edition, HotStorage will continue to showcase the latest in storage systems design, implementation, management, and evaluation. Over the past few years, storage systems have been changing like never before. Architectures are evolving rapidly, with many fundamental shifts. Disk-based networked storage arrays are embracing hybrid and tiered models. Locally attached storage is back in fashion. Thin provisioning, multi-tiering, compression, and deduplication are becoming standard features for inline storage. We are seeing disruption in multiple forms: flash-only networked storage, node-local low-latency storage, and the emerging NoSAN 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 increasing demands on storage systems. Public and private clouds are also demanding low-cost, highly-scalable and high-performant storage. Storage QoS is back in fashion given the favorable trade-off in terms of fairness and efficiency with SSDs. “Big Data,” data analytics, distributed key-value stores (such as NoSQL), and the proliferation of storage devices in consumer electronics all offer exciting opportunities and challenges. Finally, “software-defined storage” (SDS) is the new buzzword that we want to explore further as part of the workshop.

We expect that workshop submissions will advocate fresh, unorthodox approaches advancing the state of the art in many of the areas listed below. 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. We also welcome controversial and disruptive ideas whose time is yet to come!

Topics

Topics of interest include but are not limited to:

- Archival storage
- Cloud storage
- Caching, tiering, and replication
- Energy-efficient storage
- File system design
- Key-value and NoSQL storage
- Mobile storage
- New memory hierarchies
- Distributed storage architectures and data consistency
- Programming models for new memories
- Solid-state storage
- Storage and server convergence
- Storage at home
- Storage security
- Storage performance modeling and prediction
- Storage quality of service
- The challenges of “Big Data”

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 '13 Web site, www.usenix.org/conference/hotstorage13/call-for-papers, 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 www.usenix.org/conferences/submissions-policy. Questions? Contact your program chair, hotstorage13chair@usenix.org, or the USENIX office, submissionspolicy@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 '13 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 27, 2013.

