MUTES

USENIX Member Benefits

Members of the USENIX Association receive the following benefits:

Free subscription to ;login:, the Association's magazine, published six times a year, featuring technical articles, system administration articles, tips and techniques, practical columns on such topics as security, Perl, networks, and operating systems, book reviews, and reports of sessions at USENIX conferences.

Access to ;login: online from December 1997 to the current month: www.usenix.org/publications/login/

Access to videos from USENIX events in the first six months after the event: www.usenix.org/publications/multimedia/

Discounts on registration fees for all USENIX conferences

Special discounts on a variety of products, books, software, and periodicals: www. usenix.org/member-services/discount-instructions

The right to vote on matters affecting the Association, its bylaws, and election of its directors and officers

For more information regarding membership or benefits, please see www.usenix.org/membership/or contact office@usenix.org. Phone: 510-528-8649

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Announcing Enigma

by Casey Henderson,
USENIX Executive Director
A sign of growth at USENIX
is the introduction of new

conferences supporting emerging and growing communities. Following the successful launch of SREcon, geared toward site reliability engineering, we're excited to announce Enigma, a security-themed conference focused on emerging threats and novel attacks.

Enigma will take place January 25-27, 2016, in San Francisco. Elie Bursztein and I developed the concept for this event upon realizing the need for a vendor-neutral, Bay Area conference featuring truly cuttingedge practices. Enigma will focus on immediately useful responses to attacks, which are currently dramatically increasing in scope. The conference will lean more heavily toward the latest practices employed by engineers on the frontlines—both offensive and defensive—as opposed to the USENIX Security Symposium, which focuses on innovative systems. In turn, Enigma is meant to appeal primarily to the industry sector as opposed to the research sector. Nonetheless, academics are welcome to contribute talks, and their research could benefit from the ideas presented at Enigma. The program will feature a single track of 30-minute, highquality, peer-reviewed talks as opposed to refereed paper presentations—another departure from USENIX Security. The Bay Area location, where many top security practitioners live and work, is convenient for fostering collaboration.

We are thrilled to announce that Google will serve as our Founding Sponsor, providing us with sufficient financial backing to launch such a large-scale event. We're actively seeking additional industry sponsorship to ensure long-term sustainability.

We hope to see you at the inaugural Enigma in 2016. Find out more at enigma.usenix.org.

Notice of Annual Meeting

The USENIX Association's Annual Meeting with the membership and the Board of Directors will be held on Thursday, August 13, 2015, at the Hyatt Regency Washington on Capitol Hill in Washington, D.C., during the 24th USENIX Security Symposium, August 12–14, 2015. The meeting will take place at 7:30 p.m. in the Lexington/Bunker Hill Room.



14th USENIX Conference on File and Storage Technologies (FAST '16)

Important Dates

Paper submissions due: Monday, September 21, 2015 Notification to authors: Monday, December 7, 2015 Final paper files due: Tuesday, January 26, 2016

Conference Organizers

Program Co-Chairs

Angela Demke Brown, *University of Toronto* Florentina Popovici, *Google*

Program Committee

Atul Adya, Google

Andrea Arpaci-Dusseau, University of Wisconsin—Madison

Angelos Bilas, University of Crete and FORTH-ICS

Jason Flinn, University of Michigan

Garth Gibson, Carnegie Mellon University and Panasas, Inc.

Haryadi Gunawi, University of Chicago

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Eddie Kohler, Harvard University

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Kai Li, Princeton University

James Mickens, Microsoft Research

Ethan L. Miller, University of California, Santa Cruz, and Pure Storage

Sam H. Noh, *Hongik University* David Pease, *IBM Research*

Daniel Peek, Facebook

Dan R. K. Ports, University of Washington

Ken Salem, University of Waterloo

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William J. Bolosky, *Microsoft Research*

Jason Flinn, University of Michigan

Greg Ganger, Carnegie Mellon University

Garth Gibson, Carnegie Mellon University and Panasas

February 22–26, 2016, Santa Clara, CA, USA

Casev Henderson, USENIX Association

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Ric Wheeler, Red Hat

Erez Zadok, Stony Brook University

Yuanyuan Zhou, University of California, San Diego

Overview

The 14th USENIX Conference on File and Storage Technologies (FAST '16) brings together storage-system researchers and practitioners to explore new directions in the design, implementation, evaluation, and deployment of storage systems. The program committee will interpret "storage systems" broadly; everything from low-level storage devices to information management is of interest. The conference will consist of technical presentations including refereed papers, Work-in-Progress (WiP) reports, poster sessions, and tutorials.

FAST accepts both full-length and short papers. Both types of submissions are reviewed to the same standards and differ primarily in the scope of the ideas expressed. Short papers are limited to half the space of full-length papers. The program committee will not accept a full paper on the condition that it is cut down to fit in the short paper page limit, nor will it invite short papers to be extended to full length. Submissions will be considered only in the category in which they are submitted.

Topics

Topics of interest include but are not limited to:

- Archival storage systems
- Auditing and provenance
- · Caching, replication, and consistency
- Cloud storage
- Data deduplication
- Database storage
- Distributed storage (wide-area, grid, peer-to-peer)
- Empirical evaluation of storage systems
- Experience with deployed systems
- File system design
- Key-value and NoSQL storage
- Memory-only storage systems
- Mobile, personal, and home storage
- Parallel I/O and storage systems
- Power-aware storage architectures

- RAID and erasure coding
- Reliability, availability, and disaster tolerance
- Search and data retrieval
- Solid state storage technologies and uses (e.g., flash, PCM)
- Storage management
- Storage networking
- Storage performance and QoS
- Storage security
- The challenges of big data and data sciences

Submission Instructions

Please submit full and short paper submissions (no extended abstracts) by 9:00 p.m. PDT on September 23, 2014, in PDF format via the Web submission form on the Call for Papers Web site, www.usenix.org /fast16/cfp. Do not email submissions.

- The complete submission must be no longer than twelve (12) pages for full papers and six (6) for short papers, excluding references. The program committee will value conciseness, so if an idea can be expressed in fewer pages than the limit, please do so. Supplemental material may be appended to the paper without limit, however the reviewers are not required to read such material or consider it in making their decision. Any material that should be considered to properly judge the paper for acceptance or rejection is not supplemental and will apply to the page limit. Papers should be typeset in two-column format in 10-point Times Roman type on 12-point leading (single-spaced), with the text block being no more than 6.5" wide by 9" deep. As references do not count against the page limit, they should not be set in a smaller font. Submissions that violate any of these restrictions will not be reviewed. The limits will be interpreted strictly. No extensions will be given for reformatting.
- Templates and sample first pages (two-column format) for Microsoft Word and LaTeX are available on the USENIX templates page, www.usenix.org/templates-conference-papers.
- Authors must not be identified in the submissions, either
 explicitly or by implication. When it is necessary to cite your
 own work, cite it as if it were written by a third party. Do not say
 "reference removed for blind review." Any supplemental material
 must also be anonymized.
- 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 for details.
- If you are uncertain whether your submission meets USENIX's guidelines, please contact the program co-chairs, fast16chairs@ usenix.org, or the USENIX office, submissionspolicy@usenix.org.
- Papers accompanied by nondisclosure agreement forms will not be considered.

Short papers present a complete and evaluated idea that does not need 12 pages to be appreciated. Short papers are not workshop papers or work-in-progress papers. The idea in a short paper needs to be formulated concisely and evaluated, and conclusions need to be drawn from it, just like in a full-length paper.

The program committee and external reviewers will judge papers on technical merit, significance, relevance, and presentation. A good paper will demonstrate that the authors:

- are attacking a significant problem,
- have devised an interesting, compelling solution,
- · have demonstrated the practicality and benefits of the solution,
- have drawn appropriate conclusions,
- have clearly described what they have done, and
- have clearly articulated the advances beyond previous work.

Moreover, program committee members, USENIX, and the reading community generally value a paper more highly if it clearly defines and is accompanied by assets not previously available. These assets may include traces, original data, source code, or tools developed as part of the submitted work.

Blind reviewing of all papers will be done by the program committee, assisted by outside referees when necessary. Each accepted paper will be shepherded through an editorial review process by a member of the program committee.

Authors will be notified of paper acceptance or rejection no later than Monday, December 7, 2015. If your paper is accepted and you need an invitation letter to apply for a visa to attend the conference, please contact conference@usenix.org as soon as possible. (Visa applications can take at least 30 working days to process.) Please identify yourself as a presenter and include your mailing address in your email.

All papers will be available online to registered attendees no earlier than Tuesday, January 26, 2016. 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 main conference, February 23, 2016. Accepted submissions will be treated as confidential prior to publication on the USENIX FAST '16 Web site; rejected submissions will be permanently treated as confidential.

By submitting a paper, you agree that at least one of the authors will attend the conference to present it. If the conference registration fee will pose a hardship for the presenter of the accepted paper, please contact conference@usenix.org.

If you need a bigger testbed for the work that you will submit to FAST '16, see PRObE at www.nmc-probe.org.

Best Paper Awards

Awards will be given for the best paper(s) at the conference. A small, selected set of papers will be forwarded for publication in *ACM Transactions on Storage (TOS)* via a fast-path editorial process. Both full and short papers will be considered.

Test of Time Award

We will award a FAST paper from a conference at least 10 years earlier with the "Test of Time" award, in recognition of its lasting impact on the field

Work-in-Progress Reports and Poster Sessions

The FAST technical sessions will include a slot for short Work-in-Progress (WiP) reports presenting preliminary results and opinion statements. We are particularly interested in presentations of student work and topics that will provoke informative debate. While WiP proposals will be evaluated for appropriateness, they are not peer reviewed in the same sense that papers are.

We will also hold poster sessions each evening. WiP submissions will automatically be considered for a poster slot, and authors of all accepted full papers will be asked to present a poster on their paper. Other poster submissions are very welcome.

Information about submitting posters and WiPs will be announced at a later date.

Birds-of-a-Feather Sessions

Birds-of-a-Feather sessions (BoFs) are informal gatherings held in the evenings and organized by attendees interested in a particular topic. BoFs may be scheduled in advance by emailing the Conference Department at bofs@usenix.org. BoFs may also be scheduled at the conference.

Tutorial Sessions

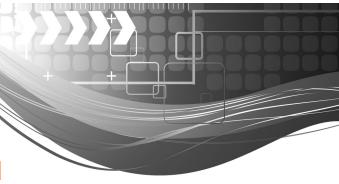
Tutorial sessions will be held on February 22, 2016. Please send tutorial proposals to fasttutorials@usenix.org.

Registration Materials

Complete program and registration information will be available in December 2015 on the conference Web site.



13th USENIX Symposium on Networked Systems Design and Implementation (NSDI '16)



March 16-18, 2016, Santa Clara, CA, USA

Important Dates

- Paper titles and abstracts due: September 17, 2015
- Complete paper submissions due: September 24, 2015
- Notification to authors: December 7, 2015
- Final papers due: February 18, 2016

Symposium Organizers Program Co-Chairs

Katerina Argyraki, *EPFL*

Rebecca Isaacs, Google

Program Committee

Aditya Akella, University of Wisconsin—Madison

Mohammad Alizadeh, Massachusetts Institute of Technology

Mona Attariyan, Google

Mahesh Balakrishnan, Yale University

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Laurent Vanbever, ETH Zürich

Matt Welsh, Google

Overview

NSDI focuses on the design principles, implementation, and practical evaluation of networked and distributed systems. Our goal is to bring together researchers from across the networking and systems community to foster a broad approach to addressing overlapping research challenges.

NSDI provides a high quality, single-track forum for presenting results and discussing ideas that further the knowledge and understanding of the networked systems community as a whole, continue a significant research dialog, or push the architectural boundaries of network services.

Topics

We solicit papers describing original and previously unpublished research. Specific topics of interest include but are not limited to:

- Highly available and reliable networked systems
- · Security and privacy of networked systems
- Distributed storage, caching, and query processing
- Energy-efficient computing in networked systems
- · Cloud/multi-tenant systems
- Mobile and embedded/sensor applications and systems
- Wireless networked systems
- Network measurements, workload, and topology characterization systems
- Self-organizing, autonomous, and federated networked systems
- Managing, debugging, and diagnosing problems in networked/ distributed systems
- Virtualization and resource management for networked systems and clusters
- Systems aspects of networking hardware
- Software-Defined Networks
- Experience with deployed/operational networked systems
- Computing over big data on a networked system
- Practical aspects of network economics
- An innovative solution for a significant problem involving networked systems

Operational Systems Track

In addition to papers that describe original research, NSDI '16 is also soliciting papers that describe the design, implementation, analysis, and experience with large-scale, operational systems and networks. While such papers may not describe new results or ideas, they are welcome if they disprove or strengthen existing assumptions, deepen the understanding of existing problems, and validate known techniques at scales or environments in which they were never used or tested before.

Authors should indicate on the title page of the paper and in the submission form that they are submitting to this track.

What to Submit

Submissions must be no longer than 12 pages, including footnotes, figures, and tables. Submissions may include as many additional pages as needed for references and for supplementary material in appendices. The paper should stand alone without the supplementary material, but authors may use this space for content that may be of interest to some readers but is peripheral to the main technical contributions of the paper. Note that members of the program committee are free to not read this material when reviewing the paper.

Submissions must be in two-column format, using 10-point type on 12-point (single-spaced) leading, with a maximum text block of 6.5" wide x 9" deep, with .25" inter-column space, formatted for 8.5" x 11" paper. Papers not meeting these criteria will be rejected without review, and no deadline extensions will be granted for reformatting. Pages should be numbered, and figures and tables should be legible when printed without requiring magnification. Authors may use color in their figures, but the figures should be readable when printed in black and white.

NSDI is single-blind, meaning that authors should include their names on their paper submissions and do not need to obscure references to their existing work. Authors must submit their paper's title and abstract by September 17, 2015, and the corresponding full paper is due by September 24, 2015 (hard deadlines). All papers must be submitted via the Web submission form on the Call for Papers Web site, www.usenix.org/nsdi16/cfp. Do not email submissions.

Submissions will be judged on originality, significance, interest, clarity, relevance, and correctness. Papers so short as to be considered "extended abstracts" will not receive full consideration.

NSDI '16 Policies

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 for details.

Previous publication at a workshop is acceptable as long as the NSDI submission includes substantial new material. For example, submitting a paper that provides a full evaluation of an idea that was previously sketched in a five-page position paper is acceptable. Authors of such papers should cite the prior workshop paper and clearly state the submission's contribution relative to the prior workshop publication.

Authors uncertain whether their submission meets USENIX's guidelines should contact the Program Co-Chairs, nsdi16chairs@usenix.org.

Papers accompanied by nondisclosure agreement forms will not be considered. All submissions will be treated as confidential prior to publication on the USENIX NSDI '16 Web site; rejected submissions will be permanently treated as confidential.

Processes for Accepted Papers

Authors will be notified of paper acceptance or rejection by December 7, 2015. If your paper is accepted and you need an invitation letter to apply for a visa to attend the conference, please contact conference@usenix.org as soon as possible. (Visa applications can take at least 30 working days to process.) Please identify yourself as a presenter and include your mailing address in your email.

Accepted papers may be shepherded through an editorial review process by a member of the Program Committee. Based on initial feedback from the Program Committee, authors of shepherded papers will submit an editorial revision of their paper to their Program Committee shepherd. The shepherd will review the paper and give the author additional comments. All authors, shepherded or not, will upload their final file to the submissions system by February 18, 2016, for the conference Proceedings.

All papers will be available online to registered attendees before the conference. 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 conference, March 16, 2016.

Best Paper Awards

Awards will be given for the best paper(s) at the conference.





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