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The Advanced Computing Systems Association

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USENIX Special Technical Group



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USENIX News

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USENIX Board Elections: Nominating Committee Releases Its Report

The report from the Nominating Committee is now available. Nominations from the membership are still open; [click here](#) for details.

Just Up! Preliminary Programs for Early 2004 Conferences Now Available: NSDI, FAST, and VM

Check out the latest program information for our upcoming events!

- [NSDI '04: First Symposium on Networked Systems Design and Implementation](#)
March 29-31, 2004, San Francisco, CA
- [FAST '04: 3rd USENIX Conference on File and Storage Technologies](#)
March 31-April 2, 2004, San Francisco, CA
- [VM '04: 3rd Virtual Machine Research and Technology Symposium](#)
May 6-7, 2004, San Jose, CA

USENIX '04: UseBSD Special Interest Group Session Call for Participation: Deadline Approaching!

Participate in the [UseBSD](#) SIG Session by submitting a proposal for a presentation (Deadline: January 5, 2004).

GET INVOLVED!
Submit a Paper to Our Refereed Tracks:

- [2004 USENIX Annual Technical Conference \(USENIX '04\): UseBSD SIG Session](#)
June 27-July 2, 2004, Boston, MA
Submissions deadline: January 5, 2004
- [13th USENIX Security Symposium \(Security '04\)](#)
Submissions deadline: January 25, 2004
August 9-13, 2004, San Diego, CA
- [LISA '04: The 18th Large Installation Systems Administration Conference](#)
Submissions deadline: April 20, 2004
November 14-19, 2004, Atlanta, GA

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- Selected Papers in Network and System Admin
- Using Java

- Perl Practicum

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Proceedings

Online proceedings of conferences from previous years are now freely available to everyone. All abstracts continue to be freely available as well.

The full papers of the past twelve months are available only to USENIX members. When accessing restricted papers, remember to use your member number or login name as your userid. Not a USENIX member? [Join today!](#)

Search for specific papers or topics:

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Go Google Look at the proceedings grouped by conference name on our [Events By Name](#) pages.

Browse our [Compendium of Best Papers](#). These awards have been given over the past decade by the Program Committees for each conference.

Browse proceedings grouped by year:
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2003 [\[Return to Top\]](#)

- [Internet Measurement Conference \(IMC 2003\)](#)
October 27-29, Miami, FL
Sponsored by ACM SIGCOMM and co-sponsored by USENIX
- [17th Large Installation Systems Administration Conference \(LISA '03\)](#)
October 26-31, San Diego, CA
- [BSDCon 2003](#)
September 8-12, San Mateo, CA
- [12th USENIX Security Symposium](#)
August 4-8, Washington, D.C.
- [2003 Linux Kernel Developers Summit](#)
July 21-22, Ottawa, Ontario, Canada
(includes reports on the summit, but no proceedings)
- [2003 USENIX Annual Technical Conference](#)
June 9-14, San Antonio, TX
- [HotOS IX: The 9th Workshop on Hot Topics in Operating Systems](#)
May 18-21, Lihue, HI
- [First International Conference on Mobile Systems, Applications, and Services \(MobiSys '03\)](#)
May 5-8, San Francisco, CA
- [2nd USENIX Conference on File and Storage Technologies \(FAST '03\)](#)
March 31-April 2, San Francisco, CA
- [4th USENIX Symposium on Internet Technologies and Systems \(USITS '03\)](#)
March 26-28, Seattle, WA

2002 [\[Return to Top\]](#)

- [5th Symposium on Operating Systems Design and Implementation \(OSDI '02\)](#)
December 9-11, Boston, MA
- [2nd Workshop on Industrial Experiences with Systems Software \(WIESS '02\)](#)
December 8, Boston MA
- [5th Smart Card Research and Advanced Application Conference \(CARDIS '02\)](#)
November 21-22, San Jose, CA
- [2nd Internet Measurement Workshop \(IMW '02\)](#)
November 6-8, Marseille, France
Sponsored by ACM SIGCOMM and co-sponsored by USENIX
- [16th Systems Administration Conference \(LISA '02\)](#)
November 3-8, Philadelphia, PA
- [11th USENIX Security Symposium](#)
August 5-9, San Francisco, CA

OSDI '02

5th Symposium on
Operating Systems
Design and Implementation

Co-located with
WIESS '02

Boston Park Plaza

Boston, MA

December 9–11, 2002

Sponsored by

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At a Glance

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OSDI Tech Sessions

WIESS Tech Sessions

Organizers

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Conference Organizers
Program Co-Chairs
David Culler, *University of California, Berkeley*
Peter Druschel, *Rice University*

Program Committee
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- Conference Proceedings
- [Refereed Papers \(until December 2003, you will need your USENIX membership identification in order to access the full papers.\)](#)
 - [Work-in-Progress Reports](#)

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OSDI '025th Symposium on Operating Systems Design and Implementation

Co-located withWIESS '02

Boston Park Plaza • Boston, MA • December 9–11, 2002Sponsored byUSENIX

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Technical Sessions

Monday, December 9, 2002

8:45 am—9:00 am

Opening Remarks and Awards
David Culler, *University of California, Berkeley*; and Peter Druschel, *Rice University*

9:00 a.m.—10:30 a.m.

Decentralized Storage Systems
Session Chair: Greg Ganger, *Carnegie Mellon University*

FARSITE: Federated, Available, and Reliable Storage for an Incompletely Trusted Environment
Atul Adya, William J. Bolosky, Miguel Castro, Gerald Cermak, Ronnie Chaiken, John R. Douceur, Jon Howell, Jacob R. Lorch, Marvin Theimer, and Roger P. Wattenhofer, *Microsoft Research*

Taming Aggressive Replication in the Pangaea Wide-Area File System
Yasushi Saito, Christos Karamanolis, Magnus Karlsson, and Mallik Mahalingam, *HP Labs*

Ivy: A Read/Write Peer-to-Peer File System
Athicha Muthitacharoen, Robert Morris, Thomer M. Gil, and Benjie Chen, *Massachusetts Institute of Technology*

10:30 am—11:00 am Break

11:00 a.m.—12:30 p.m.

Robustness
Session Chair: Miguel Castro, *Microsoft Research*

Defensive Programming: Using an Annotation Toolkit to Build DoS-Resistant Software
Xiaohu Qie, Ruoming Pang, and Larry Peterson, *Princeton University*

Using Model Checking to Debug Device Firmware
Sanjeev Kumar and Kai Li, *Princeton University*

CMC: A Pragmatic Approach to Model Checking Real Code
Madanlal Musuvathi, David Y.W. Park, Andy Chou, Dawson R. Engler, and David L. Dill, *Stanford University*

12:30 pm—2:00 pm Symposium Luncheon

2:00 pm—3:30 pm

Kernels
Session Chair: Carla Ellis, *Duke University*

Practical, Transparent Operating System Support for Superpages
Juan Navarro, *Rice University and Universidad Católica de Chile*; Sitaram Iyer, Peter Druschel, and Alan Cox, *Rice University*

Vertigo: Automatic Performance-Setting for Linux
Krisztián Flautner, *ARM Limited*; Trevor Mudge, *University of Michigan*

Cooperative I/O: A Novel I/O Semantics for Energy-Aware Applications
Andreas Weissel, Björn Beutel, and Frank Bellosa, *University of Erlangen*

3:30 pm—4:00 pm Break

4:00 pm—5:30 pm

Physical Interface
Session Chair: Jay Lepreau, *University of Utah*

TAG: A Tiny AGgregation Service for Ad-Hoc Sensor Networks
Samuel Madden, Michael J. Franklin, and Joseph M. Hellerstein, *University of California, Berkeley*; Wei Hong, *Intel Research, Berkeley*

Fine-Grained Network Time Synchronization Using Reference Broadcasts
Jeremy Elson, Lewis Girod, and Deborah Estrin, *University of California, Los Angeles*

Supporting Time-Sensitive Applications on a Commodity OS
Ashvin Goel, Luca Abeni, Charles Krasic, Jim Snow, and Jonathan Walpole, *Oregon Graduate Institute*

8:00 pm—9:30 pm

Panel
Organizers: David Culler, *University of California, Berkeley*; Peter Druschel, *Rice University*; Deborah Estrin, *University of California, Los Angeles/ISI*

Tuesday, December 10, 2002

9:00 am—10:30 am

Virtual Machines
Session Chair: Dawson Engler, *Stanford University*

Memory Resource Management in VMware ESX Server
Carl A. Waldspurger, *VMware Inc.*

Scale and Performance in the Denali Isolation Kernel
Andrew Whitaker, Marianne Shaw, and Steven D. Gribble, *University of Washington*

Scale and Performance in the Default Isolation Region

[ReVirt: Enabling Intrusion Analysis Through Virtual-Machine Logging and Replay](#)
George W. Dunlap, Samuel T. King, Sukru Cinar, Murtaza A. Basrai, and Peter M. Chen, *University of Michigan*

10:30 am—11:00 am Break

11:00 am—12:30 pm

[Cluster Resource Management](#)
Session Chair: Eric Brewer, *University of California, Berkeley*

[Integrated Resource Management for Cluster-based Internet Services](#)
Kai Shen, *University of Rochester*; Hong Tang, *University of California, Santa Barbara*; Tao Yang, *University of California, Santa Barbara, and Ask Jeeves, Inc.*; Lingkun Chu, *University of California, Santa Barbara*

[Resource Overbooking and Application Profiling in Shared Hosting Platforms](#)
Bhuvan Ugaonkar and Prashant Shenoy, *University of Massachusetts*; Timothy Roscoe, *Intel Research, Berkeley*

[An Integrated Experimental Environment for Distributed Systems and Networks](#)
Brian White, Jay Lepreau, Leigh Stoller, Robert Ricci, Shashi Guruprasad, Mac Newbold, Mike Hibler, Chad Barb, and Abhijeet Joglekar, *University of Utah*

12:30 pm—2:00 pm Lunch (on your own)

2:00 pm—3:30 pm

[Peer-to-Peer Infrastructure](#)
Session Chair: Robert Morris, *Massachusetts Institute of Technology*

[Scalability and Accuracy in a Large-Scale Network Emulator](#)
Amin Vahdat, Ken Yocum, Kevin Walsh, Priya Mahadevan, Dejan Kostic, Jeff Chase, and David Becker, *Duke University*

[Pastiche: Making Backup Cheap and Easy](#)
Landon P. Cox, Christopher D. Murray, and Brian D. Noble, *University of Michigan*

[Secure Routing for Structured Peer-to-Peer Overlay Networks](#)
Miguel Castro, *Microsoft Research*; Peter Druschel, *Rice University*; Ayalvadi Ganesh and Antony Rowstron, *Microsoft Research*; Dan S. Wallach, *Rice University*

3:30 pm—4:00 pm Break

4:00 pm—6:00 pm

[Work-in-Progress Reports](#)
Session Chair: Chandu Thekkath, *Microsoft Research*

[Work-in-Progress Schedule](#)

Short, pithy, and fun, Work-in-Progress Reports introduce interesting new or ongoing work, and the USENIX audience provides valuable discussion and feedback.

If you have work you would like to share or a cool idea that's not quite ready for publication, send a one- or two-paragraph summary to osdi02wips@usenix.org. We are particularly interested in presenting students' work. A schedule of presentations will be posted at the conference, and the speakers will be notified in advance. Work-in-Progress reports are five-minute presentations; the time limit will be strictly enforced.

Work-in-Progress Reports submissions deadline: Monday, Dec 2nd, 12 Noon PST.

6:00 pm—7:30 pm Symposium Reception

Wednesday, December 11, 2002

9:00 am—10:30 am

[Network Behavior](#)
Session Chair: David Wetherall, *University of Washington*

[An Analysis of Internet Content Delivery Systems](#)
Stefan Saroiu, Krishna P. Gummadi, Richard J. Dunn, Steven D. Gribble, and Henry M. Levy, *University of Washington*

[TCP Nice: A Mechanism for Background Transfers](#)
Arun Venkataramani, Ravi Kokku, and Mike Dahlin, *University of Texas at Austin*

[The Effectiveness of Request Redirection on CDN Robustness](#)
Limin Wang, Vivek Pai, and Larry Peterson, *Princeton University*

10:30 am—11:00 am Break

11:00 am—12:30 pm

[Migration](#)
Session Chair: Timothy Roscoe, *Intel Research, Berkeley*

[The Design and Implementation of Zap: A System for Migrating Computing Environments](#)
Steven Osman, Dinesh Subhraveti, Gong Su, and Jason Nieh, *Columbia University*

[Optimizing the Migration of Virtual Computers](#)
Constantine P. Sapuntzakis, Ramesh Chandra, Ben Pfaff, Jim Chow, Monica S. Lam, and Mendel Rosenblum, *Stanford University*

[Luna: A Flexible Java Protection System](#)
Chris Hawblitzel, *Dartmouth College*; Thorsten von Eicken, *Expertcity, Inc.*

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USENIX Association

Proceedings of the
5th Symposium on Operating Systems
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Boston, Massachusetts, USA
December 9–11, 2002

USENIX

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For more information about the USENIX Association:

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Optimizing the Migration of Virtual Computers

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