2000 USENIX Annual Technical Conference

http://www.usenix.org/events/usenix2000

June 18-23, 2000   **San Diego Marriott Hotel & Marina, San Diego, California**

Important Dates

Paper submission deadline: *November 29, 1999*
Notification to authors: *January 26, 2000*
Full papers due for editorial review: *March 28, 2000*
Camera-ready papers due: *April 25, 2000*

Conference Organizers

Program Committee:
Chair: Christopher Small, *Lucent Technologies—Bell Labs*
Ken Arnold, *Sun Microsystems*
Aaron Brown, *University of California at Berkeley*
Pei Cao, *University of Wisconsin*
Fred Douglis, *AT&T Labs—Research*
Edward W. Felten, *Princeton University*
Eran Gabber, *Lucent Technologies—Bell Labs*
Greg Minshall, *Siara Systems*
Yoonho Park, *IBM*
Vern Paxson, *International Computer Science Institute*
Liuba Shrira, *Brandeis University*
Keith A. Smith, *Harvard University*
Mark Zbikowski, *Microsoft*

Invited Talks Coordinators:
John Heidemann, *USC/Information Sciences Institute*
John T. Kohl, *Rational Software*

FREENIX Program Committee:
Chair: Marshall Kirk McKusick, *Author & Consultant*
Clem Cole, *Compaq*
Chris Demetriou, *The NetBSD Project*
David Greenman, *The FreeBSD Project*
Miguel de Icaza, *Instituto de Ciencias Nucleares, UNAM*
Niels Provos, *University of Michigan*
Ted Ts'o, *VA Linux Systems*
Stephen C. Tweedie, *Red Hat Software*
Victor Yodaiken, *New Mexico Institute of Technology*

Overview

USENIX, founded twenty-five years ago, is the Advanced Computing Systems Association. Over the past quarter-century, the USENIX Association's membership has grown from its original core of UNIX users to a broad community of developers, researchers, and users with interests ranging from embedded systems to Tcl/Tk, from object-oriented programming to network administration, and from Internet technologies and electronic commerce to using, managing, and researching Windows NT. The USENIX 2000 Annual Technical Conference seeks to bring together this broad community under a single roof to share the results of their latest and best work, find points of common interest and perspective, and develop new ideas that cross and break boundaries.

The three-day technical session of the conference includes a track of refereed papers selected by the Program Committee; a track of Invited Talks by experts and leaders in the field; and FREENIX, a track of talks and paper presentation on freely available POSIX-based software and systems. Refereed papers are published in the Proceedings, which are provided to Technical Session attendees, along with materials from the Invited Talks and FREENIX presentations. Three days of tutorials precede the technical sessions with practical tutorials on timely topics.

Refereed Papers

The 2000 USENIX Technical Conference seeks to bring together the work, and the members, of the groups that make up the USENIX community. To that end, the Program Committee is interested in receiving submissions on a broad range of topics, including (but not limited to):

- Operating system and application structures for modern, commodity hardware, including extensible, embedded, distributed, and object-oriented systems.
- The impact of commodity hardware and software on the development of software systems.
- How the growing ubiquity of the Internet affects, and is affected by, the technological developments in the areas of electronic commerce, security, and heterogeneous and mobile computing.
- ActiveX, Java, CORBA, and other technologies that support mobile and reusable software components.
- The future of Tcl/Tk, Perl, and other scripting and domain-specific languages.
- Connecting, managing, and maintaining geographically distributed, heterogeneous networks of computers.

As at all USENIX conferences, papers that analyze problem areas, draw important conclusions from practical experience, and make freely available the techniques and tools developed in the course of the work are especially welcome.

Cash prizes will be awarded to the best paper and the best paper by a student.

How to Submit a Paper to the Refereed Track

Authors are required to submit full, complete papers by Monday, November 29, 1999. No papers will be accepted after 5:00 PM, Eastern time, Friday, December 3.

All submissions for USENIX 2000 will be electronic, in PostScript or PDF. Please follow the instructions for on-line submission at: *http://www.usenix.org/events/usenix2000/cfp/submit.html.*

Authors will be notified of receipt of submission via e-mail. If you do not receive notification, contact: *usenix2000-chair@usenix.org.*

Papers should be 8 to 12 single-spaced 8.5 x 11 inch pages (about 4000-6000 words), not counting figures and references. Papers longer than 14 pages and papers so short as to be considered extended abstracts will not be reviewed.

It is imperative that you follow the instructions for submitting a quality paper. Specific questions about submissions may be sent to the program chair via email to: *usenix2000-chair@usenix.org.*

A good paper will clearly demonstrate that the authors:
- are attacking a significant problem,
- are familiar with the literature,
- have devised an original or clever solution,
- if appropriate, have implemented the solution and characterized its performance using reasonable experimental techniques, and
- have drawn appropriate conclusions from their work.

Note: the USENIX Technical Conference, like most conferences and journals, requires that papers not be submitted simultaneously to more than one conference or publication, and that submitted papers not be previously or subsequently published elsewhere. Papers submitted to this conference that are under review elsewhere will not be reviewed. Papers accompanied by non-disclosure agreement forms can not be accepted, and

will not be reviewed. All submissions are held in the highest confidentiality prior to publication in the Proceedings, both as a matter of policy and in accord with the U.S. Copyright Act of 1976.

Authors will be notified by January 26, 2000. All accepted papers will be shepherded by a program committee member through an editorial review process prior to final acceptance for publication in the proceedings.

FREENIX Track

FREENIX is a special track within the USENIX Annual Technical Conference. USENIX encourages the exchange of information and technologies between the commercial UNIX products and the free software world as well as among the various free operating system alternatives.

FREENIX is the showcase for the latest developments and interesting applications in freely redistributable software. The FREENIX forum includes Apache, FreeBSD, GNOME, GNU, Linux, NetBSD, OpenBSD, Samba, and more. The FREENIX track attempts to cover the full range of software which is freely redistributable in source code form and provides pointers to where the code can be found on the Internet. Marshall Kirk McKusick is serving as FREENIX program chair. FREENIX attendees also attend all of the USENIX Conference offerings and informal get-togethers.

Submissions to the refereed track are expected to represent mature work for which the authors are ready to fully describe the background, new ideas, experiments, and results of their work. By contrast, the FREENIX track seeks to gather reports on projects that are underway, but not yet finished. The purpose for the FREENIX papers is not as an archival reference, but rather a place to let others know about the project on which you are working and to provide a forum from which to expand your user base. We are looking for talks which advance the state of the art of freely redistributable software or otherwise provide useful information to those faced with deploying (and "selling") free software in the field.

Areas of interest include, but are not limited to:
- Operating system design
- Network design and implementation
- File system design
- Highly-available systems
- Highly-scalable systems
- Graphical user interface tools
- Desktop metaphors
- File and print systems
- System management tools
- Security
- Large scale system management
- Interesting deployments of free software
- How free software is being developed and managed today

Interesting applications of freely redistributable software might include: robotics and automation, clustering, wearable computers, embedded systems, high-speed networking, studio graphics, and audio processing.

How to Submit to the FREENIX Track

Authors are required to submit one to three page summaries by Monday, November 29, 1999. No submissions will be accepted after 5:00 PM, Eastern time, Friday, December 3.

All submissions for USENIX FREENIX 2000 Track will be electronic. Please use this web form to send your submission:
http://www.usenix.org/events/usenix2000/cfp/freenix-submit.html.

Authors will be notified of receipt of submission via e-mail. If you do not receive notification, contact: *freenix2000-chair@usenix.org.*

You may submit a full paper, however we expect that most submissions will be 1–3 page summaries of your work to date. Please provide enough detail to let us know what you are doing. In no event should you submit a description in excess of 14 pages.

Specific questions about submissions may be sent to the program chair via email to: *freenix2000-chair@usenix.org.*

A good submission will clearly demonstrate that the authors:
- are attacking a significant problem,
- are actively working on a solution, and
- have made enough progress to have useful information to report.

In particular, the FREENIX track is not for people that are thinking about doing some project, but have not yet started it. Such talks are better presented in the Work-In-Progress (WIP) session.

Authors will be notified by January 26, 2000. All accepted submissions will be expected to produce a written report for the proceedings by the March 28, 2000 deadline. These reports need not be polished papers as would be submitted to the refereed track, but they should describe work that has been completed as of the time of their submission. The purpose of your paper is to let readers and attendees know what you are doing. Your talk at the conference may describe not only what is in your paper but also the work completed between the time that the paper is submitted and the conference is held. Members of the program committee will help shepherd authors through the writing process prior to final acceptance for publication in the proceedings.

Submitting a Tutorial Program Proposal

On Sunday-Tuesday, June 18-20, USENIX's well-respected tutorial program offers intensive, immediately practical tutorials on topics essential to the use, development, and administration of advanced computing systems. Skilled instructors, who are hands-on experts in their topic areas, present both introductory and advanced tutorials covering topics such as:
- High availability and quality of service
- Distributed, replicated, and web based systems
- System administration and security
- Embedded systems
- File systems and storage systems
- Interoperability of heterogeneous systems
- Operating systems (Linux, BSD*, NT, etc.)
- Application development (threads, Perl, etc.)
- Intrusion detection and prevention
- Internet security
- Mobile code and mobile computing
- New algorithms and applications
- Systems application configuration and maintenance
- Personal digital assistants
- Security and privacy
- Web-based technologies

To provide the best possible tutorial slate, USENIX continually solicits proposals for new tutorials. If you are interested in presenting a tutorial, contact: Dan Klein, Tutorial Coordinator, Phone: 1.412.422.0285, Email: *dvk@usenix.org*

Submitting an Invited Talk Proposal

These survey-style talks given by experts range over many interesting and timely topics. The Invited Talks track also may include panel presentations and selections from the best presentations at recent USENIX conferences.

The Invited Talks coordinators welcome suggestions for topics and request proposals for particular talks. In your proposal state the main focus, including a brief outline, and be sure to emphasize why your topic is of general interest to our community. Please submit via email to *usenix2000-it@usenix.org.*

Work-in-Progress Reports

Do you have interesting work you would like to share, or a cool idea that is not yet ready to be published? The USENIX audience provides valuable discussion and feedback. We are particularly interested in presentation of student work. To request a WIP slot, send email to *usenix2000-wips@usenix.org.*

Birds-of-a-Feather Sessions (BOFs)

The always popular evening BOFs are very informal, attendee-organized gatherings of persons interested in a particular topic. BOFs may be scheduled at the conference or in advance by contacting the USENIX Conference Office at 1.949.588.8649 or via email to *conference@usenix.org.*

USENIX Exhibition

In the exhibition, the emphasis is on serious questions and feedback. Vendors will demonstrate the features and technical innovations which distinguish their products. For more information, please contact: Dana Geffner, USENIX Exhibition Coordinator, Phone: 1.831.457.8649, Email: *dana@usenix.org*