

SIGOPS Annual Report 2010

Fiscal Year July 2009-June 2010

Submitted by Doug Terry, SIGOPS Chair

Overview

SIGOPS continues to be a vibrant community of people with interests in “operating systems” in the broadest sense, including topics such as distributed computing, storage systems, security, concurrency, middleware, mobility, virtualization, networking, datacenter software, and Internet services. We sponsor a number of top conferences, provide travel grants to students, present yearly awards, disseminate information to members electronically and through our web site, and collaborate with other SIGs on important programs for computing professionals.

The SIGOPS officers are Doug Terry as Chair, Frank Bellosa as Vice Chair, Jeanna Matthews as Treasurer (and Editor of our newsletter), and Stefan Saroiu as the Information Director. Their terms expire in June 2011, and so new SIGOPS elections will be held next spring.

Highlights from the past year include:

- The *ACM Symposium on Operating Systems Principles (SOSP)*, our flagship conference, was held in Big Sky, Montana, on October 11-14, 2009 with a record attendance of 565. The conference was under the leadership of Jeanna Mathews, the General Chair, and Tom Anderson, the Program Chair. Nine SIGOPS-sponsored workshops were held in conjunction with SOSP, including workshops on cloud computing, storage and file systems, power aware computing, systems for developing regions, and diversity. The next SOSP is being planned for October 2011 in Cascais, Portugal with Ted Wobber as the General Chair and Peter Druschel as the Program Chair.
- A new annual *ACM Symposium on Cloud Computing (SOCC)* was started with joint sponsorship from SIGMOD and SIGOPS, and the first instance was held in Indianapolis, Indiana in June following the SIGMOD 2010 conference. This new conference attracted over 200 attendees. SOCC 2011 is being co-located with SOSP in Portugal.
- The annual *SIGOPS Asia-Pacific Workshop on Systems (APSys)* was started, and the first instance is planned for August 30, 2010 in New Delhi, India, immediately before the SIGCOMM 2010 conference. The goal of this new workshop is to encourage and catalyze systems work in the Asia-Pacific region by providing a forum for systems researchers and practitioners across the world to present their work in computer systems and for locals to meet, interact, and collaborate with top researchers in the field.
- SIGOPS members produced the *Cloud Computing Tech Pack*, the first in a series of integrated learning packages on specific topics designed especially for practitioners and managers.

Awards

SIGOPS presents several awards on a yearly basis, and here are this past year's recipients:

- Eric Brewer received the Mark Weiser Award for creativity and innovation in operating systems research.
- Tushar Chandra, Vassos Hadzilacos, and Sam Toueg received the Edsger W. Dijkstra Prize in Distributed Computing.
- The SIGOPS Hall of Fame Award, which recognizes the most influential systems papers, was presented to three papers:
 - Cary G. Gray and David R. Cheriton, [Leases: An Efficient Fault-Tolerant Mechanism for Distributed File Cache Consistency](#), Proceedings of the Twelfth ACM Symposium on Operating Systems Principles (SOSP), December 1989, Litchfield Park, AZ, USA.
 - Butler W. Lampson and David D. Redell, [Experience with processes and monitors in Mesa](#), Proceedings of the Seventh ACM Symposium on Operating Systems Principles (SOSP), December 1979, Pacific Grove, CA, USA.
 - Nancy P. Kronenberg, Henry M. Levy, and William D. Strecker, [VAXclusters: A Closely-Coupled Distributed System](#), Proceedings of the Tenth ACM Symposium on Operating Systems Principles (SOSP), December 1985, Orcas Island, USA, USA.

Programs and Services

Professional SIGOPS membership dues remain at \$15, and student membership is just \$5 per year. We offer a “member plus” package (for \$20) for those who wish to continue receiving printed proceedings for the SOSP, ASPLOS, and EuroSys conferences; thus far, demand for this package is low, but this could partly stem from it not being well advertised.

Several widely respected conferences were sponsored or co-sponsored by SIGOPS this year. This includes the *EuroSys Conference* (with our European SIGOPS Chapter), the *International Conference on Architectural Support for Programming Languages and Operating Systems* (ASPLOS), co-sponsored with SIGARCH and SIGPLAN, the *Symposium on Principles of Distributed Computing* (PODC), co-sponsored with SIGACT, the *International Conference on Embedded Networked Sensor Systems* (SenSys), co-sponsored with SIGCOMM, SIGARCH, SIGBED, SIGMOBILE, and SIGMETRICS, the *International Conference on Virtual Execution Environments* (VEE), co-sponsored with SIGPLAN, and the new *Symposium on Cloud Computing* (SOCC), co-sponsored with SIGMOD.

SIGOPS encourages participation in conferences and career building activities for young members of the community. For example, substantial funding was provided this year as travel grants for students to attend conferences and diversity workshops, with many of these grants targeted at women and underrepresented minorities.

SIGOPS also publishes a quarterly newsletter, *Operating Systems Review*, which focuses on specific research topics or research institutions, manages an electronic mailing list, which is used for announcements, and maintains a web site: <http://www.sigops.org/>.

Key Issues

Although the number of SIGOPS members is substantially lower than ten years ago, this is not a serious concern for our organization. We still have a committed core of researchers and volunteers, have a healthy fund balance, and are able to continue sponsoring a broad spectrum of popular conferences. Our challenge is to convince active members of the community to become SIGOPS members, to increase student memberships, to reach out to practitioners, and to expand our global outreach. Given our low yearly membership dues, financial concerns should not be a barrier to membership. We simply need to make it easy for new members to join and demonstrate how their involvement strengthens our community. By providing travel grants to conferences, we allow students to experience the benefits of belonging to the SIGOPS family. We also provide the opportunity for members of our European chapter to automatically become SIGOPS members through a joint registration process. Based on our success with EuroSys, a yearly systems conference in Europe, we are now exploring holding conferences and workshops in other parts of the world, particularly Asia, Australia, and South America. We expect the new APSys workshop to become a yearly event in the Asia-Pacific region and to lead to the formation of a SIGOPS Chapter with the long-term goal of highlighting and supporting systems research in the region.