

First Workshop on I/O Virtualization (WIOV '08)

Sponsored by USENIX, the Advanced Computing Systems Association

<http://www.usenix.org/wiov08>

December 10–11, 2008

San Diego, CA

WIOV '08 will be held in conjunction with the 8th USENIX Symposium on Operating Systems Design and Implementation (OSDI '08), December 8–10, 2008.

Important Dates

Submissions due: *September 15, 2008*

Notification to authors: *October 3, 2008*

Final files due: *November 3, 2008*

Workshop Organizers

Program Co-Chairs

Muli Ben-Yehuda, *IBM Haifa Research Lab*

Alan L. Cox, *Rice University*

Scott Rixner, *Rice University*

Program Committee

Eyal de Lara, *University of Toronto*

Jun Nakajima, *Intel*

Renato Santos, *HP Labs*

Karsten Schwan, *Georgia Institute of Technology*

Pratap Subrahmanyam, *VMware*

Leendert van Doorn, *AMD*

Andrew Warfield, *University of British Columbia*

Overview

Over the past decade, the use of virtualization technology has grown rapidly. Moreover, it is being used in a variety of places, ranging from the data center to the desktop. Although this has spurred great advances in processor and memory virtualization in commodity hardware and virtualization software, I/O virtualization has received far less attention. However, both personal computers and servers may perform significant amounts of I/O. For example, efficient virtualization of graphics hardware has presented significant challenges on the desktop and efficient virtualization of network interfaces has limited server consolidation in the data center.

This workshop is meant to provide a forum to discuss challenges of I/O virtualization that span the virtual machine monitor, guest operating system, processor, memory subsystem, and I/O subsystem. In that spirit,

we welcome papers that describe new challenges in I/O virtualization and papers that describe novel approaches to solving known problems in I/O virtualization. The final program will consist of both reviewed submissions and invited talks. The invited talks will focus on open problems in I/O virtualization and will be accessible to a broad audience.

Topics

Topics of interest include but are not limited to:

- Hardware support for I/O virtualization
- Novel I/O device architectures for virtualization
- Novel software approaches to I/O virtualization
- Software methods for I/O device emulation
- Para-virtualized I/O device driver design for virtualization
- Virtual machine monitors I/O subsystems

Submission Guidelines

Please submit an extended abstract in PDF format through the workshop submission Web form on the WIOV '08 Call for Papers Web site, <http://www.usenix.org/wiov08/cfp>. The extended abstract should be no more than 4 double-column pages using 10-point type on 12-point leading (“single-spaced”). Figures and references are not included in this 4-page limit.

Accepted papers will be available to participants before the workshop on the USENIX WIOV '08 Web site and will be made generally accessible after the workshop.

Simultaneous submission of the same work to multiple venues, submission of previously published work, and plagiarism constitute dishonesty or fraud. USENIX, like other scientific and technical conferences and journals, prohibits these practices and may, on the recommendation of a program chair, take action against authors who have committed them. In some cases, program committees may share information about submitted papers with other conference chairs and journal editors to ensure the integrity of papers under considera-

tion. If a violation of these principles is found, sanctions may include, but are not limited to, barring the authors from submitting to or participating in USENIX conferences for a set period, contacting the authors' institutions, and publicizing the details of the case.

Authors uncertain whether their submission meets USENIX's guidelines should contact the program co-chairs, wiov08chairs@usenix.org, or the USENIX office, submissionspolicy@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 WIOV '08 Web site.

Registration Materials

Complete program and registration information will be available in October 2008 on the workshop Web site. If you would like to receive the latest USENIX conference information, please join our mailing list: <http://www.usenix.org/about/mailing.html>