

## CALL FOR PAPERS

### Workshop on Security and High Performance Systems

### The 2006 High Performance Computing & Simulation Conference (HPC&S 2006)

May 28-31, 2006

Bonn, GERMANY

<http://www.engr.udayton.edu/faculty/wsmari/hpc06/>

**Submission Deadline: February 28, 2006**

#### **Brief Description:**

The aim of this workshop is to address security and performance issues. Security and performances are generally conflicting. So, providing high performance security solutions is a challenging objective.

This workshop addresses relationships between security and high performance systems in two directions. First, it considers how to add security properties (authentication, confidentiality, integrity, non-repudiation, access control) to high performance computing systems. In this case, safety properties can also be addressed such as availability, fault tolerance for high performance computing systems. Second, it covers how to use high performance systems to solve security problems. For instance, a grid computation can break an encryption code, or a cluster can support high performance intrusion detection. More generally, this topic addresses every efficient use of a high performance computing system to improve security.

In all these directions, various performance analyses or monitoring techniques can be conducted to show the efficiency of a security infrastructure.

#### **This workshop covers (but is not limited to) the following topics:**

##### **1) Security and safety of high performance computing systems:**

- Security of clusters
- Security of grid infrastructures
- Impact of security infrastructures on high performance computing systems
- Security for high performance networks using topological properties
- Availability of high performance computing systems
- Integrity of data in high performance computing systems
- Security of HPCS using agent or multi-agent based systems

##### **2) Use of high performance computing systems to address security issues:**

- High performance encryption/decryption systems
- High performance intrusion detection/protection systems

- High performance systems for access control
- High performance systems for authentication, biometry
- High performance security of web services

### 3) Performance analysis and monitoring of security infrastructure

- Performance of secure network
- Performance of secure operating systems
- Performance of secure middleware

### **Submission Instructions:**

Papers reporting original and unpublished research results on above and related security and HPC topics are solicited. Please submit an electronic copy of your full manuscript (not to exceed 15 double-spaced pages or 8 double-column single-space IEEE formatted pages, including figures, tables, and references). Please clearly indicate the corresponding author. Include up to 6 keywords from the above list and an abstract of no more than 300 words. Papers must be submitted - in .pdf (preferred) or word .doc format via email to [Patrice.Clemente@ensi-bourges.fr](mailto:Patrice.Clemente@ensi-bourges.fr), [Jean-Francois.Lalande@ensi-bourges.fr](mailto:Jean-Francois.Lalande@ensi-bourges.fr), and [Christian.Toinard@ensi-bourges.fr](mailto:Christian.Toinard@ensi-bourges.fr) or to the web at the following conference website:

<http://www.univ-orleans.fr/lifo/Manifestations/HPCS2006workshop/>.

More detailed submission procedures will be available on this website.

If accepted, the final camera-ready manuscript will follow the ECMS 2006 format, which will be made available to all authors. Consistent with standard practice, each submitted paper will receive a minimum of three reviews. Papers will be selected based on their originality, timeliness, significance, relevance, and clarity of presentation. Initial selection will be based on full papers. Submission implies the willingness of at least one of the authors to register and present the paper, if accepted. All accepted papers in the conference are required to be presented and will be included in the conference proceedings.

If you have any questions about paper submission, please contact organizers using the information below.

### **Important Dates:**

Full paper submission deadline	February 28, 2006
Notification of Acceptance	March 15, 2006
Registration & Camera-Ready Manuscripts due	April 10, 2006

### **Workshop Organizers:**

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**Workshop Program Committee:**

(forthcoming)

If you have any questions about paper submission, please contact conference Program Chair: Waleed W. Smari, Dept. of Electrical and Computer Engineering, University of Dayton, 300 College Park, Dayton, OH 45469-0226, USA, Voice: (937) 229-2795, Fax: (937) 229-4529, Email: [Waleed.Smari@notes.udayton.edu](mailto:Waleed.Smari@notes.udayton.edu). For information about the HPCS conference in general, please contact the General Chair: Helen Karatza, Aristotle University of Thessaloniki, Greece, [karatza@csd.auth.gr](mailto:karatza@csd.auth.gr). The Multi Conference web site is at <http://www.scs-europe.net/conf/ecms2006/>