



5<sup>th</sup> International Conference on  
Information Systems for  
Crisis Response and Management

Washington, DC, USA  
May 4-7, 2008  
<http://www.iscram.org>

## CALL FOR PAPERS

FOR A SPECIAL *ACADEMIC* SESSION ON

### *Decentralized and Self-Organizing IT-Infrastructures for Crisis Response and Management*

Session ID: INT-03

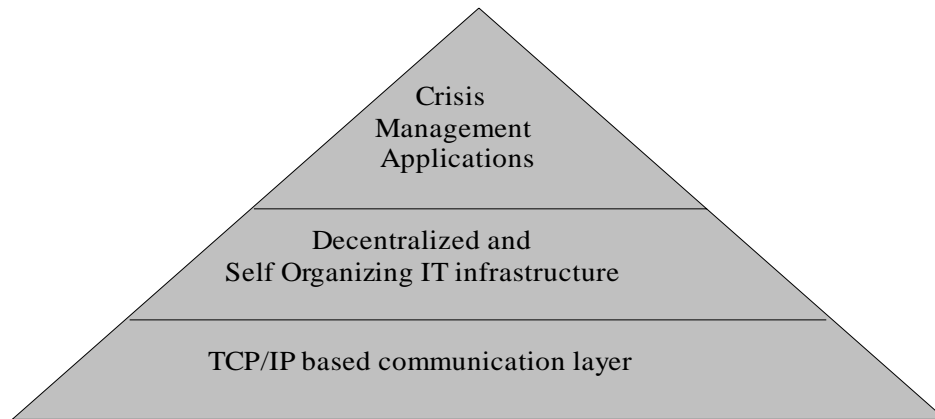
#### **Motivation**

Recent crisis like the recent Sumatra-Andaman earthquake and Hurricane Katrina demand quick first response organization as well as a high number of participating helpers and organizations. These two requirements are naturally supported by decentralized and self-organizing IT-infrastructures. While p2p systems like Groove achieve an easy way of enabling communication between heterogeneous first response teams. There are crucial inefficiencies in terms of network resource utilization, which is a vitally important requirement in crisis response situations.

There are still numerous open topics necessary to put crisis response and management software on a solid technical base. Focus for this special session is the technical management of distributed crisis response systems. The areas covered by this session are listed below. Additional contributions concerning crisis response systems that are not explicitly mentioned but fit into the scope of this session are welcomed as well.

#### **Research Area**

The technical challenges for a successful deployment of a Crisis Response and Management System can be divided in three main areas. While the base for communication, shown as TCP/IP based communication layer is crucial for a successful deployment of a Crisis Response System, the main focus of this special session is the second layer "Decentralized and Self Organizing IT infrastructure".



The underlying TCP/IP based communication layer becomes increasingly more a commodity product while intelligent replica placement, distributed storage, service discovery, access control and context awareness need to be provided by the second layer. Based on the available services and infrastructure of the second layer the top layer provides various user interfaces to the deployed services. While all three layers are needed for a successful deployment of a Crisis Response and Management System, the main focus of this session is on the design of the second layer.

### Topics

- Overlay networks specialized for Decentralized Crisis Response and Management
- Decentralized service discovery
- Distributed information storage and retrieval
- Decentralized and self-organizing mechanisms for replica management
- Decentralized location awareness
- Group membership and access control
- Simulation environments for “Decentralized and Self-Organizing IT-Infrastructures for Crisis Response and Management”
- Decentralized Crisis Response and Management Systems
- Systems Implications on Policy and Organizational Structures
- Case Studies on “Decentralized and Self-Organizing IT-Infrastructures”

### Type of contribution:

- **Academic Session:** We invite researchers from academia or research labs to present their research or research-in-progress papers. Prospective presenters submit a regular research (or research-in-progress) paper.

### Important Notice:

- All submissions must be formatted according to the ISCRAM 2008 formatting guidelines. Templates and instructions are published on [www.iscram.org](http://www.iscram.org).
- All submissions must be submitted through the ISCRAM 2008 conference paper submission web page at [www.conftool.com/iscram2008](http://www.conftool.com/iscram2008). Instructions for the ConfTool system can be found on [www.iscram.org](http://www.iscram.org).
- All papers and presentations will go through a double-blind review process, leading to a decision of (conditional) acceptance or rejection.

- Accepted papers will be included in the ISCRAM 2008 program and published in the official proceedings if and only if
  - (1) the paper is formatted according to the instructions,
  - (2) the authors sign the copyright transfer form and
  - (3) one of the authors registers for the conference and pays the registration fee before the cut-off date for early registration.
- Authors who have multiple papers accepted can only register for and present one paper at the conference; co-authors need to register separately.

**Session Chairs:**



**Ralf Steinmetz**

[Ralf.Steinmetz@KOM.tu-darmstadt.de](mailto:Ralf.Steinmetz@KOM.tu-darmstadt.de)

Technische Universitaet Darmstadt, Germany



**Nicolas C. Liebau**

[Nicolas.Liebau@KOM.tu-darmstadt.de](mailto:Nicolas.Liebau@KOM.tu-darmstadt.de)

Technische Universitaet Darmstadt, Germany



**Dirk Bradler**

[bradler@tk.informatik.tu-darmstadt.de](mailto:bradler@tk.informatik.tu-darmstadt.de)

Technische Universitaet Darmstadt, Germany



**Jussi Kangasharju**

[Jussi.Kangasharju@cs.helsinki.fi](mailto:Jussi.Kangasharju@cs.helsinki.fi)

University of Helsinki

#### **Important ISCRAM 2008 Dates:**

- December 21, 2007: Paper submission deadline
- February 10, 2008: Notification of (conditional) acceptance
- February 22, 2008: Early registration deadline
- March 1, 2008: Final camera-ready paper submission deadline
- May 4-7, 2008: ISCRAM 2008

#### **About ISCRAM:**

The ISCRAM Community is a worldwide community of researchers, scholars, teachers, students, practitioners and policy makers interested or actively involved in the subject of Information Systems for Crisis Response and Management. At its annual international conference alternating between the US and Europe, the ISCRAM Community gathers to present and discuss the latest research and developments in this growing area during an interactive and stimulating 3 day program. The ISCRAM Community also organizes an International Summer School for PhD students and ISCRAM-CHINA, an annual conference for ISCRAM research in China. All information on ISCRAM can be found at <http://www.iscram.org>

ISCRAM 2008 will be held from 4-7 May at the George Washington University (GWU) located in Washington, DC, USA. The conference will be hosted by GWU's Institute for Crisis, Disaster, and Risk Management (ICDRM). All details on this conference will be made available via the ISCRAM website mentioned above.