

Call for Papers

# PoDSy 2003

## Workshop on Principles of Dependable Systems

June 23, 2003

San Francisco, CA, USA

In conjunction with: The International Conference on Dependable Systems and Networks (DSN-2003)



### IMPORTANT DATES

Papers due: Jan. 27, 2003  
Notification: Mar. 10, 2003  
Camera-ready copies due: April 1, 2003  
Workshop date: Jun. 23, 2003

### ORGANIZERS

- Felix Gärtner, EPF Lausanne, Switzerland
- Klaus Kursawe, IBM Zurich, Switzerland
- Levente Buttyán, Budapest University of Technology and Economics, Hungary

### PROGRAM COMMITTEE

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### SCOPE

Dependable systems are supposed to satisfy an ensemble of distinct properties, namely safety, security and availability, to name a few. These properties are in parts complementary and also diverse enough to have spawned complete topic areas of their own. Consequently, work on achieving and validating the different properties has partly been performed in different communities and with varied nuances. Maybe most prominently this is true for the two areas of fault-tolerant systems on the one hand and secure systems (especially cryptography) on the other. For example, researchers in fault-tolerance often make statements about systems by treating cryptographic primitives as black boxes. This is done to simplify analysis and (sometimes) avoid number and probability theory. However, by abstracting away the basic properties of the cryptographic primitives, this severely constrains the ability to conduct rigorous security proofs. Various examples of the past show that by over-abstraction, important attributes got neglected, contributing to attack vulnerabilities in the resultant protocols. But despite these examples, many researchers have confirmed that there are strong similarities between the ways of modeling and handling uncertainty in both areas.

In this workshop we wish to bring together researchers and practitioners from both the fault-tolerance and security communities to discuss foundational topics (and related applied experiences) on the similarities and differences between both areas. The main research challenges in this context are to formulate consistent and mutually understandable notions of the relevant dependable system properties, to identify suitable models for studying these properties, and to assess fundamental abstractions of systems which are both fault-tolerant and secure. In this direction, papers are solicited which address foundational issues around the “principles” of dependable systems.

Contributions of interest will address topics related to, but not limited by, the following:

- Relationship between areas of fault-tolerance and security
- Relationship between fault-tolerance and security properties
- Metrics for fault-tolerance and security
- Specification, modeling and analysis of fault-tolerant and secure systems
- Using fault-tolerance techniques to achieve security
- Using security techniques to achieve fault-tolerance
- Verification and validation of fault-tolerant and secure systems
- Experiences with fault-tolerant and secure systems

### PAPER SUBMISSION DETAILS

Two classes of papers are solicited: (a) original research contributions, and (b) position papers. Papers should be between 5 and 10 pages in length and will be reviewed by members of the program committee. Research contributions will be selected based on their relevance to the workshop, their originality, their technical quality and their presentation. Position papers will be selected based on their presentation and the potential to foster discussion.

Please submit all contributions by sending an e-mail to Felix Gärtner ([fgaertner@lpdmail.epfl.ch](mailto:fgaertner@lpdmail.epfl.ch)) no later than January 27, 2003 (extended deadline).

Accepted workshop contributions will be published in the Supplement of the 2003 International Conference on Dependable Systems and Networks.

### WEBPAGE

<http://lpdwww.epfl.ch/fgaertner/podsy2003/>