This workshop will focus on technologies and tools that are designed to enhance the dependability of IP based applications, platforms, and networks. Examples of such systems are IP telephony, IP service platforms, IP network management systems, web Infrastructures and applications, IP switches and networks, and middleware tools. The workshop will present papers and talks on basic research, case studies, experiments, architecture designs and practical experience reports which describe techniques to improve or measure the dependability of IP applications and systems.

Contact Information:
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Opening Remarks

SESSION 2D:
Dependability Technologies
Towards Continuous Availability of Internet Services through Availability Domains
N. Bowen and D. Sturman (IBM); T. Liu (University of Illinois at Urbana-Champaign)

Issues in Interoperability and Performance Verification in a Multi-Orb Telecommunication Environment
C.J. Lin, A. Avritzer, E.J. Weyuker, and S. Lo (AT&T)

Algorithms for Improving the Dependability of Firewall and Filter Rule Lists
S. Hazelhurst, A. Attar, and R. Sinnapan (University of the Witwatersrand, South Africa)

Dynamic Distribution of resources for DiffServ Multimedia Applications
D.Q. Hai and S.T. Vuong (University of British Columbia)

SESSION 3D:
Dependable Network and Operating Systems
The Impact of Internet Infrastructure Failures
C. Laborvitz (Microsoft)

Windows 2000 Dependability
B. Murphy (Microsoft)

SESSION 5D:
Dependable Middleware and Applications
Fault Tolerant CORBA and Its Applications
S. Yajnik (Bell Labs, Lucent)

Building Dependable Internet Services with E-Speak
A. Van Morsel (HP Labs)

A Fault-Tolerant Server Architecture Applicable to Voice over IP Services
R. Lyons (AT&T)
Tuesday, June 27, 2000

Workshop on Dependability of e-Business Systems
8:30 AM - 5:00 PM

The workshop will bring a combination of technical insight and business perspective from companies that are leaders in electronic commerce and driving significant volumes of business over the Internet. Attendees will be researchers, product designers and people deploying these systems. The day will be a mixture of talks on key issues to interactive panel sessions with companies who are actively operating major e-business systems. The objective behind the panels is to engage the creators of the technology, the users of the technology, and the Research community in a fruitful discussion about key issues that must be address in the 21st century.

Contact Information:
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Workshop Program

SESSION 7
PLENARY:
Keynote Address:
Internet Performance/Availibility from an End User Perspective
Eric Siegel, Keynote Systems

SESSION 8D:
Panel I:
Dependability for Business to Business Systems

SESSION 9D:
Invited Talk:
e-Business Issues for the 21st Century
Brian Brandt

SESSION 10D:
Panel II:
Dependability for Consumer Based Internet Systems

SESSION 11D:
Forum:
Key Issues for Industry, Research and System Development
Wednesday, June 28, 2000

Workshop on Dependability Despite Malicious Faults
8:30 AM - 3:30 PM

This workshop will address explicitly the dependability of computing systems facing attacks by external hackers as well as by insiders, or coping with malicious design faults. Topics of interest include: survivability of large information system infrastructures, security for safety-critical systems, intrusion detection and tolerance, damage assessment and healing, prevention and tolerance of denials of service, dependability assessment with respect to malicious faults, testing, metrics and benchmarking, fault injection and penetration analysis and COTS-based dependable systems.

Contact Information:
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Workshop Program

SESSION 12
PLENARY:
Panel:
Running the Bytes without Getting Bitten: Strategies for Dealing with Malicious Code
Panel Chair: Carl Landwehr (Mitretek Sys)
Panelists will include:
Crispin Cowan (Oregon Graduate Institute), Gary McGraw (Reliable Software Technologies), and Jeannette Wing (Carnegie Mellon University).

SESSION 13D:
Analysis of System Resiliency to Malice
Testing for Software Vulnerability Using Environment Perturbation
W. Du and A. Mathur (Purdue University)

SESSION 14D:
System Design for Resiliency to Malice
Avoiding Loss of Fairness Owing to Process Crashes in Fair Data Exchange Protocols
P. Liu (University of Maryland); P. Ning, and S. Jajodia (George Mason University)

Analyzing Survivability Properties of Specification of Networks
S. Jha, R.C. Linger, T. Longstaff, and J. Wing (Carnegie Mellon University)

Benchmarking Anomaly-based Detection System
R. Maxion and K. Tan (Carnegie Mellon University)

A Formal-Specification Based Approach for Protecting the Domain Name System
S. Cheung and K.N. Levitt (University of California, Davis)

Invited Talk