

CALL FOR PAPER

IAMCOM 2007 (<http://www.iamcom.org>)

Information Assurance Middleware for COMMunications (IAMCOM)

held in conjunction with

2nd IEEE/ACM International Conference on COMMunication System softWARE and MiddlewaRE (IEEE COMSWARE 2007)

January 12, 2007, Bangalore, India.



Individual subsystems designed to operate reliably in isolation may not be reliable when networked together: due to the complexity of subsystem interactions and the functional heterogeneity and diversity among the network subsystems. Although the network subsystems can be made highly reliable by using appropriate techniques (such as capacity over-provisioning), networking these systems together, however, exposes them to outside attackers, so the trust placed upon these subsystems diminishes precipitously. Communications middleware allows dealing with the diversity and heterogeneity among network subsystems through a set of generic software/hardware, protocol and/or modeling tools. These tools often reside in the management stations that 'oversee' the proper functioning of communication session activities between application end-points: in terms of performance, QoS, and integrity, and availability. A communication system is deemed as dependable if it can provide some minimal functional guarantees to the on-going communication sessions in the presence of attacks and/or failures occurring at one or more network subsystems.

The heterogeneity in network software and hardware diminishes the power of attackers to cripple the whole system. This advantage can be reaped to a full extent only if the heterogeneity itself does not become an impediment in dealing with the failures and attacks that may actually occur. Middleware for dependable communications addresses the issues of providing sustainable guarantees on session-level QoS, performance, integrity, availability and security through a repertoire of generic software/hardware tools and models.

The goal of IAMCOM workshop is to offer a focused forum to discuss the on-going research in the area of middleware for dependable communications. Papers are solicited on middleware topics pertaining to the communication layers of a distributed network system: Topics of interest include, but not limited to:

- QoS assurance architectures
- Network state fusion, monitoring
- Tools for detecting DOS attacks
- Utility-based QoS adaptation
- Diversity management and control
- Adaptive encryption techniques
- Capacity provisioning
- Communication security: authentication, confidentiality
- Network survivability
- Dynamic bandwidth allocations
- Traffic engineering
- Distributed consensus/voting
- Self-healing networks
- Topology management
- Failure detectors

Workshop Co-Chairs

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Important Dates

Full Papers Submission Deadline

October 10, 2006

Notification of Acceptance

October 25, 2006

Camera-ready Manuscripts due

November 15, 2006