Quality of Service (QoS) issues are usually discussed in a piecemeal manner pertaining to a particular entity such as the network, operating system, processor, server, storage device or database. However, as more devices such as computational and storage nodes are connected over networks to form distributed systems, the quality of end user experience and the timeliness of decisions and actions depend on the coordinated behavior of the network and connected entities, i.e. “coordinated QoS”.

Coordinated QoS in distributed systems is important in newly emerging areas such as wireless sensor networks, ambient intelligence, pervasive computing, mixed reality, grid computing, online gaming and distributed storage, as well as traditional areas like multimedia and content delivery. In these areas, constraints such as power, computational, communication, memory and storage limitations dictate that careful attention be paid to QoS management in the different entities of the system, as well as the system as a whole. Thus, a holistic approach to the design, analysis and management of distributed systems comprising a number of interconnected entities is necessary in order to efficiently achieve predictable and robust end-to-end performance to meet the stringent requirements of end users and specific applications.

The aim of this workshop is to provide a platform for the discussion of methods and schemes to achieve coordinated QoS in distributed systems, especially in the emerging areas mentioned above.

We would like to solicit technical papers on coordinated QoS and performance issues in distributed systems which focus on the network (wired and/or wireless) together with one or more other entities. Coordination among several network layers, or between the application and network layers, are also acceptable. The term “QoS” used here covers quantitative aspects such as delay, cycle time and jitter, and/or qualitative aspects such as security and enhanced user experience.

Specific areas of interest for coordinated QoS include, but are not limited to, the following:

I. Systems
   • Ad hoc and sensor networks
   • Grid computing
   • Peer-to-peer systems
   • Cluster computing
   • Client-server systems
   • Distributed storage, e.g. SAN, NAS
   • Multimedia and Content Delivery Networks (CDNs)
   • Operating systems
   • (Distributed) real time systems
   • Embedded systems
   • Parallel and distributed systems
   • Web servers
   • Web services

II. Techniques
   • Measurements
   • Frameworks and platforms
   • Cross layer design and optimization
   • Service differentiation
   • Resource management
   • (Super-)Scheduling
   • Workflow management
   • Congestion control
   • Protocols and signalling
   • Coordination and control
   • QoS adaptation and automatic configuration
   • Pricing, control-theoretic and game-theoretic approaches
   • AI, decision-theoretic and machine learning-based approaches
   • Service Level Agreements (SLAs)
   • Systems management
   • Application-level QoS
   • End-to-end and multi-domain QoS
   • Security
   • Middleware
   • Development environments and programming languages

Authors should indicate clearly in EDAS that they are submitting to the COQODS Workshop (select the correct category for the paper).

Paper submission instructions can be found at [http://www.sp.edu.sg/icon2004](http://www.sp.edu.sg/icon2004).