P4P2P 2008

Performance for Peers Workshop

May 22nd -23rd, 2008
University of Warwick

http://www.dcs.warwick.ac.uk/events/p4p2p/

Peer-to-peer systems create new challenges in the familiar context of performance-based adaptation: measurement, decision, and implementation processes must be decentralized because no node has a view of the entire system. Instead, locally decided changes based on local measurements must be relied upon. A major theme is the design of highly decentralized systems is the question of what degree of structure such systems should contain. Further, should structure be pre-imposed or discovered at run-time. Answering such questions requires being able to measure system performance, and defining precise definitions of the performance requirements of intended applications. Measuring performance is a thus pre-requisite to building adaptive or self-organizing systems.

This workshop will explore the relationship between the way in which a peer-to-peer overlay is organized, the computations for which it is most suited, and the corresponding performance improvements that can be made over unorganized networks.

Topics of interest include:

- Algorithms that adapt or self-organize based on specific performance measurements.
- Performance measurement studies of existing decentralized systems or algorithms.
- Case studies describing application areas and their requirements.
- Proposals of metrics and test sets for common p2p tasks.
- Experience papers on performance issues encountered in building adaptive self-organizing systems.

The proceedings of P4P2P will be published in book format for the workshop. Authors of the best papers will be invited to submit extended versions for publication in the International Journal of Parallel, Emergent and Distributed Systems.

Important Dates: Abstract submission (April 14th 2008), Paper submission (April 25th 2008)