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Important dates

Paper submission:
01-04-2011

Acceptance notification:
20-06-2011

Final papers:
20-07-2011

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Call for Papers

A Special Issue of Computer Networks On "Measurement-based Optimization of P2P Networking and Applications"

Measurement plays an important role in different Peer-to-Peer (P2P) applications, for the peer selection, data delivery and overlay construction. Since P2P systems may include hundreds of thousands of online peers at the same time, it is necessary for the measurements to be scalable. The P2P system can utilize the measured results to either improve the system's performance or ensure the system's robustness. For example, Network Coordinate (NC) Systems provide a scalable way for the measurement and prediction of Internet latencies. And these NC systems can be used in different P2P applications.

Currently P2P systems are the largest contributor of network traffic on the Internet. To enhance the data delivery efficiency while reducing the interdomain traffic, different schemes like P4P or ALTO are proposed. By utilizing different sources of information, such as routing information from the ISP or real-time measurement results exchanged among the peers, traffic optimization can be performed. This can potentially satisfy both ISP's operational cost and the users' experience.

The objective of this special issue is to highlight the recent novel results that will enhance the measurement-based optimization of P2P networking and applications. The state-of-the-art research papers will cover various aspects of scalable measurement and traffic optimization for P2P systems, including their design, deployment, evaluation, security issues and applications.

Topics of particular interest include but are not limited to the following:

- Novel scalable measurement architectures
- Network Coordinate (NC) systems
- Deployment of scalable measurement systems
- Security Issues of scalable measurement
- P2P applications based on scalable measurement
- Scalable measurement in mobile P2P
- Congestion control for P2P traffic
- Traffic optimization for P2P
- Traffic localization for P2P
- Proactive network provider participation for P2P
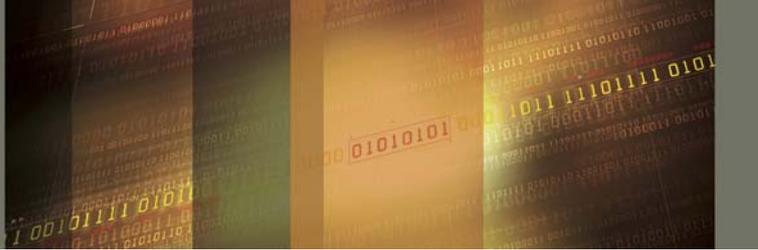
About the Computer Networks

Computer Networks is an international, archival journal providing a publication vehicle for complete coverage of all topics of interest to those involved in the computer communications networking area. The audience includes researchers, managers and operators of networks as well as designers and implementors. The Editorial Board will consider any material for publication that is of interest to those groups.

Submission format

The submitted papers must be written in English and describe original research which is not published nor currently under review by other journals or conferences. Author guidelines for preparation of manuscript can be found at
www.elsevier.com/locate/comnet/
For more information, please contact the Editor-in-Chief:
Ian F. Akyildiz (ian@ece.gatech.edu)
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Submission Guideline

All manuscripts and any supplementary material should be submitted through Elsevier Editorial System (EES). The authors must select as "SI: Measurement-based Optimization of P2P Networking and Applications" when they reach the "Article Type" step in the submission process. The EES website is located at:
http://ees.elsevier.com/comnet/

Guide for Authors

This site will guide you stepwise through the creation and uploading of you article. The guide for Authors can be found on the journal homepage (www.elsevier.com/locate/comnet/).