

Call for Papers
IEEE Network
Special Issue on
Ad Hoc Networking:
Data Communications and Topology Control

<http://www.comsoc.org/pubs/net>

IEEE Network seeks articles for a special issue on Ad Hoc Networking: Data Communications and Topology Control, to appear in July 2004. The guest editors for this special issue are David Simplot, University of Lille, France, and Ivan Stojmenović, University of Ottawa, Canada.

Wireless networks and mobile computing research has until recently concentrated on single-hop networks (network nodes communicating directly to a fixed infrastructure), such as cellular and satellite systems. Ad hoc networking covers multi-hop scenarios (network nodes communicating via other network nodes) such as conference, hospital, battlefield, rescue, and monitoring scenarios. Particular ad hoc network systems include packet radio networks, sensor networks, personal communication systems, rooftop networks, and wireless local area networks. Even multi-hop cellular networks may be a viable option when a huge number of cellular phones are concentrated on a small area such as stadium.

This special issue will cover comprehensively the network layer in ad hoc networks, which deals with data communication and topology control problems. Data communication problems include routing, broadcasting, multicasting, geocasting, clustering, area monitoring, data and service access. Topology control problems include neighbor discovery, topology construction and maintenance, activity scheduling, position discovery, partition detection, location updates, and network management. The new approaches to ad hoc networks design emphasize cross-layering approach, and therefore the relevant issues arising from network layer problems will also be covered, such as power management, security, quality of service, performance evaluation, data link and transport layers.

The goal of the special issue is to publish original research and review articles which should be comprehensive to all readers, regardless of their specialty.

Paper Submission

Send papers as PDF file to both co-guest editors simplot@lifl.fr and ivan@site.uottawa.ca. It is recommended that submissions be limited to 4500 words, with the number of references limited to 10. Guidelines for authors can be found on the IEEE Network magazine Website at

<http://www.comsoc.org/pubs/net/ntwrk/authors.html>

Important Dates

Manuscript Submission	November 30, 2003
Acceptance Notification	February 29, 2004
Final Manuscript Due	May 1, 2004
Publication	July/August 2004

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