MeshTech'07

First IEEE International Workshop on *Enabling Technologies and Standards for Wireless Mesh Networking*

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Aim and scope

Wireless Mesh Networks are emerging as a key technology for next generation wireless networking. A WMN is characterized by dynamic self-organization, self-configuration and self-healing, which allow them for easy and fast, highly scalable, reliable and cost-effective network deployment under very diverse environments, and provision of better coverage and capacity to stationary and mobile users. Because of this, WMNs are currently inspiring a lot of research activities and also experiencing a very fast deployment in many today's environments, such as public city-wide broadband WiFi networks, rural networks, private neighbourhood communities, or private business networks that are characterized by frequent topology changes, cabling troubles, or hard environmental conditions.

Despite such extraordinary interest in both academia and private industry, there is still a lack of reference standard specifications for developing mesh networking technology. However, several standardization bodies have recently started working on specifications which aim at defining recognized protocols and architectures for interoperable WMNs, including both the IEEE 802 LAN/MAN standards committee (inside the IEEE 802.16 and, more recently, the IEEE 802.16j, the IEEE 802.11s, and the IEEE 802.15.5 Working Groups) and the IETF in the context of wireless access and mobility support in Next Generation Internet (inside, e.g., the MIPSHOP, NETLMM and MANET Working Groups).

The aim of this workshop is to bring together practitioners and researchers from both academia and industry in order to have a forum for discussion and technical presentations on the recent advances in theory, application and implementation of next generation mobile mesh/multi-hop relay networking technologies within the context of existing and/or emerging standards, in an attempt to answer the question of what technical solutions will be able to drive the success of these standardization efforts, and what kind of mesh networking products will then appear on the market in the near future.

Topics of interest include, but are not limited to:

- Routing protocols
- Medium access control protocols
- Quality of Service and fairness provisioning
- Mesh networks configuration and management
- Topology discovery, association and control
- Mesh networks measurement
- Mobility management
- Interworking in heterogeneous wireless mesh networks
- Security architectures, functions and protocols
- Fault tolerance, anomaly detection and error recovery schemes
- Performance evaluation
- Comparative study of competing solutions
- Cross-layer design and optimization
- Advanced antenna technologies
- Spectrum policy and etiquettes
- Cognitive and frequency-agile radios

Submission instructions

All submissions must describe original research, not published or currently under review for another workshop, conference, or journal. Detailed submission instructions will be published on the conference website http://www.ing.unipi.it/meshtech07 in due time. Submission implies the willingness of at least one author to attend the workshop and present the paper. Accepted papers will be included in the main proceedings of IEEE MASS 2007 and published by the IEEE Computer Society.

Important dates

Manuscript Submission Due: **May 22, 2007 (11:59pm EDT)**. ***** EXTENDED *****
Notification of acceptance: **July 15, 2007**.
Final Manuscript Due: **August 10, 2007**.

Contact information

For any further information, please do not hesitate to send an e-mail to: **meshtech07@ing.unipi.it**