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of Engineering the Future



MeshTech 2009

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

October 12, 2009. MACAU SAR, P.R. China
co-located with IEEE MASS 2009

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Call for Papers

With the emergence of wireless mesh networks new topologies appeared that complement the classic base station centered deployments. On the low complexity side, direct link set-ups like the IEEE 802.11 Task Group "z" approach enable connectivity between end stations, thereby avoiding unnecessary transmissions to and from an Access Point. The peer-to-peer specification that Wi-Fi Alliance currently develops provides a more powerful but also more complex approach. It targets at Bluetooth like deployments, so as to allow for a private network to be easily set up. Unlike the aforementioned projects, the wireless mesh networking standards developed within IEEE 802.16, IEEE 802.11s, IEEE 802.15.5, the IETF Next Generation Internet groups MIPSHOP, NETLMM, and MANET target at full solutions that provide all features necessary to enable spontaneous ad hoc connectivity within single hop range up to highly scalable, self-healing, reliable and cost-effective multi-hop set-ups for very diverse environments. Even beyond this scope, several research projects survey the feasibility of mesh networks formed of heterogeneous standards.

With the traditional network topologies fading away, wireless mesh networks and their ad hoc relatives have become a hot topic in the research community. However, the new topologies affect protocol designs and interoperability with existing networks. Loop-free set-ups, broadcast traffic handling, inter-standard mesh networks, hand over of roaming devices, and the usage of mesh networks in TV whitespaces are few examples that these new technologies need to be aware of. Furthermore, it is still to be fully understood what technological challenges the above mentioned standardization efforts have to face, how they will evolve, and what application scenarios will be able to drive their possible success in the market.

Building on the success of the previous editions, MeshTech 2009 aims at bringing together again practitioners and researchers from both academia and industry in order to discuss the recent advances and future evolution of next generation peer-to-peer and mobile mesh/multihop relay networking technologies and standards for Wireless Personal, Local, Metropolitan, Rural and Regional Area Networks.

Within the scope of wireless mesh networks, 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 of heterogeneous standards wireless mesh networks
- Performance evaluation
- Coexistence with existing wireless infrastructures
- Security architectures, functions and protocols
- Comparative study of competing solutions
- Cross-layer design and optimization
- Cognitive and frequency-agile radios
- Fault tolerance, anomaly detection and error recovery schemes
- Mesh networks for TV white spaces

Submission instructions

All submissions must describe original research, not published or currently under review for another workshop, conference, or journal. 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 2009 and published by IEEE. You can find detailed submission instructions at <http://www.ing.unipi.it/meshtech09/submission.shtml>.

Important dates

Manuscript Submission Due:

June 1, 2009 (11:59pm EDT). * EXTENDED *****

Notification of acceptance:

July 5, 2009.

Final Manuscript Due:

July 24, 2009.

Contact information

For any further information, please do not hesitate to send an e-mail to: meshtech09@ing.unipi.it