Call for Papers

Machine to Machine Communications (MTMC) Workshop

In conjunction with The 8th International Wireless Communications Mobile Computing Conference (IWCMC 2012)

http://iwcmc.org/2012/

1 Theme

Machine-to-machine (M2M) (or machine-type) communications has emerged as a new communication paradigm that allows machines to directly communicate with each other with little or no human intervention. M2M communications has inspired a wide variety of applications, including smart metering, healthcare monitoring, fleet management and tracking, remote security sensing, and industrial automation. Nevertheless, the existing wireless technologies are designed and optimized mainly for human-to-human (H2H) communications. Comparing to H2H networks, M2M networks face the following unique challenges:

- 1) a much larger amount of devices need to be supported in an M2M network than an H2H network;
- 2) traffic patterns of M2M devices are significantly different from those of H2H devices;
- 3) many different types of M2M devices with different characteristics and requirements may co-exist;
- 4) the resource management scheme should be redesigned to consider the low-mobility property of M2M devices;
- 5) power-saving mechanisms should be employed to reduce the power consumption of low-power M2M devices.

As M2M communications bring very different requirements, wireless technologies should themselves evolve and establish capabilities to address these challenges.

The objective of this workshop is to bring together state-of-the-art contributions on the modeling, designing, implementation, deployment, and management of M2M systems, architectures and protocols.

2 Topics

Authors are invited to submit previously unpublished papers to this workshop. Topics include, but are not limited to:

- M2M System and Functional Architecture
- M2M Access Network Technologies and Optimization
- M2M Address Management and End-to-End Addressability
- M2M Applications, Services and Test-beds
- M2M Data Management
- M2M Gateway Technologies
- M2M MAC Protocols
- M2M Network Management
- M2M Network Protocols
- M2M Performance Management (QoS, Scalability, Reliability, etc)
- M2M Security and Privacy
- M2M Session and Mobility Management
- M2M Standardization Activities
- M2M Transport and Application Protocols
- Emerging Technologies for M2M (RFID, Sensing, Actuating, etc)

- Energy-Efficient M2M
- Web Technologies for M2M

3 Important Dates

Paper Submission Deadline extended to: 20 January 2012

Paper Acceptance Notification: 15 March 2012 Camera-ready Paper Submissions: 1 April 2012 Registration Deadline for Authors: 1 April 2012

Workshop: 27-31 August 2012

4 Submission Guidelines

Authors are requested to prepare their papers in PDF file (Adobe format), and submit it electronically to the EDAS website: http://edas.info/newPaper.php?c=11197

following the submission instructions available in the conference website and IEEE Guidelines:

http://iwcmc.org/2012/

5 MTMC Organizing Committee

Workshop Chairs:

Shun-Ren Yang, National Tsing Hua University, Taiwan sryang@cs.nthu.edu.tw
Phone Lin, National Taiwan University, Taiwan plin@csie.ntu.edu.tw