IEEE ICC 2011 Workshop on
Embedding the Real World into the Future Internet (RWFI-2011)

Call for Paper

Capturing real world knowledge and events are becoming increasingly easier with sensor networks, social media sharing, location-based services, and the emerging Internet-of-Things. Currently, the knowledge capturing and using is mainly done on application level. Today's networks are mainly agnostic about what is happening around the terminals connected to the Internet. It has been proven over and over again that utilizing real world knowledge on the networking levels, as well on service level would help in optimizing systems towards higher performance, better user experiences, as well as toward more energy efficiency. It is time now to build a real world knowledge layer into the fabric of our networks and services.

In this workshop we like to explore new and innovative approaches that enable embedding real world information into networks, services and applications. Emphasis shall be given to autonomous systems like Wireless Sensor and Actuator Networks, Internet-of-Things devices, or ubiquitous device assemblies. These systems will spontaneously network with each other, with the environment, and the network infrastructure itself. New principles for self-X properties, analysis of emerging behavior, service platform approaches, new enabling technologies, as well as Web technology-based ideas shall be presented and evaluated. New paradigms like crowd sourcing of capturing real-world knowledge shall be examined. Security and privacy aspects, energy efficiency, ease of use, impact on societies, and interesting user experiences are important topics to examine and discuss.

Research in this area is slowly maturing. So it is now time for a workshop that brings together a wide range of researchers from various related fields. The workshop shall stimulate the thinking in this area and examine how this knowledge handling shall influence the Future Internet. The workshop will facilitate idea exchange as well as give room for discussions on this hot topic.

Important Dates:
- Paper submission deadline: Extended: Oct. 31st, 2010
- Accept/reject notice: Jan 15, 2010
- Camera ready submission: Feb 15, 2011
- Workshop: Jun 9, 2011

Organizing Committee:
- Stefan Gessler (NEC Europe Ltd., Germany)
- Laurent Herault (CEA Leti, France)
- Masayoshi Ohashi (ATR, Japan)

TPC Chair:
- Marimuthu Palaniswami, (U Melbourne, Australia)

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Workshop Website:
- www.rwfi.net
**Topics of Interest:**
We solicit contributions that report recent results, share experiences, or address research challenges in building a knowledge layer for the Future Internet and its applications. Particularly, we want to identify and address issues with a very high potential for significant impact on the future networking and service protocol stack. Areas of interest include but are not limited to

**Real-World Internet Approaches**
- Enabling technologies for capturing and handling real-world events and knowledge
- Technology for cooperating objects and systems
- Middleware for Internet-of-Things
- Mashups between Real-World and Cloud
- Cloud Services for Handling Real-World Information
- Resolution mechanism: how to find and organize the objects in the real world

**Innovative Usage of Real-World Information**
- Proactivity
- User Involvement
- Advanced Applications
- Linking, Combining, Annotating the World
- Real-World Games
- Crowdsourcing for capturing real-world events

**Security, Trust, and Privacy in handling Real World Information**
- security to protect the use of real world information
- mechanism to build trust among the cooperating partners in the Future Internet
- privacy enhancing techniques for handling sensor-, context-, and knowledge information

**Paper Submission Guidelines**
Prospective authors are encouraged to submit a IEEE ICC conference style paper, written in English with a maximum paper length of five printed pages (minimum 10-point font) including all text, figures, and references without incurring additional page charges (maximum one additional page with overlength page charge if accepted). Paper format is A4, file format PDF.

Accepted papers must be presented at the workshop by one of the authors. Accepted and presented papers will be published together with IEEE ICC 2011 proceedings and available on IEEE xPlore database. Submitted papers must represent original material that is not currently under review elsewhere, and has not been previously published. All papers will be properly peer-reviewed by members of the technical program committee and other experts active in the field to ensure high quality and relevance to the workshop.

For detailed information please refer to the author guidelines of the IEEE ICC 2011 Conference, especially for IEEE publication policy.