

1st International Workshop on System Support for the Internet of Things (WoSSIoT'07)

A workshop of [EuroSys 2007](#), Lisbon, Portugal, 20 March 2007

Presentation

The “Internet of Things” (abbreviated IoT) has added a new dimension to the world of information and communication technologies: from anytime, any place connectivity for anyone, we will now have connectivity to anything. The IoT connects everyday “Things” and devices to large databases and networks. “Things” carry embedded intelligence, using for example RFID (Radio Frequency IDentification) as identification system and sensor technologies to detect changes in their physical status and environment. The development of the IoT depends not only on technical innovations in the underlying hardware (wireless sensors, nanotechnology, low power devices, RFIDs), but also on appropriate software methodologies, technologies and tools in fields such as operating systems, middleware, ubiquitous and pervasive computing technology. Important economic forecasters such as the OECD, the UN and the EU, predict that the IoT will become a strategic area for new applications in the coming decades. Supply chain management is currently the driving application. It is expected that advances in smart homes, smart vehicles and personal robotics, together with more intelligent manufacturing techniques will become leading application areas in the near future.

- the network includes both passive (RFID) and active devices (sensor nodes, mobile phones...);
- Things will not be general purpose such as PCs, but will rather have a specific role to play; Identity and semantics need to be coupled to Things.
- the location of a Thing and its geometrical and spatiotemporal relationship to other objects need to be first-class entities.
- the granularity of Things varies between tiny sensors and large servers;
- the scale of the network will increase by several orders of magnitude;
- the IoT is a highly volatile context making it extremely dynamic
- the idea of the IoT is that many Things interact with each other, making reactivity an important characteristic;
- the inherent vagueness, imprecise information, and not knowing when Things will be reachable means that uncertainty becomes the rule instead of the exception;
- privacy and security are crucial concerns which need to be addressed.

Important Dates

Papers submission: February, 8 2007

Notification: February 26, 2007

Camera-ready paper: March 12, 2007

Organizing Committee

- Dhoua Ayed (K.U. Leuven)
- Julien Pauty (K.U. Leuven)
- Peter Rigole (K.U. Leuven)
- Yolande Berbers (K.U. Leuven)

Program committee

- Dhoua Ayed (K.U. Leuven)
- Yolande Berbers (K.U. Leuven)
- Paul Couderc (INRIA)
- Wolfgang De Meuter (VUB)
- Isabelle Demeure (ENST, Paris)
- Simon Dobson (UCD Dublin)
- Valerie Issarny (INRIA)
- Julien Pauty (K.U. Leuven)
- Peter Rigole (K.U. Leuven)
- Martin Strohbach (NEC Europe)

Topics of interest

We solicit papers that address one or several of the characteristics of the IoT mentioned above, dealing with the following topics (the list is not exhaustive):

- data management: context-data, spatiotemporal data, location;
- middleware for the IoT;
- hybrid architectures: passive (RFID) / active (smart objects...);
- service orientation: interoperability issues, semantic composition of things;
- deployment issue;
- programming paradigms for the IoT;
- design, implementation, and evaluation of systems for the IoT.

Submissions

We welcome papers describing early work and new ideas. Papers will be evaluated and selected with respect to their relevance to the workshop topics, their novelty and presentation quality. We hope to bring together an audience covering the different scopes of the workshop, which may also influence the selection process.

Papers should not exceed 5 pages double column including figures and tables in standard ACM format, preferably using 10pt or larger font. Papers must be submitted electronically in printable postscript or pdf form.

Printed proceedings will be distributed to participants and papers will be published on the workshop websites.

Please send your proposals to WoSSIoT_at_cs.kuleuven.

