Hydra organises 1st "Internet of Things & Services" research workshop at TrustAmI in Sophia Antipolis from 18th-19th September 2008

The 1st international Internet of Things & Services research workshop at TrustAmI, organised by the Hydra consortium, is one out of three workshops related to security issues in ambient intelligence environments featured by the Smart Event'08 (September 16-19, 2008, Sophia Antipolis). The workshop is designed for the exchange of insight between leading researchers and experts in the whole area of Semantic Interoperability, Ambient Intelligence, Sensor Networking, and generally the Internet of People, Things and Services.

The Hydra project, part of the 6th research frame program and co-funded by the EU, focuses the development of a flexibly applicable middleware for intelligent and networked embedded systems. The Hydra middleware will be the enabling link between all kinds of mobile and embedded networked devices, thus it will be the source for ambient intelligent networks that will bring intelligent interaction to connected devices. Besides, developer kits will be developed that will enable to create innovative, cost-effective and outstanding applications that will feature access to the entire capabilities of the middleware. The middleware will enable users to optimize their processes by gaining higher efficiency and flexibility. To reach these goals a team of 13 universities, research as well as industry companies is cooperating and working hard to make the vision, to create the most widely deployed middleware for networked mobile and embedded systems that will allow producers to develop cost-effective, innovative applications for new and existing devices, come true.

CNet is the technical coordinator in the Hydra project as well as a technology developer. CNet will give a key note at the workshop, deliver demonstrations and is also a co-author of several of the workshop contributions.

The concept of the "Internet of Things and Services" is gaining momentum in the emergent academic, industrial and market developments. Many key enabling technologies such as middleware and service-oriented architectures, RFID and sensor networking are available. Based on the seamless integration of embedded networked devices and services, it involves also automatic identification of things and services, communication, service selection & composition, resolution and invocation of services. The purpose of this concept is to embrace a range of exciting internet-enabled technologies for individual life support as well as an opportunity for commercial and business exploitation of emerging technology platforms. These technologies are to support *pervasive ambient intelligence* of objects and/or services through 1) context-based computation and 2) privacy-security-preferences-QoS-aware selection, resolution and execution of "smart" service-oriented model-driven systems and services.

However, the envisioned world of Ambient Intelligence and pervasive computing would be closer to realising its full potential if the embedded devices were able to communicate and semantically interoperable with each other so as to cooperate and fulfil tasks. The workshop tackles these issues through theoretical and applied research presentations, prototypes demonstrations and discussion panels that considers the relevant framework conditions.

In this context, several pressing research issues arise:

- The assumption of the interconnectivity of physical things and the ability to automatically take advantage of context information and computation to invoke appropriate action naturally highlights issues of **privacy, security and trust.**
- The need for seamless interoperability and re-configurability of Things & Services for flexible end-to-end solution integration highlights issues of providing **secure service provisioning and bundling** and the use of **privacy-enhancing technologies** within the Internet of Things & Services Architecture.

Papers presented at the workshop cover the following topics:
- Security under the Internet of Things & Services Architecture
- Context-Awareness and Data Fusion in the Internet of Things & Services Architecture
- Architectural Issues and tools for the Internet of Things & Services
- Use cases and exploitation of the Internet of Things & Services

For detailed program information click here.

Registration for the workshop click here.

Further Links:

- Project website: http://www.hydramiddleware.eu/

Subscription of Hydra newsletter after you have filed registration to our website:
http://www.hydramiddleware.eu/downloads.php?cat_id=3