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SPITFIRE wins best demo award at Future Internet Assembly The Internet of Things (IoT) is predicted to be one of the main drivers of innovation and economic growth in the coming years. The EU project SPITFIRE provides some of the required core enabling technologies for the IoT, combining the latest networking and service-based access standards with self-configuration and Web-compatible data management. Demoing this forward-looking research vision, earned the SPITFIRE team the best demo award at the Future Internet Assembly (FIA), the EU's flagship showcase event in Dublin, May 8-10, 2013. FIA showcases world-leading projects in all areas of EU research related to the Internet. In this highly competitive setting, SPITFIRE managed to convince with its research results and their translation into a stunning demo.

http://www.spitfire-project.eu/fia2013bestdemoaward

The Internet of the Future The Internet has long moved away from computers alone. Smart phones, tablets, smart meters, and recently smart sensing and actuation devices attached to "Things" or the human body – the Internet of Things – will constitute the majority of objects connected to the Internet. Cisco foresees a mind-boggling $14.4 trillion market size for this in its "Internet of Everything" vision [1]. Other companies and the world's biggest technology consulting companies publish similar estimates for the future IoT market. Yet, few of such applications exist. A major reason for this are the currently high costs and the complexity of IoT application development and the shortage of skilled experts, understanding the plethora of different technologies and application needs at the same time. The EU project SPITFIRE (Semantic Service Provisioning for the Internet of Things using Future Internet Research by Experimentation), part of the EU's Future Internet Research by Experimentation (FIRE) initiative may provide a significant building block for the solution of this problem. SPITFIRE aims at providing the same ease of use and simplicity for developers that made the World-Wide Web a global success. SPITFIRE's basic idea is simple: Why don't we provide the same abstractions as the Web to developers – RESTful interface, Linked Data, and ontologies – and hide the rest? "The Semantic Web and the Internet of Things may seem like miles apart, but combined "in the SPITFIRE way", they are becoming a key enabler for the success of the Internet of Things. This will facilitate companies to come up with new and innovative products and will stimulate economic growth and create new jobs." says Prof. Manfred Hauswirth (DERI, NUI Galway), coordinator of SPITFIRE. SPITFIRE provides the well-known upper-layer Web interfaces to potentially enable any Web developer to write IoT applications. This means programming an IoT application boils down to just application logic + Linked Data (RDF, SPARQL) + calls to RESTful services. At the same time cutting edge standards are being supperted at the lower layers – CoAP ("HTTP for sensors"), IPv6 (6LowPAN), and efficient energy management – without being

seen or even known by the application developer. RDF, SPARQL, and ontologies are supported through highly efficient implementations and binary formats down to the lowest layers. This enables SPITFIRE to support true self-configuration: A device can learn what it is, where it is and what it does and can represent this internally in standardized semantic formats. Thus sensor and actuators can “understand” and interact with other sensors, actuators and their environment (and vice versa) without human intervention in a true M2M way. For realizing and implementing these ground-breaking ideas, SPITFIRE was awarded the Best Demo Award at the Future Internet Assembly (FIA) in Dublin, Ireland, May 8-10, 2013 [2]. A detailed description of the demo along with videos and photos is available at the SPITFIRE website [3]. The SPITFIRE consortium consists of DERI-NUIG (coordinator, Ireland), University of Lübeck (Germany), TU Braunschweig (Germany), Research Academic Computer Technology Institute (Greece), iMinds (Belgium), Daysha Consulting (Ireland), Coalesenses (Germany) and is funded by the European Union under FP7. Links [1] Joseph Bradley, Joel Barbier, Doug Handler: “Embracing the Internet of Everything To Capture Your Share of $14.4 Trillion”. White Paper. Cisco, 2013, http://www.cisco.com/web/about/ac79/docs/innov/IoE_Economy.pdf [2] Future Internet Assembly, Dublin, Ireland, May 8-10, 2013, http://www.fi-dublin.eu/ [3] SPITFIRE wins FIA Best Demo Award, 2013, http://spitfire-project.eu/fia2013bestdemoaward