3rd International Workshop on Interoperability and Open-Source Solutions for the Internet of Things (InterOSS-IoT 2018)

09:00 - 13:00 Hrs – 06 June 2018, Bilbao, Spain
Euskalduna Jauregia Conference Center - Sala A3.2

Co-located with
Global IoT Summit 2018 as part of IoT Week 2018
04 - 07 June 2018, Bilbao, Spain

The InterOSS-IoT workshop is co-organized by the H2020 **symbIoTe** and **BIG IoT** Research and Innovation Actions, which are part of the **Internet of Things European Platform Initiative (IoT-EPI)**, working on relevant aspects for enabling and bridging the IoT research and industry. The main objective of this workshop is to exchange experiences and ideas with the IoT community as well as contribute to build new knowledge around open issues and gaps on IoT interoperability, architectural principles, security and standardization efforts.

Organized as an International scientific event, the InterOSS workshop this year combines two keynote talks on privacy and security and the interoperability aspects of the Internet of Things, with contributions from the participants to further advance IoT research and solution space through peer reviewer Papers. Researchers and practitioners from academy and industry will share their experiences on IoT platforms and middleware solutions. Participants can expect from InterOSS-IoT to expand their understanding of IoT interoperability aspects and privacy and security issues, and to identify and discuss existing and emerging solutions, standards, enabling IoT interoperability as well as open-source initiatives.

Workshop Agenda

Time	Title	Presenter(s)
09:00 – 09:10	Welcome and Opening Statements	Sergios Soursos, Intracom SA Telecom Solutions Arne Broering, Siemens AG
09:10 – 09:40	**Invited Talk: Scaling the Internet of Things** This talk will provide an overview on where we are in terms of the Internet of Things industrial adoption and where the scalability aspects have been addressed, highlighting the interoperability remaining challenges and presenting a visionary perspective on how to address the coming scaling challenges.	Omar Elloumi, Nokia, OneM2M General Chair
Session 1:	**Approaches on Semantic Interoperability** **Chair:** Ivana Podnar Zarko, University of Zagreb - FER	
09:45 – 10:05	Towards Semantic Model Extensibility in Interoperable IoT Data Exchange Platforms	Yulia Svetashova, Robert Bosch GmbH
10:05 – 10:25	Ontology-driven Device Descriptions for IoT Network Management	Kristina Sahlmann, HTW Berlin
10:25 – 10:45	Enabling IoT Platform Interoperability Using a Systematic Development Approach by Example	Michael Schneider, Karlsruhe Institute of Technology

10:45 – 11:15	Coffee Break
11:15 – 11:45	**Invited Talk: Open Source, Security and IoT** The talk will highlight the role open source in the ongoing IoT build-out, across device and cloud ecosystems and within the various IoT project stacks and frameworks. Building upon this vision, the talk will examine conventional wisdom and real-world statistics for the security of open source software, and how its presumed resiliency and known (and unknown) vulnerabilities impact security at the edge and in the cloud that hosts IoT apps and infrastructure. Finally, it will review community and commercial efforts to build more secure code with open source and highlight best practices for choosing and integrating into IoT projects and products.	Bill Weinberg, Open Source Sense, Linux Pundit
Session 2:	**Privacy, Security and Business Aspects** **Chair:** Martin Serrano, INSIGHT, National University of Ireland Galway	
11:45 – 12:10	Privacy risk analysis in the IoT domain	Jose L. Muñoz, Technical University of Catalonia
12:10 – 12:35	LATe: A Lightweight Authenticated Time Synchronization Protocol for IoT	Renzo E Navas, IMT Atlantique
12:35 – 13:00	From Innovative Niches to a Cooperative IoT Ecosystem	Sofia Aivalioti, Sensing & Control
13:00	End of Workshop	

Keynote Speakers – Short CVs

Dr. Omar Elloumi leads oneM2M technical plenary, a partnership project chartered to advance interoperability standards for consumer, enterprise and industrial IoT. He joined Nokia in 1999 and held several positions including research, strategy and system architecture. He is currently with Nokia Bell-Labs and CTO group where he is responsible for standards and system architectures for IoT. Dr Elloumi is co-editor of books on M2M communications and Internet of Things. He is also involved in program committees of several international conferences and magazines on M2M and IoT.

Bill Weinberg has three decades of open source software in different areas, from embedded and open systems, telecommunications, automotive, to other mobile technology experience. Most recently, as a Senior Director at the Linux Foundation and at Black Duck Software and currently at Open Source Sense as co-founder, Bill led the open source strategy practices, guiding global technology companies and enterprise software organizations in enhancing their ROI from open source, leading remediation and migration projects, and helping to launch new initiatives, including ONAP. Bill was a founding team-member at MontaVista Soft. and worked at OSDL, Lynx Real-Time Systems, Acer Computer Brazil, and Microtec Research.