IoT Systems interoperability

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Résumé

The tutorial will present the IoT vision, challenges, and efforts achieved by the standardization bodies to design a globally agreed IoT service platform. The *oneM2M* standard will be introduced as a promising solution for IoT cross-domain interoperability. The participants will be asked to follow practical sessions to learn how to integrate heterogeneous devices based on the *oneM2M* API, and quickly develop *oneM2M* applications in smart building use cases.

- **Dr. Mahdi BEN ALAYA** is Founder and CEO of Sensinov. He obtained a Ph.D in systems architectures from the Federal University of Toulouse in France. He is Vice Chairman of the oneM2M Testing Group. He is co-founder and technical manager of the open source project OM2M at the Eclipse foundation. He is selected as expert by ETSI to develop interoperability tests for various IoT standards and to develop extensions and conformance tests for SAREF ontology. He organized various schools on IoT in France,Taiwan and Korea. He initiated and managed several R&D projects at LAAS-CNRS and Sensinov including H2020-LSP5-AUTOPILOT, ITEA2-USENET and ITEA2-A2NETS. He has authored more than 20 publications in international journals and conferences and more than 40 contributions in M2M standards. benalaya@sensinov.com

  Dr. Khalil DRIRA, Ph.D. Univ. of Toulouse, is Research Director, a full-time research position at the French National Center for Scientific Research (CNRS). His research interests include formal design, implementation, and provisioning of distributed communicating systems and cooperative networked services. His research activity addresses different topics in this field focusing on model-based analysis and design of correctness properties including robustness, adaptability and reconfiguration. He is or has been involved in different European and French R&D projects (FP6, FP7, ITEA, H2020, PIA, ANR, ...) in the field of distributed system engineering, collaborative activities, distributed systems, IoT/M2M and software architectures. He has organized and chaired several international conferences including IEEE-WETICE, ECSA, SESOS. He has been guest editors of different journal special issued including JSS, FGCS, Wiley Concurrency and Computation. More information is available on: http://homepages.laas.fr/khalil

  Dr. Ghada GHARBI obtained a Ph.D in Networks and Telecom from the Federal University of Toulouse in France. She is selected as expert by the ETSI to develop an interoperable devkit system offering testing and debugging tools for IoT ecosystem.

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She is committer in the open source project OM2M at the Eclipse foundation. She was contractual professor at INSA of Toulouse and participated in the constitution and the establishment of a training unit around the IoT. She also participated in the organization of several schools on IoT worldwide. ghada.gharbi@sensinov.com