IoT Cybersecurity: state-of-the-art, news, forensics and risk analysis approach

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INTRODUCTION:

The future is cybersecurity in the IoT, ICS and SCADA area! The IoTdevices is in our life and ICS / SCADA systems in "hide mode" in our day-by-day activities. Starting from autonomous vehicle, through navy, train, agriculture, industrial 4.0, energy, oil & gas, the IoT (include ICS and SCADA) are around us. At the moment more documents are under review or in draft (ISO, MITRE, ENISA, NIST, etc). The standardize process is long but in the main time, what is the cybersecurity state of the art? My workshop is divide in three parts. In the first part I will analyze and explain the documents and summarize the "high-light" keywords to construction a matrix. I will analyze also the methodology to manage the specific risks. In the second part I will analyze the best specific tools to have vulnerability assessment and penetration test for manage the realistic situation. In the 3rd part I will analyze the suggest method to acquire, in forensics way, the evidence in the IoT, ICS and SCADA devices for investigation. On top of this I will show you the Report of the Strategic Forum for Important Projects of Common European Interest under European Commission. This report touch high level technologies

such as Connected, clean and autonomous vehicles, Hydrogen technologies and systems, Smart health, Industrial Internet of Things, Low-CO2 emission industry, Cybersecurity. Of course my focus is on the IoT and cybersecurity divided in vision and strategic approach. Author biography Dr Antonio Mauro Antona Mauro member of the Scientific Committee for the UNI 11506 as certifier and examiner and Adjunct Professor in many University, Military and Government organizations, I'm also Professor and member of the Academic Board at The University of Northwest in U.S.A. I'm co-authored several books on Information Security and Intelligence, Computer Forensics, Digital Investigations, Cloud Computing, IoT and I also a Consultant for Judge in the Court in the computer forensics and digital forensics area.