# ASSURE

## ASSURED CYBERSECURITY AND INSIDER THREATS: TURNING POLICIES INTO MITIGATION PRACTICES FOR SUSTAINABLE SMART CITIES

DECEMBER 14 @ 10:00 AM - 12:00 PM

The overarching vision of future-proofing the next-generation of Smart Connectivity "Systemsof-Systems", comprising a multitude of heterogeneous embedded systems, is of paramount importance for cementing Europe's vision towards secure and sustainable smart cities. In this context, considering the diversity of involved stakeholders with varying security and privacy requirements, the endmost goal is to enable the **long-term transformation of such distributed environments with security solutions that can cover all the layers of the deployed application stack**; from network security to application security and data security, each element plays an important role into the system's overall security posture.

In this avenue, under the guiding principle of "*Never trust, Always Verify*", we have to rapidly put new trusted computing technologies and operational practices in place so as to be able to transform edge devices into security "hardened" tokens capable of withstanding all emerging types of attack vectors. But how has the cyber-security posture of such safety-critical applications has changed and what are the types of risks and vulnerabilities that attackers can exploit?

A core building block towards providing such holistic security solutions is the ability to perform a detailed **risk quantification** towards identifying the **most impactful types of threats that can affect the operational model of the target system**. This, in turn, can enable the definition and enforcement of an optimized set of security policies that best protect all hardware and software assets from unauthorized access and cyber-attacks.

In this context, the **ASSURED** project aims to develop a novel (formally verified) runtime assurance framework capable of **automatically recommending the best suite of security policies capable of reducing complex attack surfaces in (near) real-time while not affecting their safety**. ASSURED considers risk assessment and security policy recommendation to comprise four dimensions which together constitute the breadth of a system's capacity in delivering cyber-security: **quantification of risks and threats to protect against**; sets of **mitigation measures that can attest to the correct operation of all** 

**comprised devices**; creating **effective and universal security policy recommendation language** that can be used for expressing cyber-security policies at different layers of the application stack; and, **controlling risks through standards and certification technologies**.

This webinar will provide an overview of the security and trusted computing capabilities that ASSURED can offer. Participants will be introduced to the employed security policy definition language capable of (automatically) compiling policies that are expressive, deployable and enforceable while allowing for their update during runtime if new risks have been identified and based on the resources available on the target system. The goal is to reason behind the construction of new types of policy languages, their application in safety-critical domains such as smart cities and get valuable feedback on their usability on real use cases and applications.

#### MORE INFO & REGISTRATION

Event webpage: <u>https://www.project-assured.eu/event/assured-policies-webinar/</u> Registration page: <u>https://ti.to/assured/assured-policies-webinar/</u>

### AGENDA

TIME (CET)	PRESENTATION	SPEAKERS
10:00 – 10:10	Welcome and Webinar Arrangement	Jean-Baptiste Milon, MARTEL INNOVATE (Switzerland)
10:10 – 10:25	Smart Cities Use Case: From Theory to Practice towards Enhanced Safety	Dimitra Tsakanika & Ilia Christantoni, <i>DAEM (Greece)</i>
10:25 – 11:00	ASSURED Road-Map Towards the Adoption of Trust Assurances for Sustainable Security in Next- Generation "Systems-of-Systems"	Thanassis Giannetsos, UBITECH (Greece)
11:00 – 11:20	Risk Assessment and Policy Recommendation Engine	Dimitris Papamartzivanos, UBITECH (Greece)
11:20 – 12:00	Wrap Up and Main Discussion	Thanassis Giannetsos & Jean-Baptiste Milon



ASSURE CyberSecurity and Insider Threats: TURNING POLICIES INTO MITIGATION PRACTICES FOR SUSTAINABLE SMART CITIES

14 December 2022 | 10:00 - 12:00 CET

#### ABOUT ASSURED

<u>ASSURED</u> is a three-year Research & Innovation project funded by the European Union's Horizon 2020 programme under Grant agreement number 952697. ASSURED project is powered by a strong consortium with partners who were carefully selected to provide complementary skills and competencies, which cover all project objectives and activities, starting from the generation of ideas to analysis of requirements, to specification and design, low-cost implementation, system integration, up to demonstration, validation and beyond.

**REGISTER NOW** 

The partners of ASSURED consortium are <u>Technical University of Denmark</u>, <u>Martel Innovate</u>, <u>Eindhoven University of Technology</u>, <u>Technical University of Darmstadt</u>, <u>University of Surrey</u>, <u>Mellanox Technologies</u>, <u>Intrasoft International</u>, <u>Unisystems Luxembourg</u>, <u>UBITECH</u>, <u>Data</u> <u>Intelligence Solutions</u>, <u>United Technologies Research Center</u>, <u>Space Hellas</u>, <u>Bremer Institut</u> <u>für Produktion und Logistik</u>, <u>Dimos Athinaion Epicheirisi Michanografisis</u>.

#### CONTACTS

Twitter: https://twitter.com/Project Assured

LinkedIn: https://www.linkedin.com/company/assured-project/

Email: info@project-assured.eu

#### **Contact for press**

Valentin Popescu, Martel Communication and Dissemination Specialist valentin.popescu@martel-innovate.com

