

WHAT IS "CERTIFY"?

CERTIFY is a consortium research project with 12 partners from 8 countries. It offers a comprehensive approach for managing the IoT security lifecycle, including security by design, continuous assessment and monitoring, timely detection and mitigation, secure OTA updating, and information sharing. CERTIFY ensures high-level security for IoT stakeholders.

OBJECTIVES

CERTIFY has SMART (Specific, Measurable, Achievable, Realistic and Timely) specific objectives:

- Cybersecurity awareness for IoT-enabled environments through a multi-stakeholder sharing of threats and mitigations.
- Secure reconfiguration and maintenance of customizable embedded devices by means of hardware primitives and services.
- Perform security operational management based on bootstrapping and monitoring of attacks and malicious behaviors.
- Run time security compliance and continuous certification methodology via objective metrics.
- Foster knowledge delivery via wide dissemination, capacity building and supporting activities. Build a robust exploitation plan to boost ROI by optimizing current and future EU cybersecurity capabilities.
- Industrial validation of the CERTIFY framework in IoT ecosystems.

PILOTS

Pilot I: Secure Management of Devices Enabling an Intelligent and Connected Aircraft Cabin Pilot Partners : Collins (lead), TUp, ST-I

Pilot II: Smart Micro-Factories Pilot Partners : DWG (lead), UMU

Pilot III: Tracking and monitoring of artworks Pilot Partners : ST-I (lead), UZH, MOD

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AMBITIONS 🕅

The main contributions of CERTIFY are as follows, going beyond the state of the art:

- Novel framework to manage security throughout the lifecycle of the IoT device.
- · Certification & security evaluation.
- · Enhanced open hardware security.
- Secure integration of IoT devices.
- · Behavioural profile.
- · Security monitoring & detection.
- Information sharing and upgrading.

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