

VARIoT: Vulnerability and Attack Repository for IoT

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The VARIoT project with TENtec (Grant Agreement #28263632) is co-financed by the Connecting Europe Facility (CEF) of the European Union. The project started in July 2019 and ends June 2022. Project outputs are mainly disseminated through the European Data Portal (EDP). The different components involved are planned to reach a range of TRLs from 4 to 8.

Objectives

The main goal of the project is to create a service providing actionable information regarding the Internet of Things (IoT), which can be used to ensure cybersecurity of IoT devices and the whole Internet, and which can be processed in a manual way (by analysts) or in an automatic way (by various security systems). Providing such open data will increase cybersecurity level of all entities able to process such information, and also, in an indirect way, of all users globally.

Specifically, the project aims at: 1. creating an IoT devices vulnerabilities and exploits database; 2. improving IoT-related data collection through large-scale systematic mapping of IoT devices on the Internet; 3. creating a database of aggregated, correlated and enhanced IoT information of various types such as IoCs, events, incidents, malware samples; 4. creating datasets of IoT traffic, of both legitimate and malicious natures, as well as their associated behavioural models and features; 5. creating mechanisms of active IoT monitoring and devices information harvesting for discovering new threats; 6. creating interfaces to share selected data through (a) the EDP, (b) the MISP platform, and (c) reports from Shadowserver to national CSIRTs.

Consortium

The project is led by **NASK-PIB**, Poland. Other partners of the consortium are the **Shadowserver** Foundation Europe in the Netherlands; Security Made in Letzueberg G.I.E (**SMILE**), Luxemburg; **IMT**, through Télécom SudParis; and the Faculty of Engineering from **Mondragon University** in Spain.