Development, Operation, and Quality Assurance of Trustworthy Smart IoT Systems

Fact Sheet

Project Information

**ENACT**
Grant agreement ID: 780351

Funded under H2020-EU.2.1.1.

Overall budget € 4,928,542.50

EU contribution € 4,928,542.50

Coordinated by SINTEF AS Norway

Closed project

Start date 1 January 2018

End date 31 March 2021

Objective

To unleash the full potential of IoT, realizing the digital society and flourishing innovations in application domains such as eHealth, smart city, intelligent transport systems, and smart manufacturing, it is critical to facilitate the creation and operation of trustworthy Smart IoT Systems. Since smart IoT systems typically operate in a changing and often unpredictable environment, the ability of these systems to continuously evolve and adapt to their new environment is decisive to ensure and increase their trustworthiness, quality and user experience. The DevOps movement advocates a set of software engineering best practices and tools, to ensure Quality of Service whilst continuously evolving complex systems and foster agility, rapid innovation cycles, and ease of use. Therefore, DevOps has been widely adopted in the software industry. However, there is no complete DevOps support for trustworthy
smart IoT systems today. The main technical goal of ENACT is to develop novel IoT platform enablers to:
i) Enable DevOps in the realm of trustworthy smart IoT systems, and enrich it with novel concepts for end-to-end security and privacy, resilience and robustness strengthening trustworthiness, taking into account the challenges related to “collaborative” actuation and actuation conflicts.
ii) Facilitate the smooth integration of these to leverage DevOps for existing and new IoT platforms and approaches (e.g. FIWARE, SOFIA, and TelluCloud).

This will be accomplished by evolving current DevOps methods and techniques to support the agile development and operation of smart IoT systems, and provide a set of novel mechanisms to ensure quality assurance and trustworthiness, such as actuation conflict handling, continuous testing and delivery across IoT, edge and cloud spaces and end to end security and privacy management. Through this ENACT will provide a DevOps framework for smart IoT Systems

Fields of science

Programme(s)

Topic(s)

Call for proposal

H2020-IOT-2017

Funding Scheme

Coordinator

SINTEF AS

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<th>Address</th>
<th>Activity type</th>
<th>EU contribution</th>
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<td>Strindvegen 4 7034 Trondheim</td>
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Participants (14)

**CA TECHNOLOGIES DEVELOPMENT SPAIN SA**

- **Spain**
- **EU contribution**: € 149,322,78
- **Address**:
  - Plaza De La Pau Sn Wtc
  - Alameda Park Edificio 2
  - Planta 4
  - 08940 Cornella De Llobregat
  - Barcelona

**EVIDIAN SA**

- **France**
- **EU contribution**: € 469,337,50
- **Address**:
  - Rue Jean Jaures
  - 78340 Les Clayes Sous Bois

**INDRA SISTEMAS S.A.**

- **Spain**
- **EU contribution**: € 397,500
- **Address**:
  - Avenida De Bruselas 35
  - 28108 Alcobendas-madrid
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ISTITUTO PER SERVIZI DI RICOVERO E ASSISTENZA AGLI ANZIANI

Italy

EU contribution

€ 118 125

Address

Borgo Mazzini 48
31100 Treviso

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

BALTIC OPEN SOLUTIONS CENTER

Latvia

EU contribution

€ 132 080

Address

Ainazu Iela 13
2160 Saulkrasti

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

ELEKTRONIKAS UN DATORZINATNU INSTITUTS

Latvia

EU contribution

€ 136 250

Address

Dzerbenes Iela 14
1006 Riga

Activity type

Research Organisations

Website

Contact the organisation

STIFTELSEN SINTEF

Norway

EU contribution

€ 0

Address

Strindveien 4
7465 Trondheim

Activity type

Research Organisations
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<td>BEAWRE DIGITAL SL</td>
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