

Demonstration of MEC IoT API

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Abstract

This demonstration aims at

1. verifying the technical feasibility of a MEC IoT Service (IOTS) being standardized in MEC033 – IoT API specification and
2. highlighting potential real-world IoT use cases making use of IoT API.

Specifically, we will show how to set up end-to-end connectivity between:

- a simulated *IoT Device* with limited computing/networking capabilities, which aims at publishing small packets on a topic-based message bus
- a sample *IoT application*, which aims at consuming the messages it receives by subscribing to the same topics on the message bus.

Technologies and Standards

In the following, we present the main technologies employed for this demo and applicable standards:

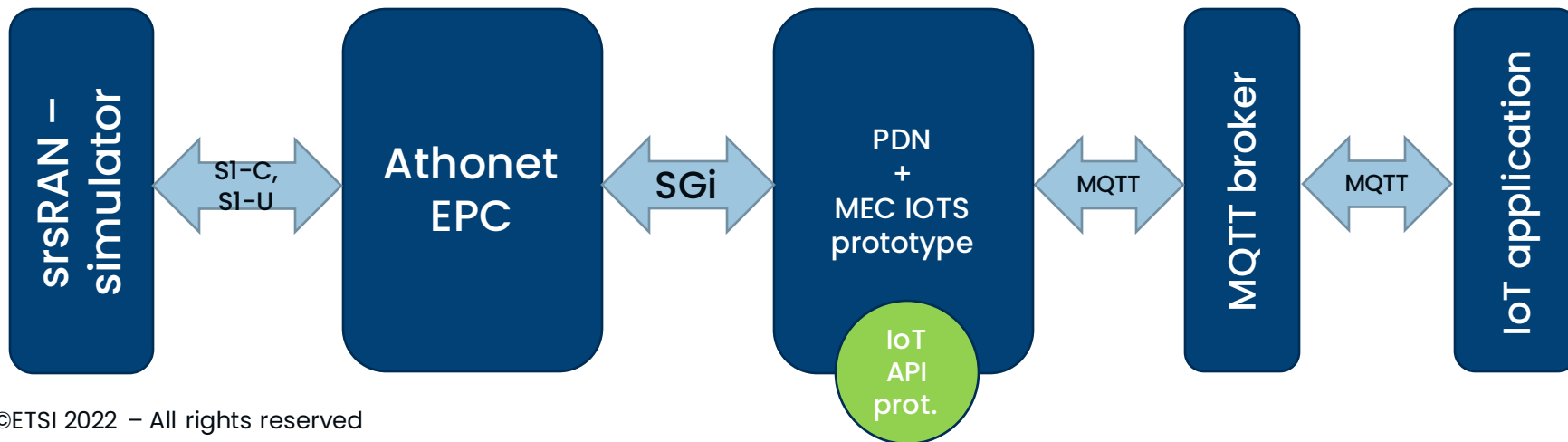
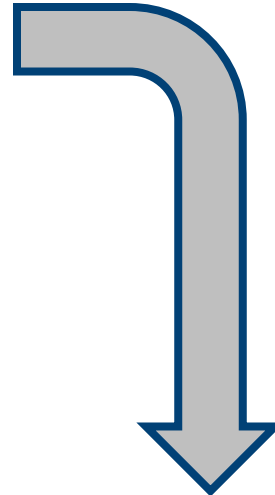
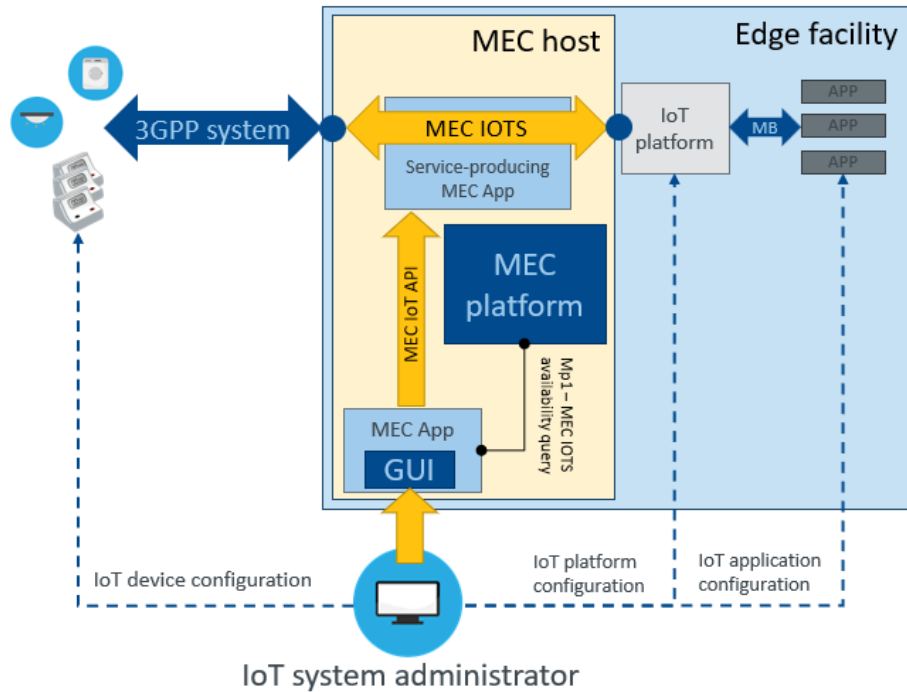
Technologies:

- 3GPP EPC deployed on VirtualBox on the workstation
- UE (IoT device) and eNB simulated using srsRAN connected to the EPC
- MQTT used as transport protocol on the message bus

Standards:

- The preliminary prototype of IoT API and MEC IOTS is based on MEC033 – IoT API (WIP)
 - A presentation of the current status of MEC033 will be provided during 'SESSION 6: THE ROLE OF EDGE IN IoT' on Wednesday, Oct. 12, at 11:30!

MEC IoT Service and IoT API



Live Demo