IntellIoT component available for OC #2 integration - Details

Name: IOBOX
Responsible partner(s): Telecommunication Systems Institute (TSI)

Brief description: The Interoperability Box is a component that interfaces low-end devices with the services that run at higher levels of the IoT application. These devices cannot handle communication requirements with the IoT application either because of limited computational resources or network capabilities. The Interoperability Box exposes these devices as Rest APIs that are described through W3C WoT Thing Descriptions (TDs).

Interfacing (I/O): The Interoperability Box is composed of modules that provide physical interfaces to low-end devices (e.g. Bluetooth LE, i²C) and Rest API interfaces to external services.

Main interactions: Interoperability Box instance is responsible for registering the devices available to it as TDs to the multi-agent system (HyperMAS), as well as providing access logs to the DLT Manager. Deliverable D2.6, subsection 2.2.1, provides for more details regarding main component interactions.

Deployment: The Interoperability Box has to be deployed in nodes that have direct physical communication with the low-end devices. The nodes must be running Linux OS with the proper device drivers installed.

Licensing: Proprietary

Deliverable references: Please refer to deliverable D2.6 – “High level architecture (final version)”, for more details regarding interfacing & integration of Interoperability Box with the HyperMAS infrastructure, as well as deliverable D3.1 – “Interoperable, Self-aware & Semi-autonomous Multi-agent Systems”, for more details on the design and development of the component.