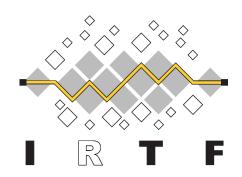
# Web of Things

T2TRG Summary Meeting at IETF 97 Seoul, Republic of Korea, 2016





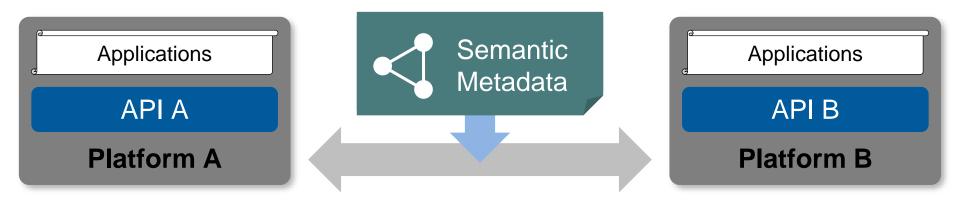
### W3C WoT Mission

Not to be yet another standard

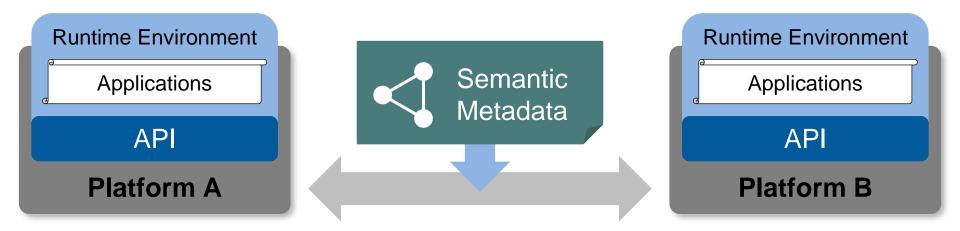


"enable easy integration across IoT platforms and application domains" "complementing available standards"

## Semantic Metadata for Interoperability



# Portable IoT Applications



## W3C WoT Building Blocks

### **WoT Scripting API:**

A standardized API to simplify IoT application development and enable portable scripts across vendors and device, gateway, and cloud platforms. The API allows to expose and consume Things according to the TD Interaction Model.

### **WoT Thing Description (TD):**

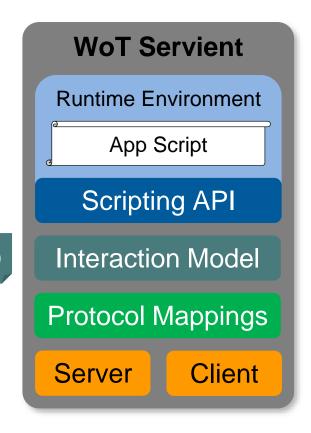
Provides metadata of the interactions, data model, communication, as well as security mechanisms of the Thing. Using JSON-LD, the TD can be consumed by classic JSON parsers, but provides extension points for optional rich semantic tooling.

### **WoT Protocol Mappings:**

The TD also describes the usage of protocols. A vanilla protocol stack can be configured at runtime to produce message that will be understood by the targeted Thing (cf. different HTTP APIs or OCF, oneM2M, and LWM2M dialects of CoAP).

### **Security & Privacy:**

W3C WoT does not invent new mechanisms, but ensures that all building blocks provide means to describe the security and privacy mechanisms used in a specific platform and provides adversary testing of Things.



## WoT Interest Group

- Exploration and collaboration
- Since April 2015, re-chartered in August 2016
  - <a href="https://www.w3.org/2016/07/wot-ig-charter.html">https://www.w3.org/2016/07/wot-ig-charter.html</a>
- 210 participants
- 7 face-to-face meetings
  - April 2015, Munich, Germany
  - July 2015, Sunnyvale, CA, USA
    Joint T2TRG (Prague IETF 93)
  - October 2015, Sapporo, Japan
    Joint T2TRG (Yokohama IETF 94)
  - January 2016, Nice, France
    Joint T2TRG
  - April 2016, Montreal, Canada
  - July 2016, Beijing, China
  - September 2016, Lisbon, Portugal Joint T2TRG

## (Proposed) WoT Working Group

- Normative standardization work
- Propsed Charter
  - https://www.w3.org/2016/09/wot-wg-charter.html
- AC Review September 2016
  - https://www.w3.org/2002/09/wbs/33280/wotwg2016/results
  - 49 support as is
  - 4 comments, but support anyway
  - 2 comments, formally object if not changed
- Resolving comments
  - RDF dependency / complexity of semantic frameworks
  - Scope
  - Security

### W3C WoT Online Resources

- W3C WoT Interest Group
  - https://www.w3.org/2016/07/wot-ig-charter.html
  - <a href="https://www.w3.org/WoT/IG/">https://www.w3.org/WoT/IG/</a>
  - https://lists.w3.org/Archives/Public/public-wot-ig/ (subscribe to list)
- (Proposed) W3C WoT Working Group
  - https://www.w3.org/2016/09/wot-wg-charter.html
  - https://www.w3.org/2002/09/wbs/33280/wotwg2016/results
- Technical work: GitHub
  - https://github.com/w3c/wot
- Organizational work: Wiki
  - https://www.w3.org/WoT/IG/wiki/Main\_Page