

A faint, light gray world map is visible in the background, centered on the Atlantic Ocean. The map shows the continents of North and South America, Europe, and Africa.

# A Study of Information Models in IoT Standards: Interoperability Perspective

WISHI Presentation  
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# What and Why?

- What?
  - Conduct a survey/study of information models in IoT standards
- Why?
  - Improve understanding and awareness of what is out there?
  - Inform future work on interoperability and standards
- How?
  - Common framework for description and analysis, next slide
- Purpose of this announcement
  - Assess value to wishi/T2TRG – interest, participation...

# Approach

- Define a common framework for description, including
  - Domain (target, specified)
  - What is defined wrt Information Model, *common terminology*
    - Objects/things/resources
      - Properties, including metadata
      - Interactions, interfaces, serialization
      - Formal ontologies, dictionaries, naming...
  - World-view assumptions, specified or implied
    - Protocols, Security
    - Management – discovery, provisioning, onboarding, updating
- Other potential stuff of interest tbd
  - Tools, SDKs, languages, IP policy, collaborations, status...

# Deliverables

- Paper (living document)
  - Intro – general concepts, IoT Information Models
  - Common framework for description, analysis
    - Terminology (and decoder), elements studied
  - Description of Info Models in IoT standards
    - Use common framework, structure, terminology
    - Give specific consistent example in each, e.g. temperature sensor
  - Wip: IPSO, OCF, Haystack, WoT (partial), OPC UA
  - Others, tbd: iotschema.org, OneM2M, your favorite here...
- Conclusions
  - Interoperability directions
  - Successful practices to emulate

# Call to Action: wishi activity?

- Why wishi?
  - Neutral (not defining a standard), respectable, knowledgeable body
  - Cross-standards interest and expertise
- Result
  - Wishi/T2TRG? paper
  - Learn and inform
- Public value/service
  - Facilitate understanding, collaborations, interoperability
  - NOT a judgement, not a contest
- Call for participation
  - Contribute, comment
  - Add standards not covered
  - Solicit feedback from covered standards for accurate representation

# Q&A

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