iot.schema.org

Community Teleconference

June 27, 2018

Agenda

- Review agenda
- Mapping Haystack and Brick Ontology
- Feature of Interest in iot.schema.org
- Review introductory materials and tools
- Review the W3C CG Charter and organization
- Upcoming events and conferences
- AOB

(Mapping Haystack and Brick)
(Feature of Interest Modeling)

Tools and infrastructure

- Work in progess: definitions using RDF shapes
  - Flexible structure and value constraints
  - Augment the RDFS structural constraints
  - Alternative to PropertyValueSpecification for data types
  - Way forward for browsing definitions in HTML
- Constructor tool to populate WoT Thing Descriptions from iot.schema.org capability definitions
- Working on the roadmap to converge/merge with schema.org

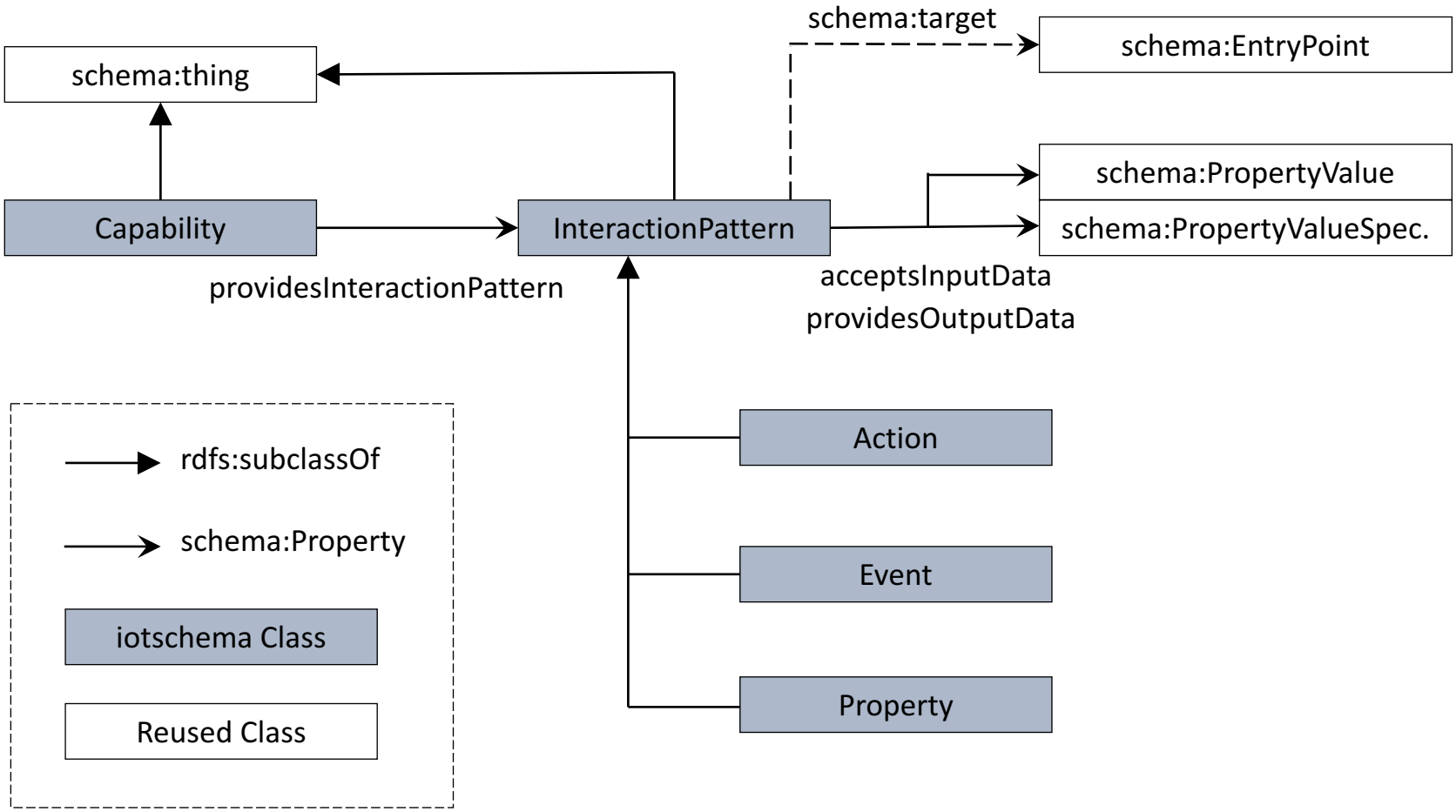
iot.schema.org one pager

- What is it?
  - An extension to schema.org and a meta-model for the semantics of interacting with connected things
  - Open, public definitions for connected things and their context, in a reusable and protocol-agnostic format
- What problems does it solve?
  - The difficulty for domain experts and system developers to create and use formal semantic descriptions
  - The lack of common semantic vocabularies and conceptual models
  - Interoperability across diverse application domains
- How does it solve these problems?
  - Common meta-model with categories of Capability, Interaction, and Data, that can be associated with Features of interest. Interaction types of Event, Action, and Property align with existing devices – (UML Diagram)
  - Enable multiple domain-specific vocabularies that can re-use the common categories and a core set of common definitions
- What is the benefit of this approach?
  - Domain experts can focus on the high value semantic definitions that are important to them, without needing to become semantic web experts
- Who it is for?
  - Developers of IoT systems, including connected things, applications, ecosystem bridges and translators
- How do we get involved?
  - Use the public definitions in annotation of connected things in discovery and configuration of IoT applications
  - Create new definitions for capabilities that are not yet defined to expand the scope of semantic interoperability
  - Attend the teleconferences, join the W3C Community Group, or contribute as a member of schema.org

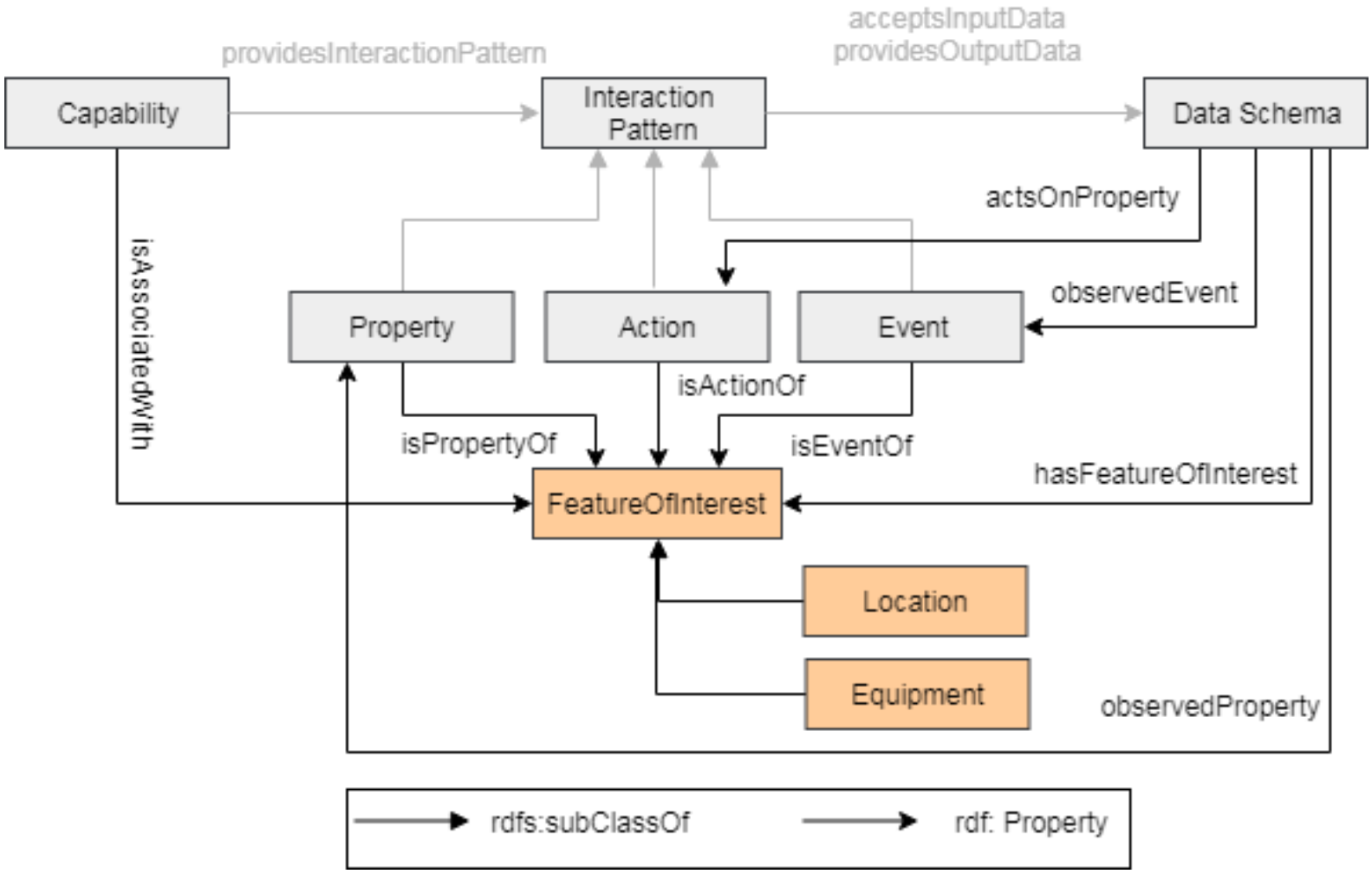
W3C WoT CG Charter

- Subset of the iot.schema.org charter, for incubating contributions of definitions to iot.schema.org
- Develop the process for achieving community consensus to publish agreed definitions
- Contributor IPR regime is based on schema.org or W3C Community Group (either are OK)
- Creative Commons CC-BY License
- Ultimately expect to split off domain-specific community groups or use existing CG, for example automotive, based on this as a template

iotschema Common Pattern



Feature Of Interest Pattern



Events and Conferences

- W3C Web of Things face to face meeting in Korea
  - June 30-July 4th 2018
  - 2 day Plugfest with
  - Using iot.schema.org annotation including FoI
- WISHI at the IETF 102 hackathon
  - 2 days; July 14th and 15th
  - Using iot.schema.org annotation with WoT framework
  - Research questions around semantic annotation and hypermedia integration

Other Business

- Next teleconference back on the 3rd Thursday schedule – July 19th (During IETF 102 in Montreal)
- Sorry for all the false notifications; having calendar integration issues… causing ghost appointments… trying to resolve