WISHI

2020 June 30th (Tuesday)
11:00–13:00 PDT (20:00–22:00 CEST, 18:00–20:00 UTC)

Draft agenda

Start (UTC)	What	Who
1800 [50 min]	Semantics technology landscape	Milan Milenkovic, Michael Koster
1850 [30 min]	OpenAPI/AsyncAPI and CoRE/ WoT techs	Jonathan Beri
1920 [5 min]	JSON Path standardization	Carsten Bormann
1925 [10 min]	SDF standardization, ASDF BOF	Carsten Bormann
1935 [15 min]	WoT discovery discussion, follow up from 2020-06-08	(get feedback on the WoT design)
1950	AOB	

Semantics technology landscape

OpenAPI/AsyncAPI and CoRE/WoT techs

Standardization

JSON Path

Highly simplied form of XPath

```
$.store.book[0].title
$['store']['book'][0]['title']
```

keying, subscript, slice; union

escape to expressions in underlying scripting language

https://goessner.net/articles/JsonPath/

(1) get Stefan Gössner on board

(2) find a home in IETF

(ASDF? dispatch to CBOR?)

ASDF BOF

Now scheduled for 2020-07-28, 1100–1240Z

Part of IETF 108, need to register (and likely pay)

Objective: Explain SDF; demonstrate **benefit**
(Real products/product capabilities)

Need strong representation of consumer side

Background: IETF BOFs
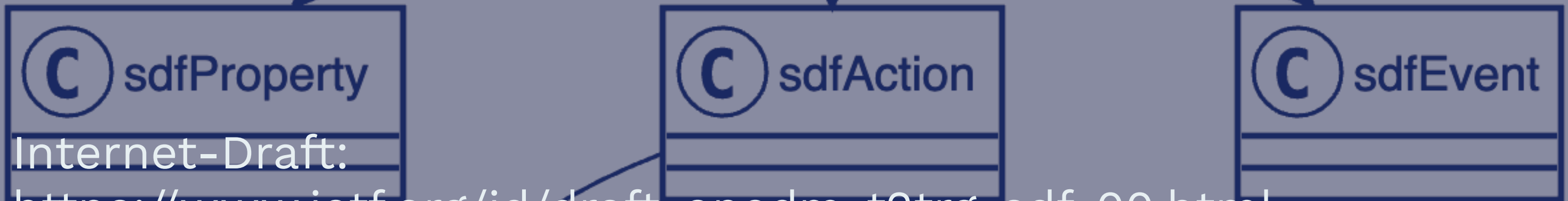
Formal meeting of a would-be WG +
interested "Tourists" (usually trying to shoot down BOF)
Demonstrate:

— agreement. What is to be done?   Document this in "charter": contract WG ↔ community (~ IESG)

— energy. People to work on documents, contribute, review?

— benefit. Are people going to implement this and use it in actual deployments?

Background: SDF

Semantic Definition Format (SDF)
for Data and Interactions of Things

JSON-based format, optimized for tool interaction
~ 200 models available in SDF format

Internet-Draft:
https://www.ietf.org/id/draft-onedm-t2trg-sdf-00.html

hasObject

C sdfObject

hasProperty   hasAction   hasEvent

0+   0+   0+

C sdfProperty   C sdfAction   C sdfEvent

isInstanceOf   hasInputData   hasOutputData   hasOutputData

Background: Status OneDM

https://onedm.org

https://github.com/one-data-model

— SDF

— playground, experimental, unit-test

— one-data-model.github.io (site)

— various historic

— ietf108 (charter proposal!)

One Data Model
Solving the problem of lack of a common data model for IoT and IoT devices

Overview   SDF   FAQ   About

One Data Model

OneDM is solving the problem of lack of a common data model for IoT and IoT devices. Each IoT standards organization, and many IoT platform vendors, have created their own version of an IoT data model framework, each with a bespoke meta-model and representation language.
The first phase result is the Semantic Definition Format (SDF) and related tools and frameworks to manage the contribution of data models from diverse sources, and collection of these data models in a single place.

one DM overview

one DM overview. An overview of the history and initial results of oneDM.

Learn more

SDF syntax

Semantic Definition Format (SDF) is a description format to describe abstract data models. SDF conveys abstract meta-model for IoT device affordances, behavior, and context decoupled from network bindings and is protocol-agile.

Learn more

FAQ

Frequently asked questions

Learn more

WoT discovery discussion