# TD Restructuring
# Web Meeting, 19. October 2016

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# Agenda

1) Logistics & Updates
2) Prop. vs Actions (continue discussion)
3) Naming of `encoding` in TD
4) Endpoint information within resource definition
5) Issues overview

# Logistics & Updates

- Web Meeting each Wednesday 9-10:30 am (CEST)
- IRC: #wot-td
- this Web meeting is scheduled until 1. November
  - enough time for next plugfest
  - setup current practice document
- Add your proposals as pull request in https://github.com/w3c/wot/tree/master/proposals/td-restructuring
- Use github for issue and proposal discussion https://github.com/w3c/wot/issues
- resolved issues will be closed
  - closed issue will be memorized if there is an impact on the current practice document using this issue https://github.com/w3c/wot/issues/262

- Update: JSON-LD 1.1 discussion will be continued next week

# Properties vs Actions I / II

| View Point | Property | Actions |
|---|---|---|
| W3C WoT Today | Static / dynamic states e.g., read temperature, read / set rgbValue | Any function or ,Has a start and an end' e.g., fadeIn, openDoor |
| Dom / Web Thing Model / OO-style | only readable states | any functions, e.g., enable/disable smoke alarm,… |
| Kajimoto-san / SDOs | Internal Software Status e.g., read / set firmwareVersion | Device Hardware Status e.g., ledOnOff, fadeIn |
| API Levels | low level API e.g., set LED light on/off, read/set firmwareVersion | complex high level API cook pasta which consists of boiling pasta … |
| No Property and Action | There are some key value pairs in the interaction resource (e.g., writable, asynchrone, …) set LED light on/off, read/set firmwareVersion, fadeIn, openDoor | |

Also see https://github.com/w3c/wot/issues/247

# Properties vs Actions II / II

| View Point | Property | Actions |
|---|---|---|
| OneM2M | Two kind of 'Properties': <br> 1) property: <br>  -only for static values/state (e.g., serial-no) <br>  - non-functional information <br> 2) datapoint: <br>  - stateless operations (e.g., on/off state of switch) <br>  - functional information (e.g., target temperature) | stateful condition, handling unknown internal state conditions (e.g., upVolume, downVolume) |

- many different view points about Properties and Actions in IoT standards and activities
- current discussion outcome (see https://github.com/w3c/wot/issues/247):
   à  TD shall not have hard rules
   à  open to solution designer / developer how to expose resources
   à  TD shall be flexible and powerful enough to interwork with most of IoT approaches such as IoT standards (this is also the motivation of the issue https://github.com/w3c/wot/issues/258)
- WoT (IG?) can provide some patterns or guideline?

# Naming of `encoding` in TD

- See https://github.com/w3c/wot/issues/253

- replace 'encoding' in TD with:
  - format,
  - representationType,
  - mediaType,
  - dataFormat, or
  - contentType

- I think, mediaType and contentType quite common used
  à TD should reley in one of them
  à close this issue until end of this week

# Endpoint information within resource definition

- See discussion [https://github.com/w3c/wot/issues/255](https://github.com/w3c/wot/issues/255)

- current TD version is quite static regarding endpoint information (e.g., url and encoding/mimeType)
  - How to assign different protocols and/or encodings to Properties, Actions, and Events?

à  allow local resource endpoint definition

- introduce global and local scopes?
  - à  E.g., Top level encoding declaration could be overridden by lower level encoding declaration.

# Overview of Additional TD Issues I / II

- Templates for properties, actions, and events
  https://github.com/w3c/wot/issues/254

- Allow the definition of resource parameters in TD
  https://github.com/w3c/wot/issues/264

- Compound properties
  https://github.com/w3c/wot/issues/256

# Overview of Additional TD Issues II / II

- Separating discussion of requirements from serialization formats
  https://github.com/w3c/wot/issues/257