

# Hydra: A Vocabulary for Hypermedia-Driven Web APIs

W3C WoT IG TF-TD – Web Meeting

## In one Word

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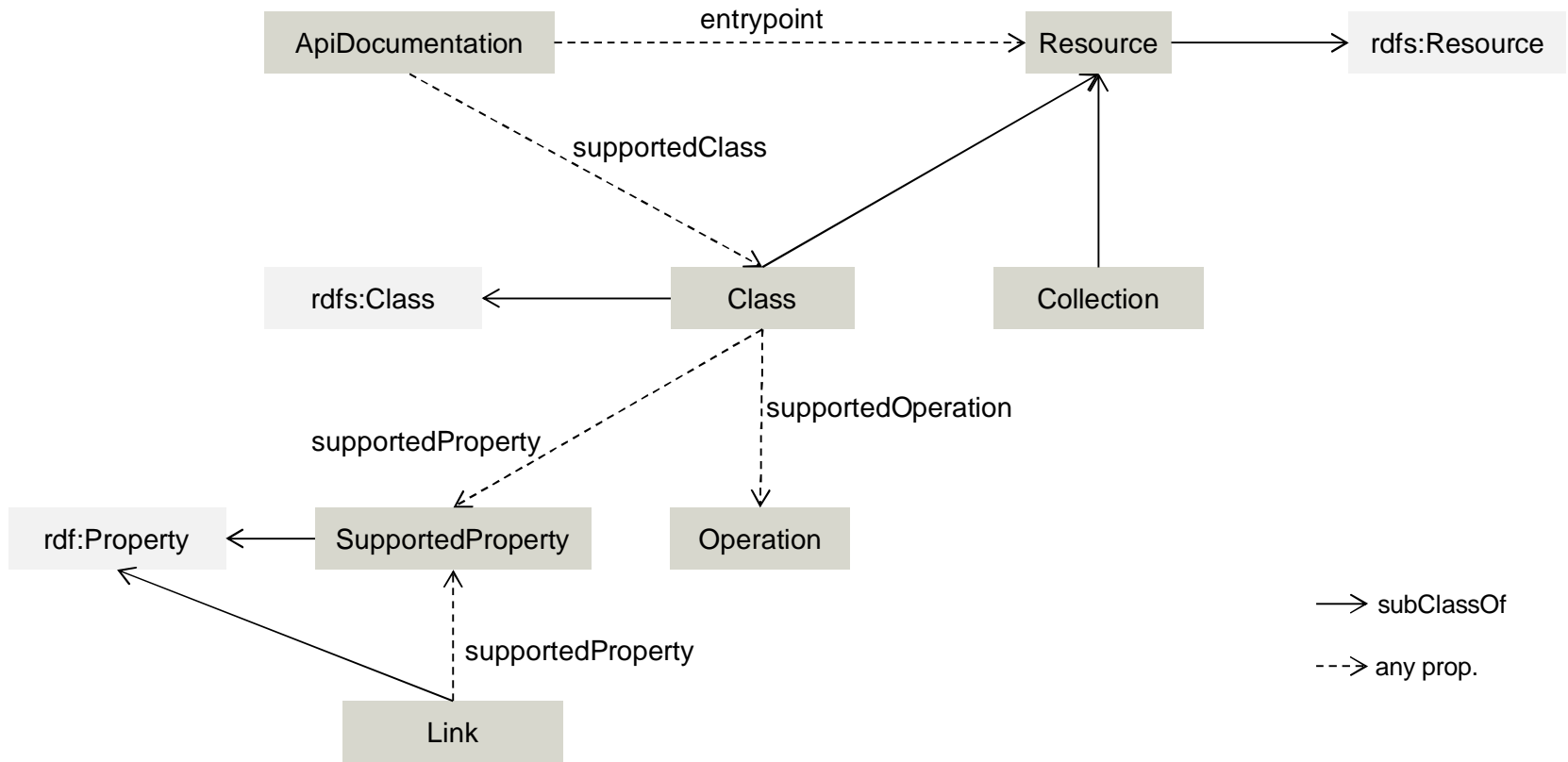
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## In one Word

### What is Hydra Vocabulary?

- An RDFS vocabulary...
- ...to specify RESTful APIs
  
- Hydra Community Group started in June 2013
  - Unofficial Draft from January 2015

# Specification



# Example



# Example

coap: //exampl e. org/temp1/name  
coap: //exampl e. org/temp1/quanti fi es/

# Example

```
coap: //example.org/temp1/name
coap: //example.org/temp1/quantities/
```

```
{
  @context: ...
  @type: EntryPoint,
  supportedClass: [{
    @id: app:Sensor,
    supportedProperty: [{
      @id: app:Sensor/quantities,
      supportedOperation: ...
    }, {
      @id: app:Sensor/name,
      supportedOperation: ...
    }], ...
  ]],
  supportedOperation: [{
    @id: _:retrieve,
    method: GET,
    expects: ...,
    returns: ...
  }
  ]
}
], {
  @id: temp1,
  @type: app:Sensor
}
}
```

# Application

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- Existing Hydra tools
  - A [dynamic client](#)
  - A PHP (Symfony) bundle for server-side implementation

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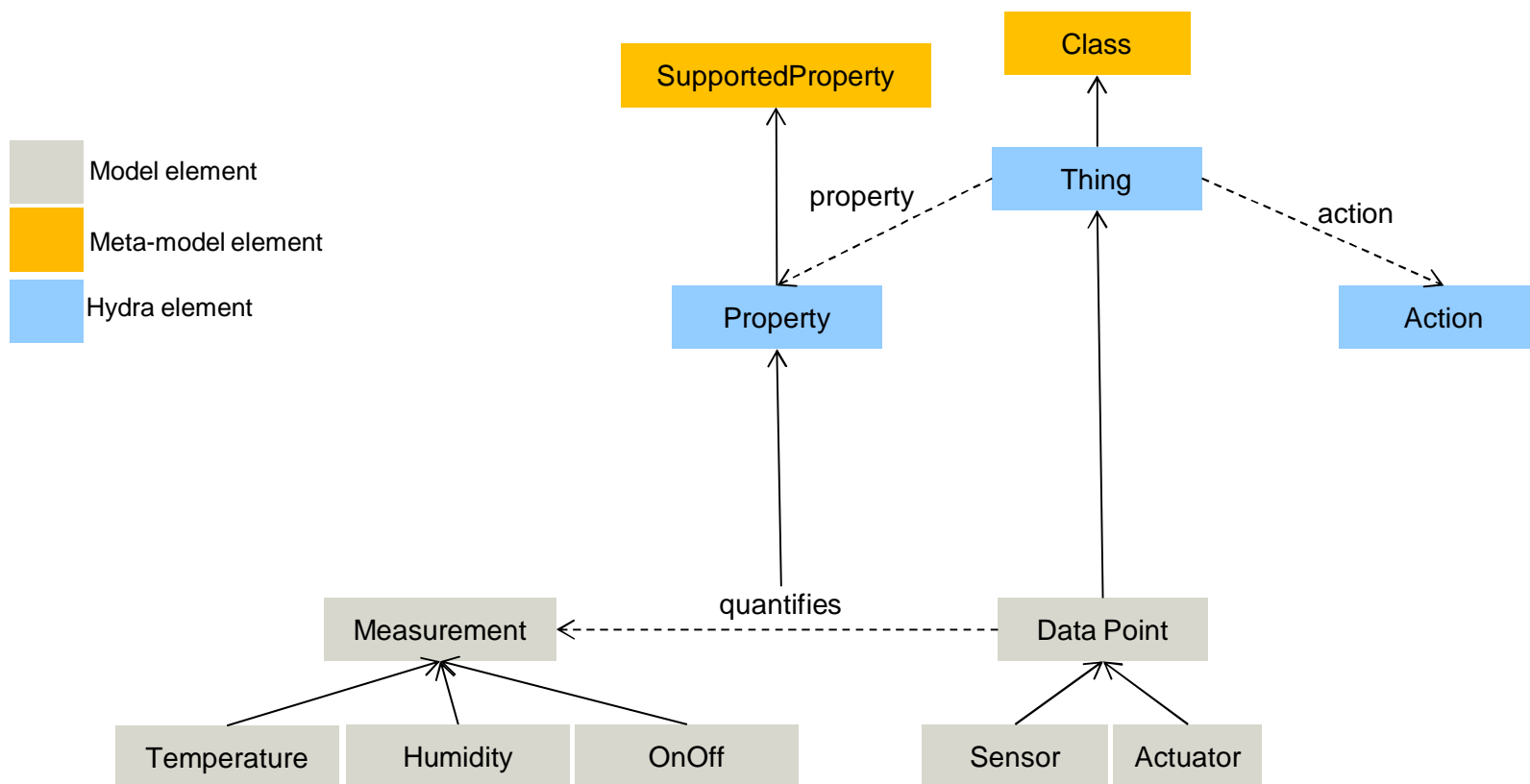
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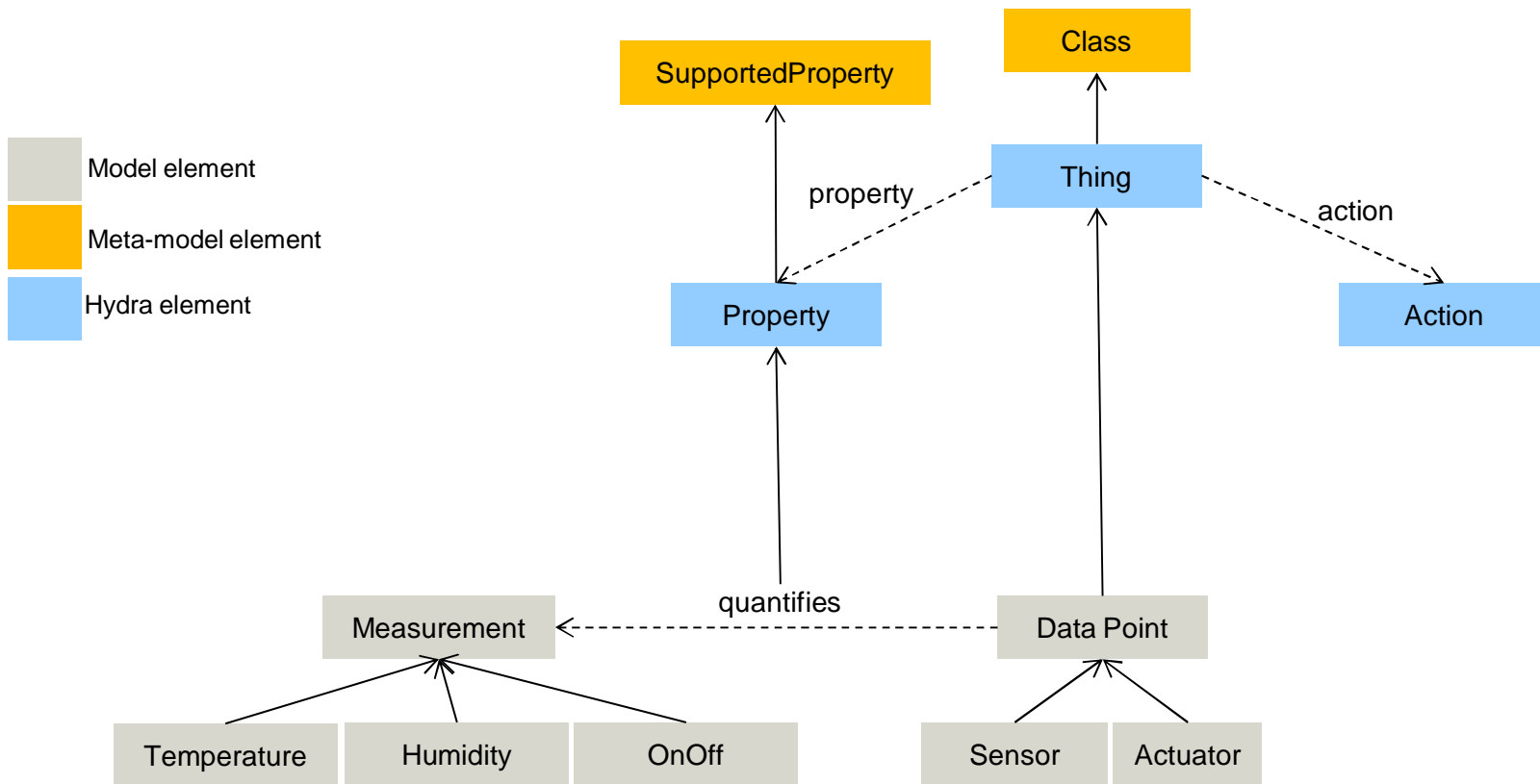
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  - Tells which URIs are dereferenceable

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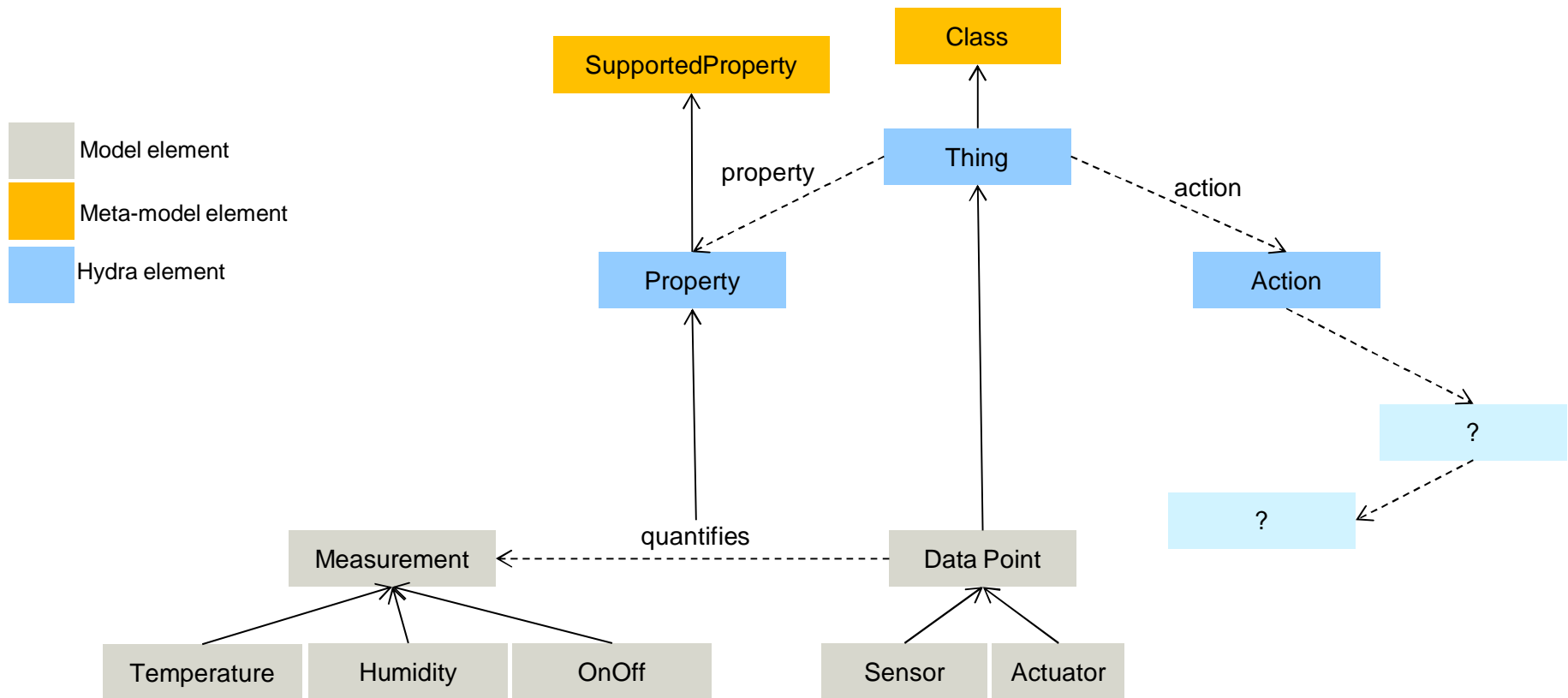
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 coap: //example.org/temp1/quantifies/





# Hydra & the Web of Thing

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Thanks

Discussion

# References

- (1) Lanthaler, Markus, "Hydra Core Vocabulary: A Vocabulary for Hypermedia-Driven Web APIs." <http://www.hydra-cg.com/spec/latest/core/>, accessed June, 30<sup>th</sup> 2015.
- (2) Swagger, "Swagger RESTful API Documentation Specification." <https://github.com/swagger-api/swagger-spec/blob/master/versions/2.0.md>, accessed June, 30<sup>th</sup> 2015.
- (3) Public W3C Web of Things Interest Group Mailing List, [public-wot-ig@w3.org](mailto:public-wot-ig@w3.org), June 2015.
- (4) "IoTDB: The Internet of Things Database." <https://iotdb.org/>, accessed June, 30<sup>th</sup> 2015.