Constrained RESTful Application Language
Hypermedia

JSON Hypertext Application Language
draft-kelly-json-hal-08

JSON Hyper-Schema
draft-handrews-json-schema-hyperschema-01

Profiled Hypertext Application Language
draft-montoya-phtal-00

Constrained RESTful Application Language
draft-hartke-t2trg-coral-08

Web Linking
RFC 8288

CoRE Link Format
RFC 6690

Home Documents for HTTP APIs
draft-nottingham-json-home-06
The Constrained RESTful Application Language (CoRAL) defines a data model and interaction model as well as two specialized serialization formats for the description of typed connections between resources on the Web ("links"), possible operations on such resources ("forms"), as well as simple resource metadata.

• Hypermedia Data & Interaction Model
• Compact, binary serialization format suitable for constrained environments
• Lightweight, textual serialization format easy to read and write for humans

“What is the resource?”
“What can you do with the resource?”
“How does the resource relate to other resources?”
#using <http://coreschema.org/ccm#>

isBrewing true
progress 0.5
count 122
readyName "size 110, strength 50%"
brewingName "size 230, strength 100%"
maxOrders 10
create -> POST <f/brew?create>
queue-item <f/brew/2/> {
    state  "paused"
    cancel -> DELETE <>
    unpause -> POST <s/order/state> [ payload "brewing" ]
}
queue-item <f/brew/1/> {
    state  "queued"
    cancel -> DELETE <>
    pause  -> POST <s/order/state> [ payload "paused" ]
}
queue-item <f/brew/0/> {
    state  "queued"
    cancel -> DELETE <>
    pause  -> POST <s/order/state> [ payload "paused" ]
}
Michael's Light Switch

W3C Thing Description

```csharp
#using <http://coreapps.org/td#>
#using iot = <http://iotschema.org/>
#base <http://159.203.213.90:1880>

id "urn:uuid:2d5e84f6-85c9-4436-b53f-c0669df01603"
type <http://iotschema.org/Light>
type <http://iotschema.org/BinarySwitch>
type <http://iotschema.org/Level>
name "Lamp"

iot:SwitchState <light> {
    contentType "application/json"
    writeproperty -> POST </light> [ contentType "application/json" ]
}

iot:CurrentLevel <light> {
    contentType "application/json"
    writeproperty -> POST </light> [ contentType "application/json" ]
}

iot:TurnOn -> POST </light> [ contentType "application/json" ]

iot:TurnOff -> POST </light> [ contentType "application/json" ]

iot:SetLevel -> POST </light> [ contentType "application/json" ]
```
.well-known/core

Link Format

```
#using <http://coreapps.org/core#>
#using iana = <http://www.iana.org/assignments/relation/>

rd-item </sensors> {  
  ct 40
  title "Sensor Index"
}

rd-item </sensors/temp> {  
  rt "temperature-c"
  if "sensor"
  iana:describedby <http://www.example.com/sensors/t123>
  iana:alternate </t>
}

rd-item </sensors/light> {  
  rt "light-lux"
  if "sensor"
}``
https://datatracker.ietf.org/doc/draft-hartke-t2trg-coral/
https://datatracker.ietf.org/doc/draft-hartke-t2trg-ciri/
https://datatracker.ietf.org/doc/draft-hartke-t2trg-coral-reef/
https://github.com/ektrah/coral

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