Constrained RESTful Application Languager (CoRAL)
Interim status update

2021-10-13
Recap from last status update

- Information model merged
  - Basic model contains statements (graph; “</x> core:ct 40”)
  - Structured model shapes them (sequence of statements, nesting)
  - Forms and embedded payloads are built on top of the model

- How to handle literals?
  - Entity with arbitrary outgoing edges
    </g> core:label "Gift" (instance 1).
    "Gift" (instance 1) xml:lang "en". 
  - Value-with-properties
    </g> core:label "Gift"@en.
(Not that it’d matter for the serialization...)
New in the editor’s copy since last time

- Packed CBOR
- CBOR diagnostic notation (with EDN) replaces text format
- Mappings with Link Format and RDF

“Applications that use links with the attribute semantics common in the CoRE ecosystem (typically used with RFC6690 Link Format) can use this conversion.”
Link Format mapping

</sensors>;ct=40;title="Sensor Index",
</sensors/temp>;rt="temperature-c";if="sensor tag:example.com:mysensor",
<http://www.example.com/sensors/t123>;anchor="/sensors/temp";rel="describedby"

[
    [2, simple(10) / rel:hosts /, cri'/sensors', [
        [2, 6(2) / core:ct /, 40],
        [2, simple(15) / core:title /, 'Sensor Index']
    ]],
    [2, simple(10) / rel:hosts /, cri'/sensors/temp', [
        [2, 6(1) / core:if /, 6(200) / cri'http:...temperature-c' /],
        [2, 6(1) / core:if /, cri'tag:example.com:mysensor' ],
        [2, 6(-2) / core:rt /, 6(250) / cri'http:...sensor' /],
        [2, simple(12) / rel:describedby /, cri'http://www.example.com/sensors/t123']
    ]]
]
Current issues

- Reasons left for deterministic encoding? #5
- Lock in the “property” model of literals? #10
- Can we do without circular visitation? #9
  (And if so, do we want to use this for a flatter file format?)
- Open or Closed World? #3
  (Not that we’d have to decide – but allowing both, guide people
to be open-world compatible.)