Hypermedia for IoT

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Formats for Hypermedia-driven APIs

- CoRE Link Format
  RFC 6690
- Hypertext Application Language (HAL)
  draft-kelly-json-hal-08
- Home Documents for HTTP APIs
  draft-nottingham-json-home-06
- Constrained RESTful Application Language (CoRAL)
  draft-hartke-core-apps-07 &
  draft-hartke-t2trg-coral-01

Differences:

- attaching semantics
- granularity
- link attributes, hints, metadata
- embedded data

CoRAL

Expressive

- Links
  - discover resources
  - semantics of resources (link relation type)
  - available data formats
  - metadata
- Forms
  - discover interactions
  - semantics of interactions ("form relation type")
  - supported parameters
  - accepted data formats
- Embedded data

Compact

- binary format based on CBOR
- clever default values
- CoAP-style URI encoding

Links and Forms can very often be expressed in a few bytes!

Additionally:

- extensible
- supports (almost) all of CoRE Link Format
- smaller than Link Format
- suitable for constrained environments