CoRAL –
The Constrained RESTful Application Language

draft-hartke-t2trg-coral

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**CoRAL** is a *hypermedia representation format* for the hypermedia model described in draft-hartke-core-apps:

- **Links**
  - change *application state*.
    ```
    {context} has a {link relation type} resource at {target URI}, which has {target attributes}
    ```

- **Forms**
  - change *resource state*.
    ```
    To {form relation type} the {context}, make a {method} request to {target URI}
    ```
CoRAL aims to reduce the cost of hypermedia:

• **Reduce size of representations**
  – Encode links and forms in a compact, binary format
  – Use numbers instead of strings
  – Use sensible default values
  Most links and forms can be expressed in a few bytes

• **Reduce number of roundtrips**
  – Embed a representation of the link target and forms manipulating the link target at the link source

• **Simplify implementations**
  – Same option concept as CoAP
  This simplifies URI parsing and reference resolution a lot
Next steps:

• Confirm hypermedia model
• Reduce size even further with Golomb-Rice coding
• Specify link navigation & form submission in more detail
• Describe embedding of CoRAL in other documents