CoRE: CRI ("HREF")

November 7, 2022 (Monday), 13:00-15:00 UTC
draft-ietf-core-href-11

draft-ietf-core-href defines **CRIs** and CRI references
Concise equivalent of
• URIs and
• URI references (RFC 3986)
CRIs as a data model for URIs

URIs carry surprising amounts of complexity
Dark corners abound
Some features straddle lexicals, syntax, and semantics

CRIs are a standard structure for parsed URIs
Attempt to be concise
Conciseness: Scheme IDs (#57)

Frequent scheme IDs (http:, coaps:, ...) are represented as a (negative) number
All others are done as text

Original idea: define the complete set in the RFC, no extensions

Extensibility: Easily provided with registry
Creates uncertainty whether a number has been allocated
→ Only text version will actually be used
Idea:
Allow registrations of scheme ID numbers only

— in initial pre-fill of registry
— when new URI scheme is registered (put a pointer in URI-Scheme registry?)

We set up
https://github.com/core-wg/href/wiki/uri-schemes-that-we-want-numbers-for
to gather data for initial pre-fill

Are we done gathering? Is this the right way to go?
Radical idea: Maybe add a column with the number to the URI-Scheme registry (RFC 7595) (Permanent registrations only)

RFC 8615 (well-known URIs) did add a column ➔ there is precedent

Would add attention to a new scheme registration
remaining issues

— #44 (percent encoding) ➔ formulate text
— #43 can't percent-escape dot ➔ integrate test
— #46 a: -- are there zero leading slashes or no slash?
  ➔ decide, i.e., make ["a", true] malformed
— #50 various nits from micrurus implementation
  ➔ write text
— (and two about test vectors)
  ➔ add selected test vectors to appendix
next steps

— have interim 2022-11-23 to decide remaining issues
— submit –12
— WGLC
— profit