CoRE: CRI (HREF)

Concise Resource Identifier:
Concise equivalent of URIs and URI references (RFC 3986)

New representation format for **URI data model**

draft-ietf-core-href defines **CRIs** and CRI references

recent updates

(-10: 2022-03-07 for 2022-03-25 IETF113 meeting)

— Most work since was on test vectors/implementation

PRs:
— Added a lamentation about percent-encoded text
— Added ./ for relative URI if first segment contains :

Bug: foo:

Is foo:

1. a foo:/bar/baz with 0 segments: ["foo", null]

2. a foo:opaquestuff with 0-length opaque: ["foo", true]

This presenter leaning to 1.
Is there an in-the-wild example of such a URI scheme?

CURIE and CRI

Opportunity: CURIEs

CURIE: Compact URIs — weird lexical compression of URIs
• Problem: CURIE semantics are based on URI syntax
Does not map to structural nature of CRIs

CBOR-packed now has function tags
Could define function tag for CURIE-like assembly of CRIs

Agreement from 2022-06-08 CoRE interim:
Do this in a separate specification
• Could be part of CoRAL, or independent

weird CURIE cases

'ht' + 'tp://coap.me/foo/bar' ~~(strikethrough)~~

~~'ht' + 'tp://coap.me/bar'~~

~~'http://coa' + 'p.me/foo/bar'~~

'http://coap.me' + '/foo/bar'

'http://coap.me/' + 'foo/bar'

'http://coap.me/foo' + '#bar'

'http://coap.me/foo#' + 'bar'

Is it always possible to express CRI-like:

— left hand side

— right hand side

without knowing the other?

is there a better CURIE?

CURIE solves a widely appreciated problem

Solution is lexical (~ URI)
• lexical solutions always cause problems

Can there be a solution that is structural (~ CRI)?
• Can this be backported (made understood) to URI space?

Can structural solution be our subset of lexical CURIEs?

Plan

— Complete the test vector implementation work

— Decide foo: ➔ ["foo"]

— WGLC CRI

— Start document on CRI CURIE function tag