

# 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

# Conciseness: Scheme IDs (2)

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?

# Conciseness: Scheme IDs (3)

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