CoRE: CoRECONF

- RFC 9254: YANG-CBOR (2022-07-18)
- RFC-to-be 9595: CORE-SID, AUTH48[-DONE]
- WGLC passed: CORE-COMI
- WGLC passed: CORE-YANG-LIBRARY
(1) Continuation work on YANG-CBOR (CBOR WG)

— RFC 9254: YANG-CBOR (2yo): stable, no known problems
— individual submissions to CBOR WG:
  — draft-bormann-cbor-yang-standin-00
    Efficient (binary) representation of text-based YANG types
    In current draft: tag 1 (date/time), 52/54 (IP addresses)
  — draft-bormann-cbor-yang-metadata-00
    Extend YANG-CBOR to support representation of YANG metadata annotations (RFC 7952)
(2) core-sid: ramping up YANG-SID launch

— core-sid -24 2023-12-22, approved 2024-01-17 (½yo)
— AUTH48: RFC-to-be 9595 (58 RFC editor questions...)
— Next steps:
  — Need designated expert (DE) assignment
  — Coordinate DE team, RPC (RFC-editor), IANA, others:
    yang-sid-logistics@ietf.org [✓]
Base:
RFC 9254: YANG-CBOR
RFC 9595-to-be: YANG-SID -- Management of SID space

CoRECONF = YANG/CBOR over CoAP
RESTCONF = YANG/*/ over HTTP
NETCONF = YANG/XML over SSH
COMI: Status

- draft-ietf-core-comi-18 2024-07-23:
  - author name fix only (for core-sid RFC 9595-to-be)
- Implementation discussions at TRT2G interims in May and June
- Simplification continues: SID 0 instead of GET?
  - Get rid of "datastore resource" GET/PUT; can do FETCH/iPATCH of "SID 0"
  - Get rid of term "data node resource" and § 5.2.2; fix GET examples
- Interim!
- multiple RPC/Actions allowed in one payload? Semantics?
- Want more examples!
COMI: Scaling

Comi was designed for constrained devices:
- Small management bases
- Selective retrieve: Subtrees only
  - limited selection via special query parameters: 
    \(?c=\text{(config)}, \?d=\text{(default)}\)
  - special SID selection for notifications

Extend selective retrieve?
- depth limit? (blunt instrument)
- Requirement for projection?
  - E.g., want list of interface names, not all interface info

Cf. YANG-scaling discussion @netmod
COMI: Plan

After summer break:
Get remaining comments addressed
(and further examples made)

— Probably another WGLC then

➔ Leave scaling discussion to an extension
CoRE: CRIs (HREF)

— -14 (2024-01-09): address reviews mostly
— -15 (2024-04-21): Make CRI scheme registry non-negative (for CoAP uint, general wellness)
— -16 (2024-07-24 today): draft-ietf-core-href-16
  — IANA early review:
    ➔ No repercussion to URI Scheme registry
— "updates 7595" in abs/intro
#82 Clarify determinism objective

It's a goal of CRIs to be deterministic:

— For (absolute) CRI: **yes**, for (relative to base) CRI reference: **no**

— **What does deterministic CRI mean?**
  1. URI→CRI: "Same" (equivalent) URI → same CRI
  2. CRI→URI: no two different CRIs produce the same URI

— narrow down the use of "equivalence" in the conversion rules
  — "equal under syntax based normalization" (RFC3986)?
  — conversion result already normalized → byte-wise identical?

— Can we **prove** some properties here?
— How important is this?
— #77 more test vectors. More test vectors. (#52, #53)
  — To get those test vectors in place: edit them in CSV: PR#79
  — #76: Add test vector for zone identifiers

Complete the I-D after summer break