CoAP Transport Indication

`ietf-core-transport-indication-08`

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Recap: Mission

- Enable discovery of alternative transports

- Build a plan how new transports avoid new coap+…

Changes on enable-discovery

Following December interim

- Described more general components to use an endpoint:
  1. CoAP transport (eg. "over TCP")
  2. Address (eg. IP and port)
  3. Additional metadata

- Describe available endpoint sources in those terms:
  1. Explicit links to proxies
  2. Resolution service, in particular DNS with A/AAAA and SVCB (RFC 9460)
  3. Explicit configuration[1]

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[1]not described

Plan for new transports

"Ensure that all components of endpoint are looked up"

For IP transports: Needs SVCB records.

Gap: Literals. `coap://[2001:db8::1]` misses lookup result.[2]

Update to syntax; examples:
`coap://636f617071756963.alpn.2001-db8--1.6.service.arpa/`
`coap://rai3ouj4a.ueekca…zowjgyr-.cred.service.arpa/`

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[2] `_coap1.0…1.0.0.2.ip6.arpa IN SVCB alpn="coapquic"` is funny but not helpful.

Question: Fate of parts

- Some SVCB registrations being picked up elsewhere.

  `edhoc-info` might move to `tiloca-lake-app-profiles`
  `cred` needed to solve `draft-lenders-core-dnr`[3]

- Do we need literals here? Who needs it now?[4]
  - Next IP-based transport.
  - Onion CoAP `amsuess-t2trg-onion-coap`.

- Can this complete without registered `.service.arpa`?

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[3]a problem statement document
[4]Why hard and slow? Needs explicit information model.

Other open points

- (Even) More precision needed on properties of SVCB records vs. properties of proxies.[5]

- SVCB best practice (`_coap` SVCB vs. `COAP` record, ALPN for non-TLS)

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[5]Proxies can have properties independent of endpoint, might chain; SVCB has priorities and different fan-out.

Next steps

Review.

Yes, we have more work to do; nonetheless, almost flying blind.