CoSERV

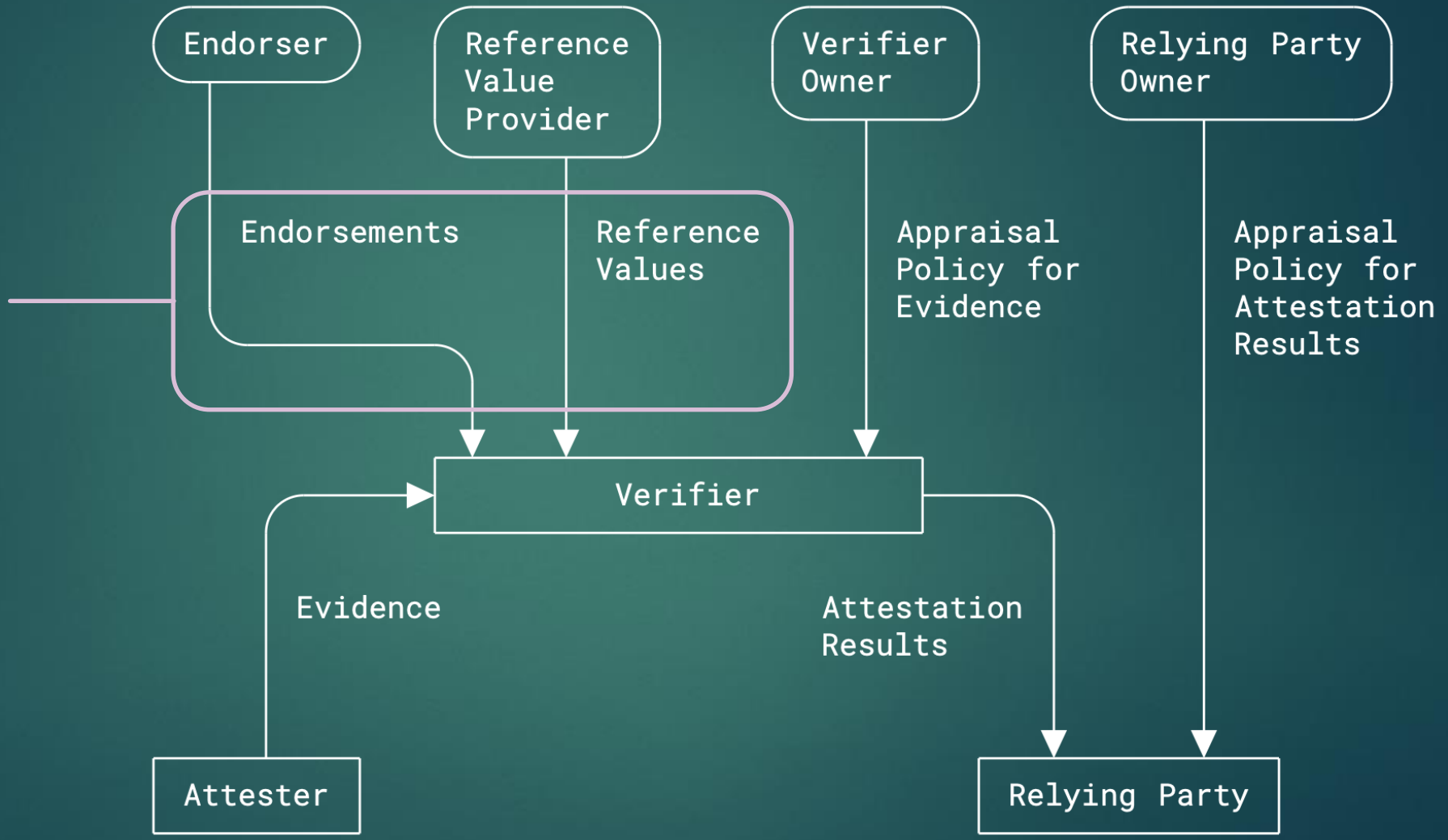
CONCISE SELECTOR FOR ENDORSEMENTS AND REFERENCE VALUES

IETF-127 DRAFT AND RUNNING CODE UPDATES

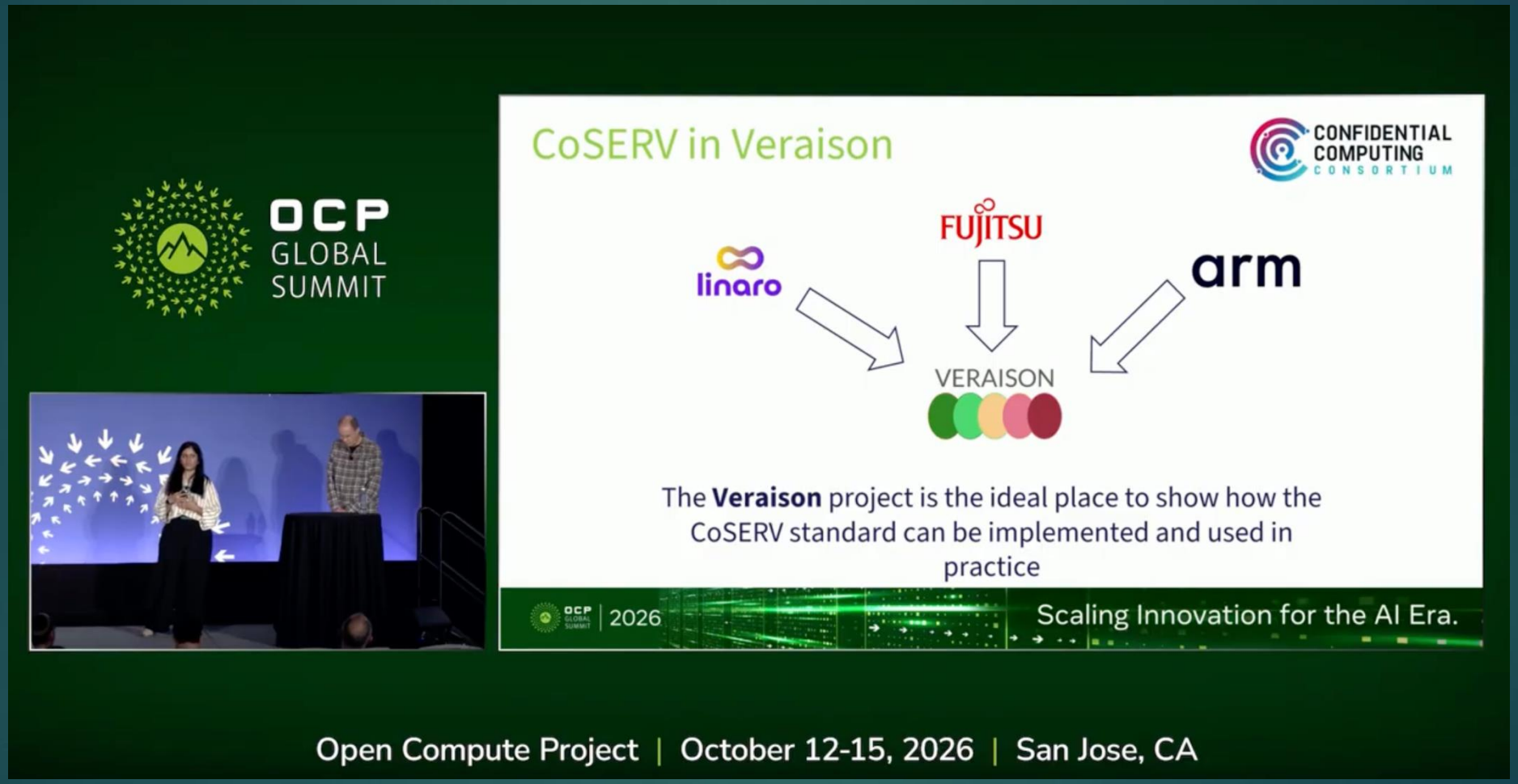
PAUL HOWARD

CoSERV in RATS

CoSERV is a **conveyance protocol** that helps Verifiers consume Endorsements and Reference Values from multiple or complex supply-chain sources



CoSERV at OCP Global Summit 2026



https://www.youtube.com/watch?v=WnfRauDjaWA

I-D Updates and Roadmap

Updates Since IETF-126

- **Features**
  - Query/result structure for topological information (domain memberships and trust dependencies) for composite attester systems
- **Maturity**
  - Approaching WGLC
  - Document shepherd assigned (thanks, Yogesh Deshpande)
  - HTTP Directorate review was completed in August and recorded a status of "Not Ready", but these issues are hopefully resolved in current draft (v08)

Roadmap

- **Features**
  - Currently nothing specific on the feature roadmap
- **Maturity**
  - CoTS integration (next slide)
  - Continue to address open GitHub issues (currently 11)
  - Would be good to have more reviews from WG participants

CoTS (Concise Trust Anchor Stores)

- **The Issue**
  - CoSERV currently has a normative dependency on the draft-ietf-rats-concise-ta-stores, including on its CDDL data model, but the import is incomplete

```
trust-anchors = (
      &(akq: 3) => [ * ak-quad ]
      &(tas: 4) => [ * cots-stmt ]
)

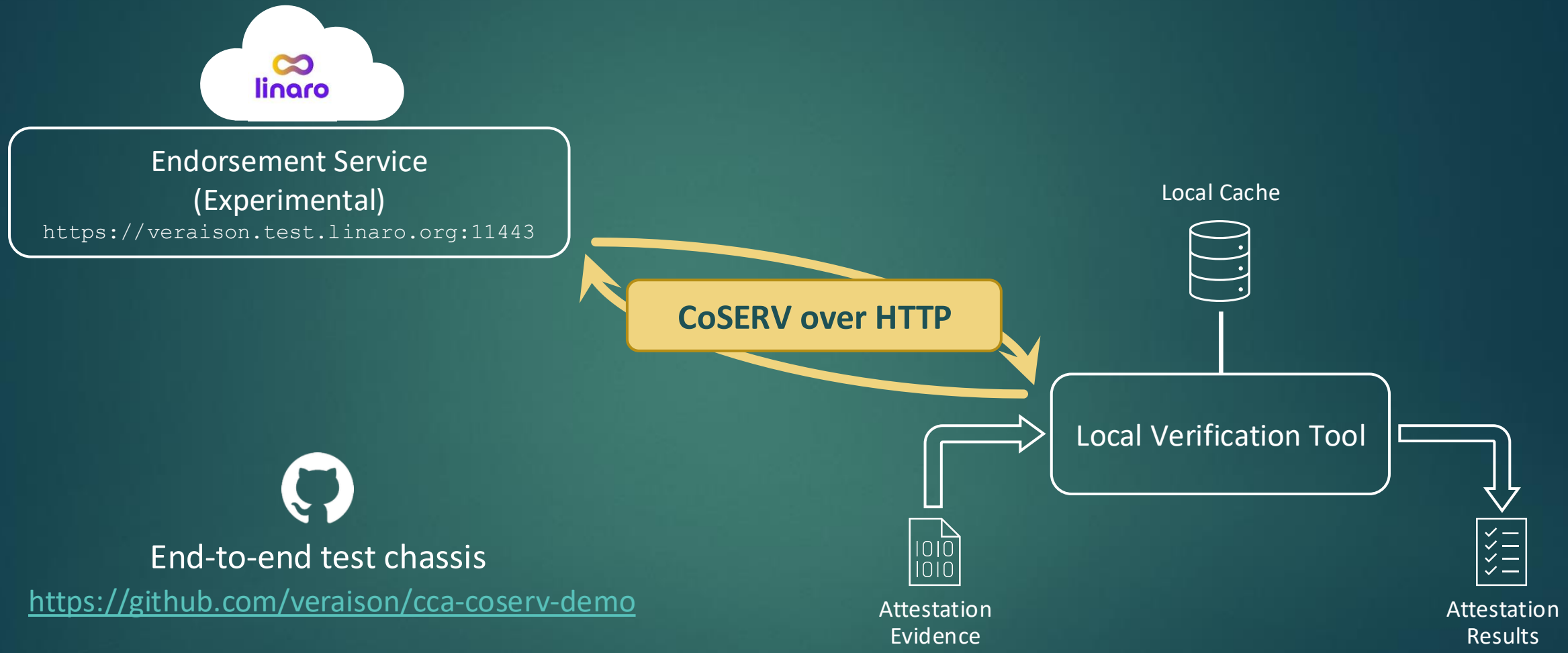
cots-stmt = {
      &(authorities: 1) => [ + comid.$crypto-key-type-choice ]
      &(cots: 2) => cots
}

cots = "TODO COTS"
```



- **Update**
  - The CoTS draft is no longer in an expired state: v03 was published just after IETF-126
  - Current strategy is to keep the normative dependency and continue to progress both drafts
  - CoSERV queries based on RIM Identifiers could easily be used to obtain CoRIM-wrapped CoTS
  - GitHub issue raised to track integration of CoTS with other CoSERV query styles

Running Code Status (1)



End-to-end test chassis

https://github.com/veraison/cca-coserv-demo

Running Code Status (2)



Library and server-side support in Go

https://github.com/veraison/corim

Supports the data model, serialization, de-serialization to draft v07 (TODO: get to v08)

https://github.com/veraison/corim-store

Supports CoSERV queries natively

https://github.com/veraison/services

Supports the CoSERV HTTP API endpoint

Library and client-side support in Rust

https://github.com/veraison/coserv-rs

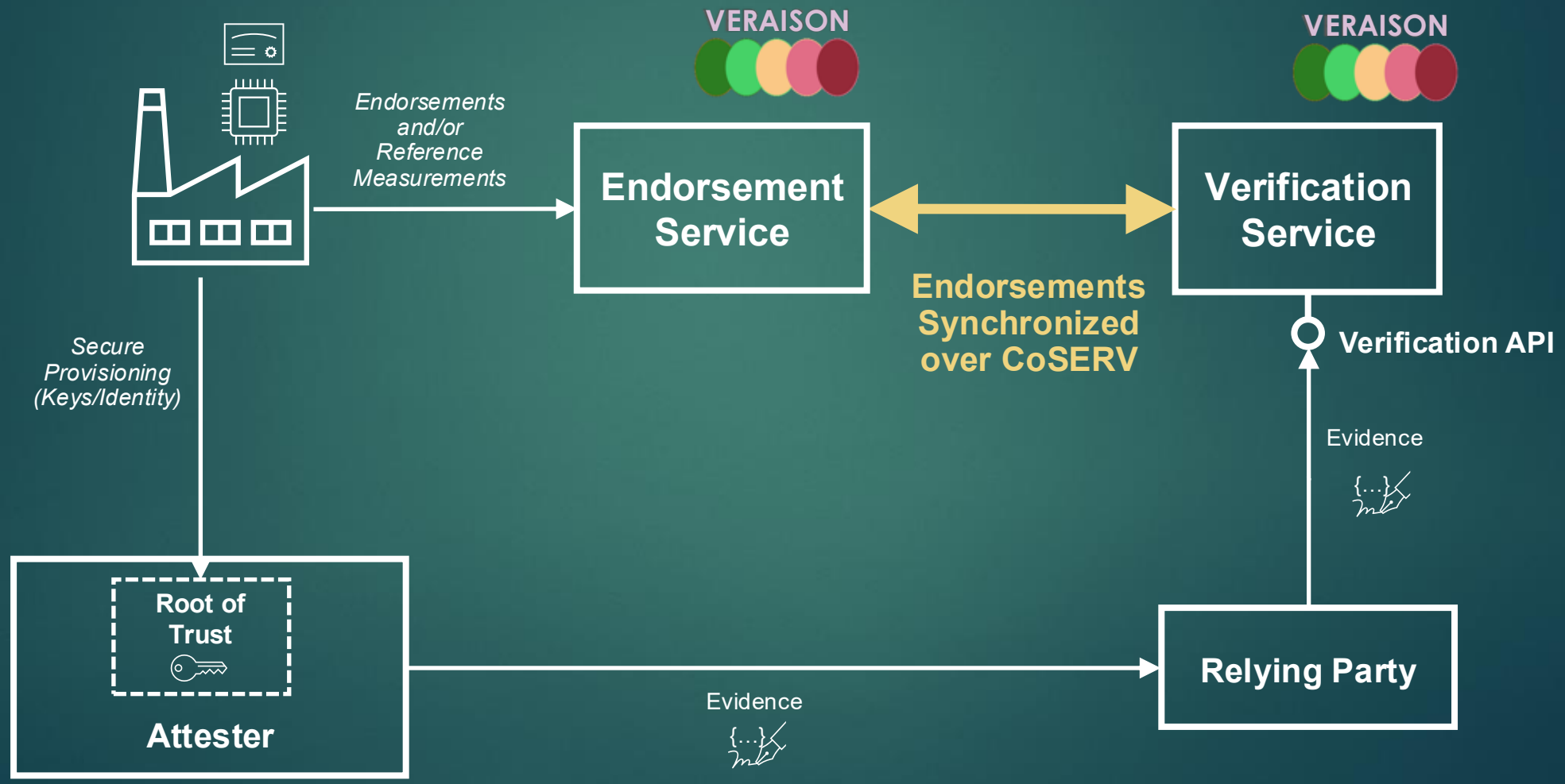
Supports the data model, serialization, de-serialization to draft v07 (TODO: get to v08)

https://github.com/veraison/rust-apiclient

Supports the execution of CoSERV queries over HTTP

Running Code Status (3)

Support for decoupled Endorsement/Verification service model in Veraison is merged



Special Thanks



Thomas Fossati



Shefali Kamal, **Dhanus Lal** and the team at **Fujitsu**



Sergei Trofimov, **Yogesh Deshpande**, **Anton Antonov** and the team at **Arm**



Carl Wallace, **Giri Mandyam**, **Henk Birkholz**, **Ding Ma**, **Lucas Pardue**, **Mark Nottingham**

Resources



- **Draft**: https://datatracker.ietf.org/doc/draft-ietf-rats-coserv/07/



- **Draft repo** (for issues and PRs): https://github.com/ietf-rats-wg/draft-ietf-rats-coserv



- **End-to-end demo**: https://github.com/veraison/cca-coserv-demo



- **CCC Attestation Sig Presentation**: https://youtu.be/IZVjgmjImmA?t=590



- **OCP Security WG Presentation**: https://youtu.be/3ZzmZMK13kg?t=408