# Protecting EST payloads with OSCORE (EST-OSCORE)

draft-selander-ace-coap-est-oscore

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# Background

- EALS (draft-selander-ace-eals) was discussed at ACE WG virtual interim Oct 19, 2017

- The WG was supportive but proposed changes to align with EST / EST-CoAPs

- EST-OSCORE (this draft) is a rewrite of EALS doing that

# Similar to EST-CoAPs

EST-CoAPs (draft-ietf-ace-coap-est):

- EST payloads transported with CoAP protected with DTLS

EST-OSCORE (this draft):

- EST payloads transported with CoAP protected with OSCORE

Most parts of EST-CoAPs apply directly to EST-OSCORE:

- EST message types, message bindings, message fragmentation, CoAP response codes, new Content-Formats, shorter Uri-Path, . . .

# Differences with EST-CoAPs

1. Key establishment

- EST-CoAPs establishes keys with a DTLS handskake
- EST-OSCORE allows different ways to establish keys
  - Pre-shared keys
  - OSCORE profile of ACE (draft-ietf-ace-oscore-profile)
  - Key exchange

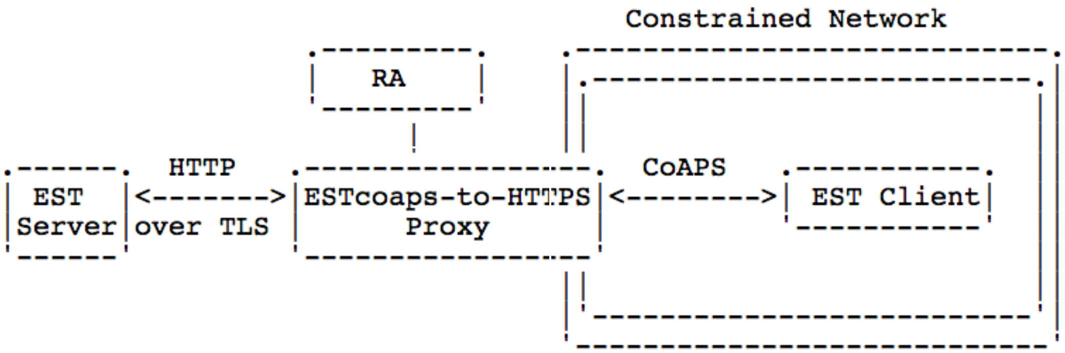
2. Discovery

- Discovery is the same, but support for OSCORE is indicated by an attribute

3. Proxying (next slide)

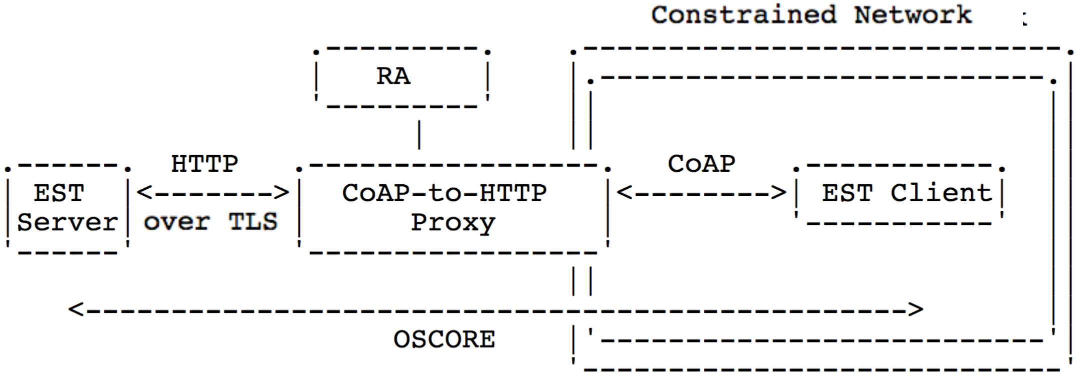
# CoAP-HTTP proxying

EST-CoAPs:



ESTcoaps-to-HTTPS proxy at the CoAP boundary.

EST-OSCORE:



CoAP-to-HTTP proxy at the CoAP boundary.

# Questions for the WG

- Was this the change you requested?

- Other comments?

- Still supportive of the draft?