OSCORE Profile of ACE

https://tools.ietf.org/html/draft-ietf-ace-oscore-profile-08

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Status

- Waiting on Ben's go-ahead to submit new version:
  - PR: https://github.com/ace-wg/ace-oscore-profile/pull/25
  - Issues: https://github.com/ace-wg/ace-oscore-profile/issues/26

- Diff with last submission:
  - https://tools.ietf.org/rfcdiff?url1=https://tools.ietf.org/id/draft-ietf-ace-oscore-profile.txt&url2=https://ace-wg.github.io/ace-oscore-profile/v-09/draft-ietf-ace-oscore-profile.txt

- Some open points discussed here and posted to the mailing list:
  - https://mailarchive.ietf.org/arch/msg/ace/Edjf_Pb0rDK1LoZChBE03ZQ9ajE

Open points

- “I know it when I see it” – HMAC based HKDF COSE algorithms
  - 43

- Remove replay window from the OSCORE_Security_Context object
  - *The idea here was that the AS is able to tell the RS what type and size of replay window to use, but I do not see a reason why the AS should send this info to the RS. Window type and size is implementation related, and each RS node can have its own.*
  - 46

- Confirm that the profile does not necessarily mean C/AS and R/AS is spedcified (optional for profiles).
  - *“Regardless, I think the question here is whether we want to have people use the "coap_oscore" string to indicate that C/AS and/or RS/AS use OSCORE, or if that information is not expected to be encoded in any protocol element; if the latter, then there's nothing to change. “ - Ben*
  - 92

Open points

- The mechanism of letting the RS pick the identifier of the client is not worth the additional complexity.
  - *“[JLS] For better or worse, this is not the only consideration. The above statement presumes that only the AS is going to be assigning the client identifiers. If the RS uses a different method of doing authentication as well, such as LAKE, then there is a chance for collisions at that point as well.”*
  - 6, 7, 32, 61, 65

- Recommendation about length of nonces N1 and N2 to use.
  - *“ [JLS] I am agnostic on this, but I think that generally 64-bits from each side is sufficient. This does add an additional 8 bytes of message size when sending the token to the server. That worries me slightly.*
  - *“I agree that 64 bits from each endpoint may well be sufficient, but it requires some analysis and thought to verify that, whereas 128 bits is "obviously enough". So, I'd like to know what level of analysis has already been done (vs. just inference from, e.g., OSCORE).” - Ben*
  - 5, 52

- Define and register 2 new ACE parameters to transport the nonces used in the exchange, instead of using "cnonce".
  - 3, 53, 60