

Profiles of the ACE framework

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ACE profiles 1 (2)

- › ACE defines a framework for authorization of access to resources in an IoT setting
- › To allow for a variety IoT deployments, the ACE framework is complemented with profiles.
- › An ACE profile should specify [1]:
 - communication protocol between client and RS
 - security protocol the client and RS must use to protect their communication
 - proof-of-possession protocol(s) and how to select one
 - unique profile identifier
 - ...

[1] <https://tools.ietf.org/html/draft-ietf-ace-oauth-authorized-06#appendix-C>

ACE profiles 2 (2)

ACE profiles:

- 1. CoAP-DTLS profile
 - 2. CoAP-OSCOAP profile
 - 3. MQTT-TLS profile
 - 4. CoAP Pub-Sub profile
- } "plain" access to resource
- } access to publish/subscribe on topic
+ additional access

Other texts related to ACE profiles:

- 5. Low-latency group communications
 - 6. App. A in Secure CoAP group communication
- } access to group keys
+ additions

(References in a later slide)

Discussion

- › If ACE profiles are adopted and developed independently of each other there is a risk of overlapping or different specification of the same functionality
- › How do we coordinate the development of ACE profiles?

References

1. <https://tools.ietf.org/html/draft-gerdes-ace-dtls-authorize>
2. <https://tools.ietf.org/html/draft-seitz-ace-oscoap-profile>
3. <https://tools.ietf.org/html/draft-sengul-kirby-ace-mqtt-tls-profile>
4. <https://tools.ietf.org/html/draft-palombini-ace-coap-pubsub-profile>
5. <https://tools.ietf.org/html/draft-somaraju-ace-multicast>
6. <https://tools.ietf.org/html/draft-tiloca-core-multicast-oscoap-01#appendix-A>