

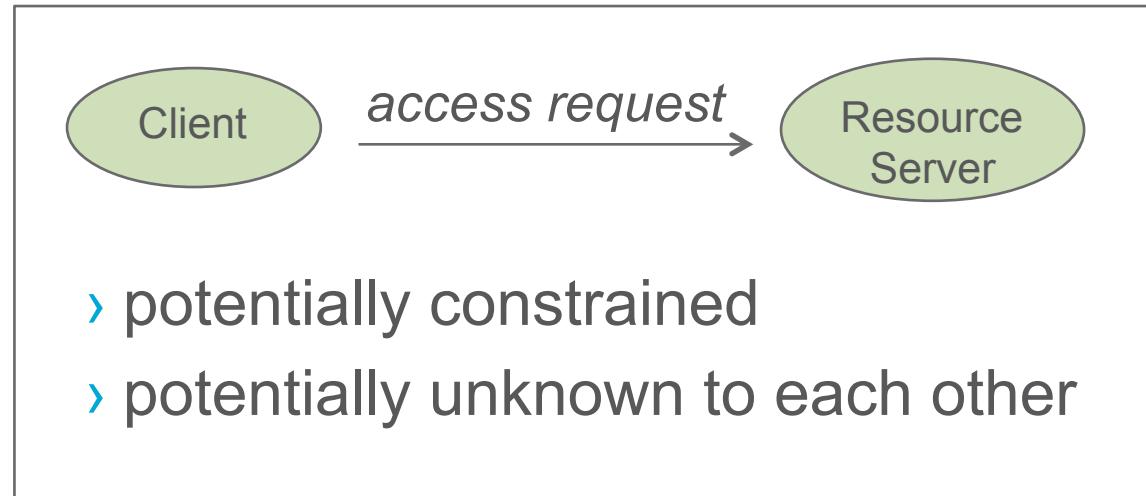
The ACE Framework

draft-ietf-ace-oauth-authz

IETF 99, ACE WG, Prague, Jul 17, 2017

Background

- › ACE defines a framework for authorization of access to resources in an IoT setting.

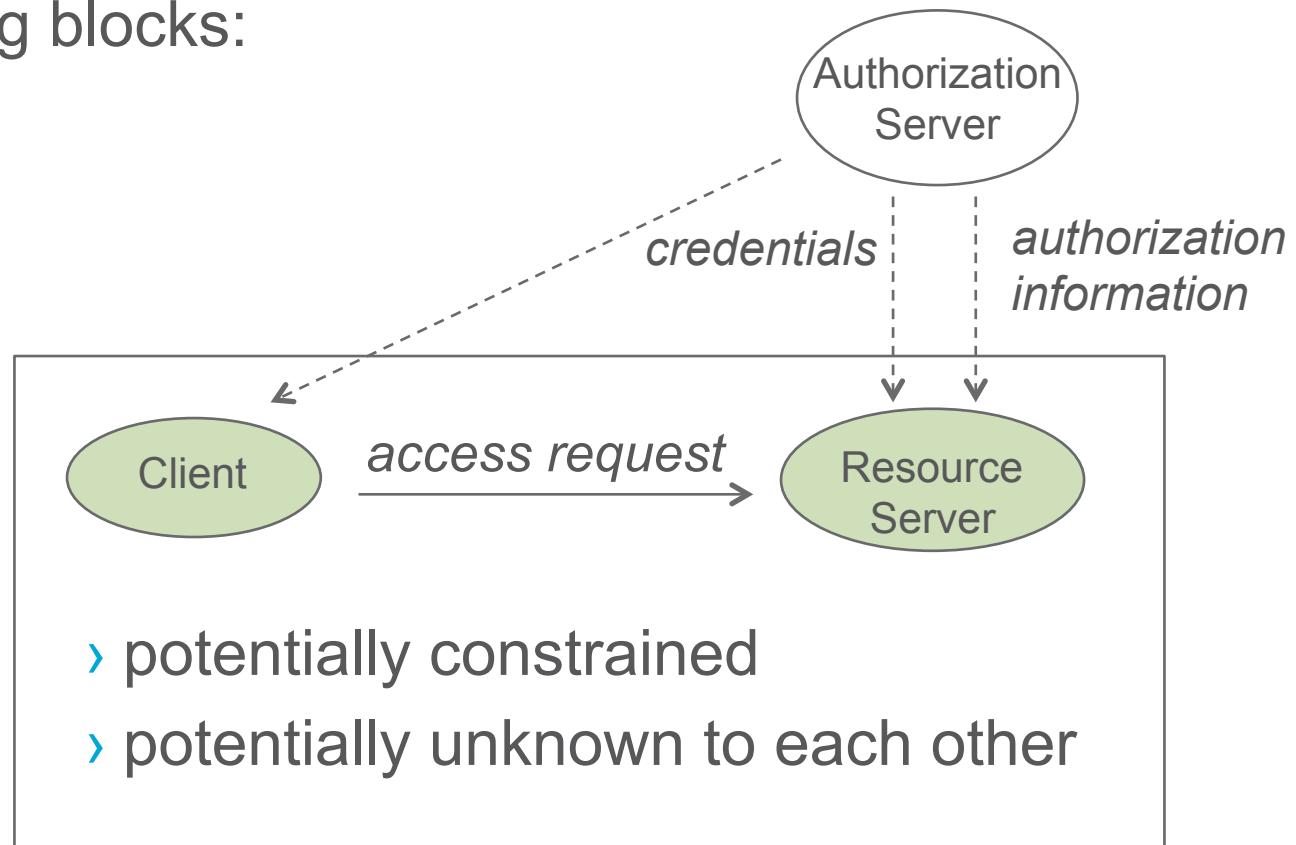


Background

- › ACE defines a framework for authorization of access to resources in an IoT setting.

- › Four building blocks:

- OAuth 2.0
- CBOR
- COSE
- CoAP



ACE profiles

- › To allow for a variety IoT deployments, the ACE framework is complemented with profiles:

1. CoAP/DTLS profile
 2. CoAP/OSCOAP profile
 3. MQTT/TLS profile
 4. CoAP/Pub-Sub profile
-
- The diagram shows four ACE profiles listed vertically. To the right of the first two profiles is a large brace that groups them together, with the text "plain" access to resource to its right. To the right of the last two profiles is another large brace that groups them together, with the text access to publish/subscribe on topic + additional access to its right.

New profiles:

5. CoAP/IPsec profile
 6. Multicast profile
-
- The diagram shows two new ACE profiles listed vertically. To the right of the first profile is a brace that groups it with the first profile in the previous section, with the text "plain" access to resource to its right. To the right of the second profile is another brace that groups it with the second profile in the previous section, with the text access to group keys + additions to its right.

references
in a later slide

Related to low-latency group communication [7]

Status and next steps

- › No major changes in -06
- › Import discovery process from the CoAP/DTLS-profile (courtesy DCAF)
- › Address Jim's review comments
- › Open issue: Time synchronization (see [8])
- › Implementation
 - At least two implementations of the ACE framework
 - Interop test with specific profiles

References

1. <https://tools.ietf.org/html/draft-ietf-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-aragon-ace-ipsec-profile>
6. <https://tools.ietf.org/html/draft-tiloca-ace-oscoap-joining>
7. <https://tools.ietf.org/html/draft-somaraju-ace-multicast>
8. <https://tools.ietf.org/html/draft-navas-ace-secure-time-synchronization>

Thank you!

Comments/questions?