

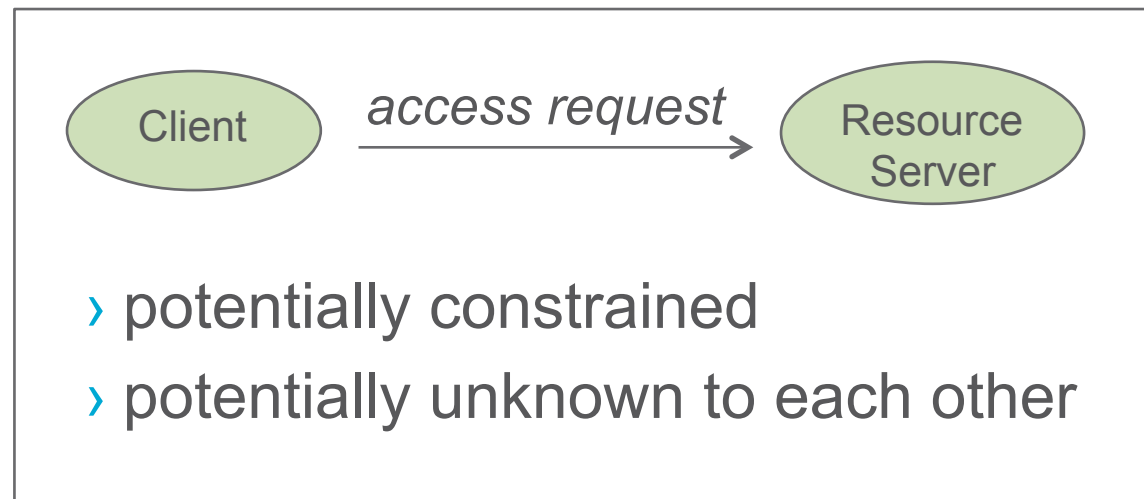
The ACE Framework

draft-ietf-ace-oauth-authz

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

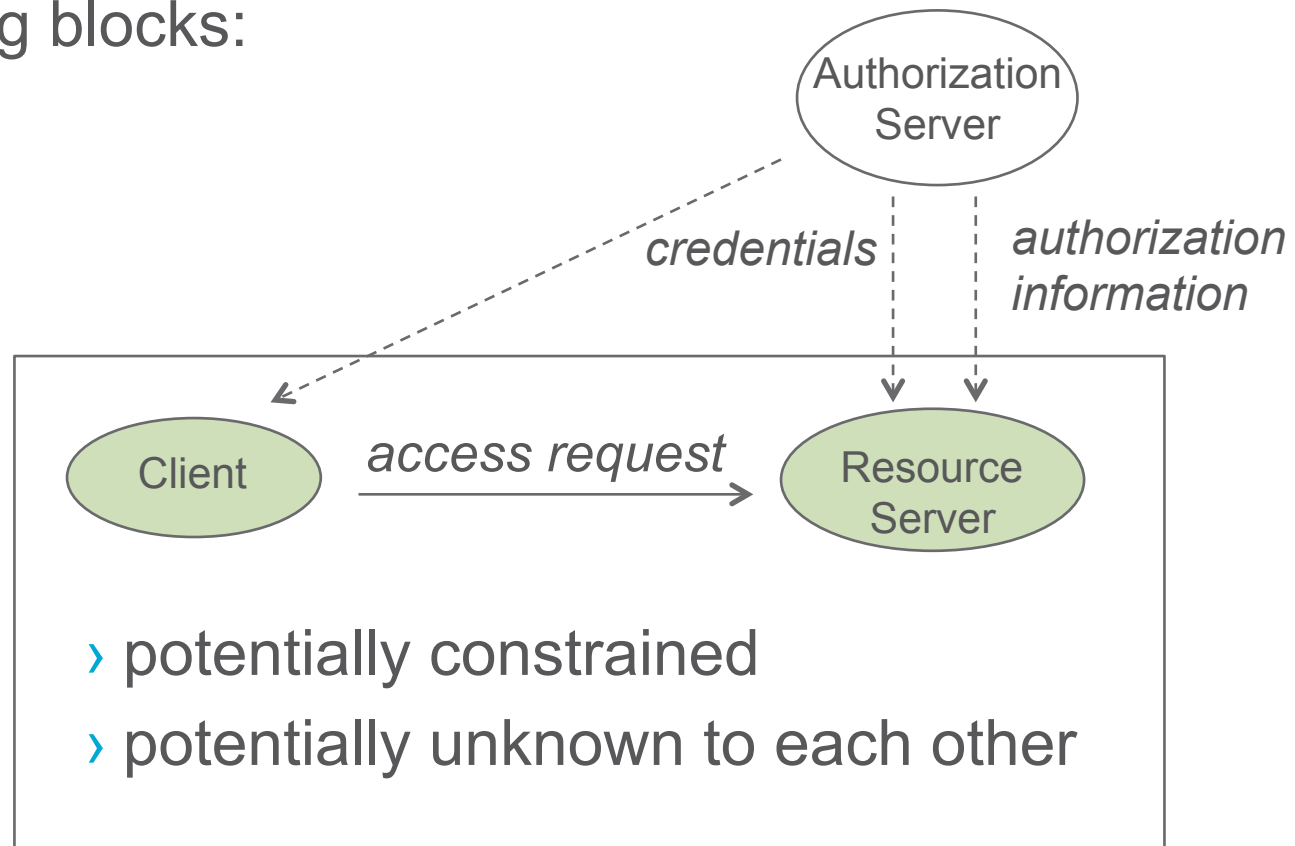
Background

- › 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
- } "plain" access to resource
- } access to publish/subscribe on topic + additional access

New profiles:

- 5. CoAP/IPsec profile
 - 6. Multicast profile
- } "plain" access to resource
- } access to group keys + additions

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?