# Interoperable Step Up Authentication for OAuth 2

**IETF 113**

https://datatracker.ietf.org/doc/draft-bertocci-oauth-step-up-authn-challenge/

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**Brian Campbell**

# Agenda

- Problem
- Proposal
- Discussion

# Problem

- An API can reject an access token at any time
  - Even if the token is technically still valid, etc
- Most common reasons
  - Authentication strength deemed insufficient for a particular request
  - Freshness requirements stricter than what the AS-determined expiration would allow
    - E.g. risk management engine determines a fresher token is required
- No obvious way for a client to remediate the error situation

# Proposal

- Extend RFC6750 with
  - error code `insufficient_user_authentication`
  - New `WWW-Authenticate` params `acr_values`, `max_age`
- Require support for AS request parameters `acr_values`, `max_age`
- Provide guidance for JWT ATs and Introspection response to express auth levels in interoperable fashion so that RS can read them

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client
resource server
authorization server


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authorization: Bearer eyJ0[..]5A
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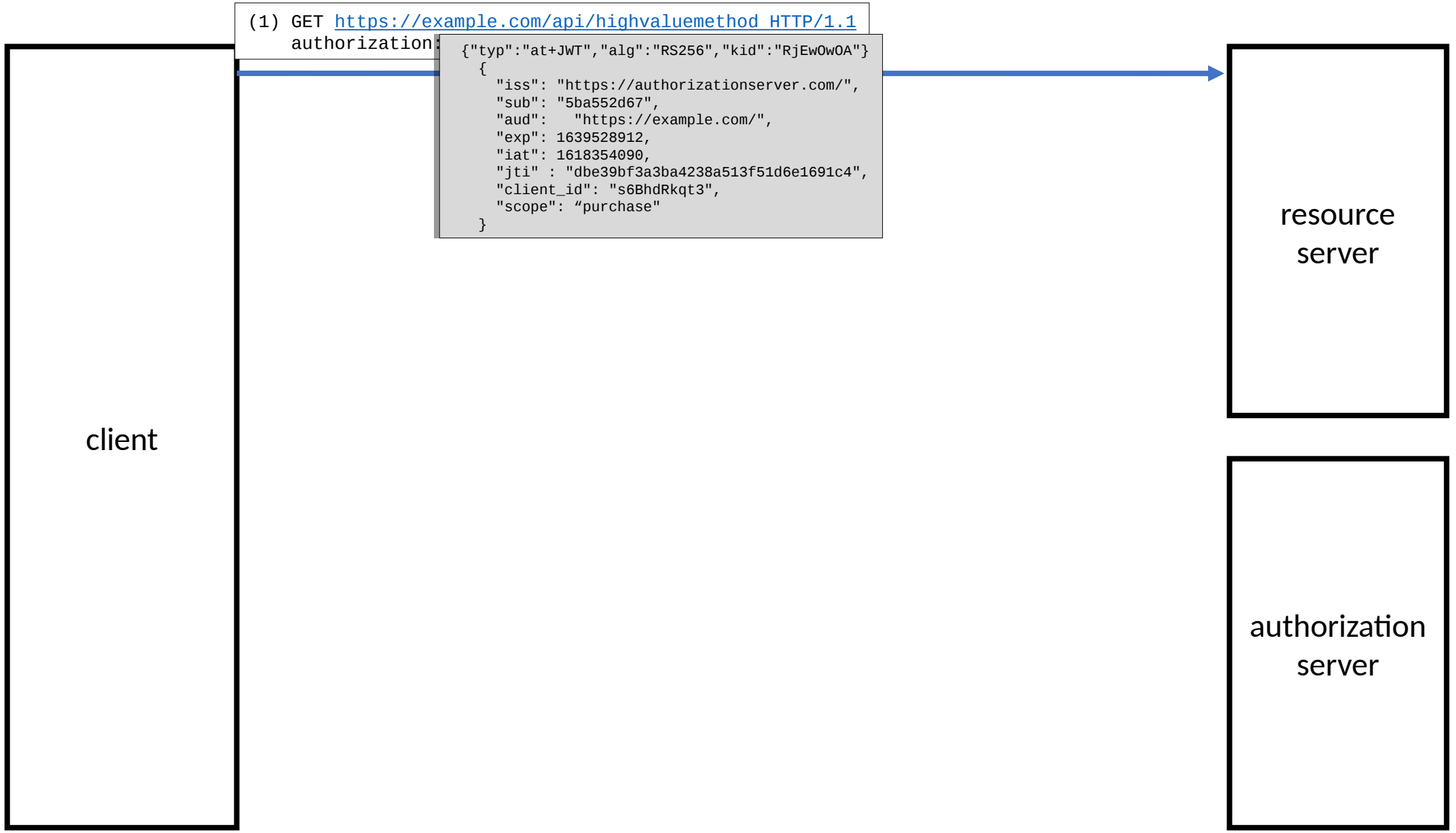
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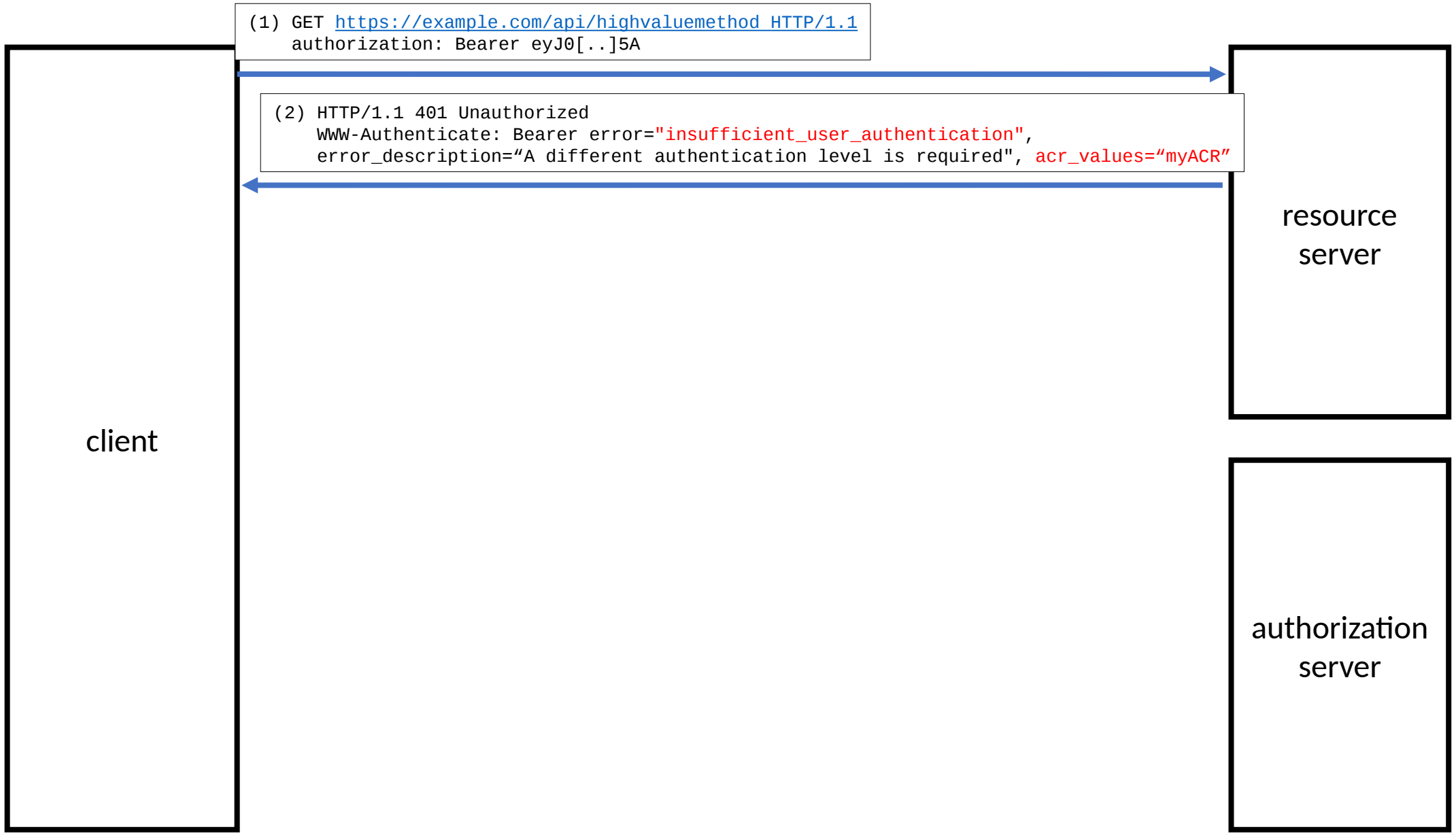
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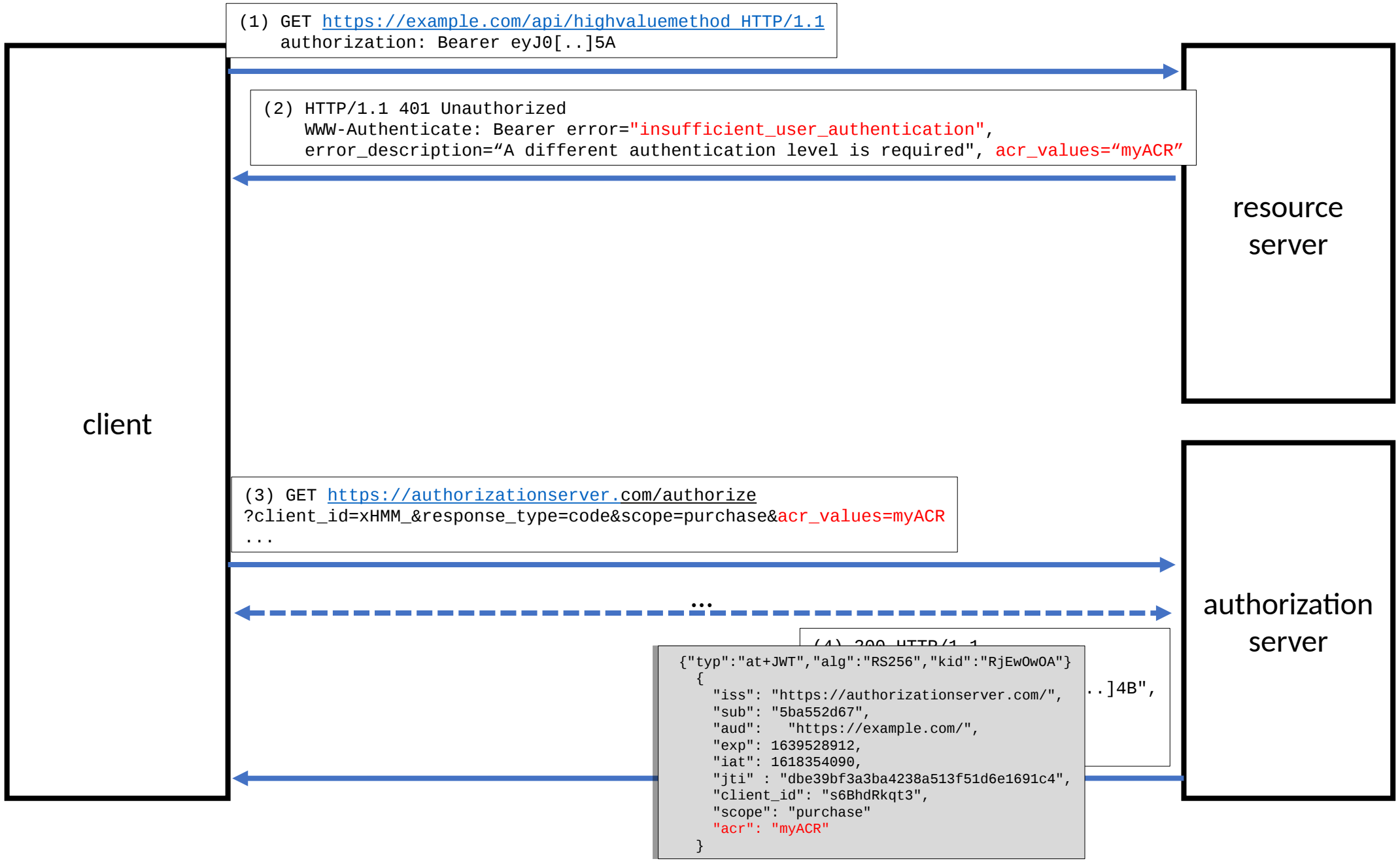
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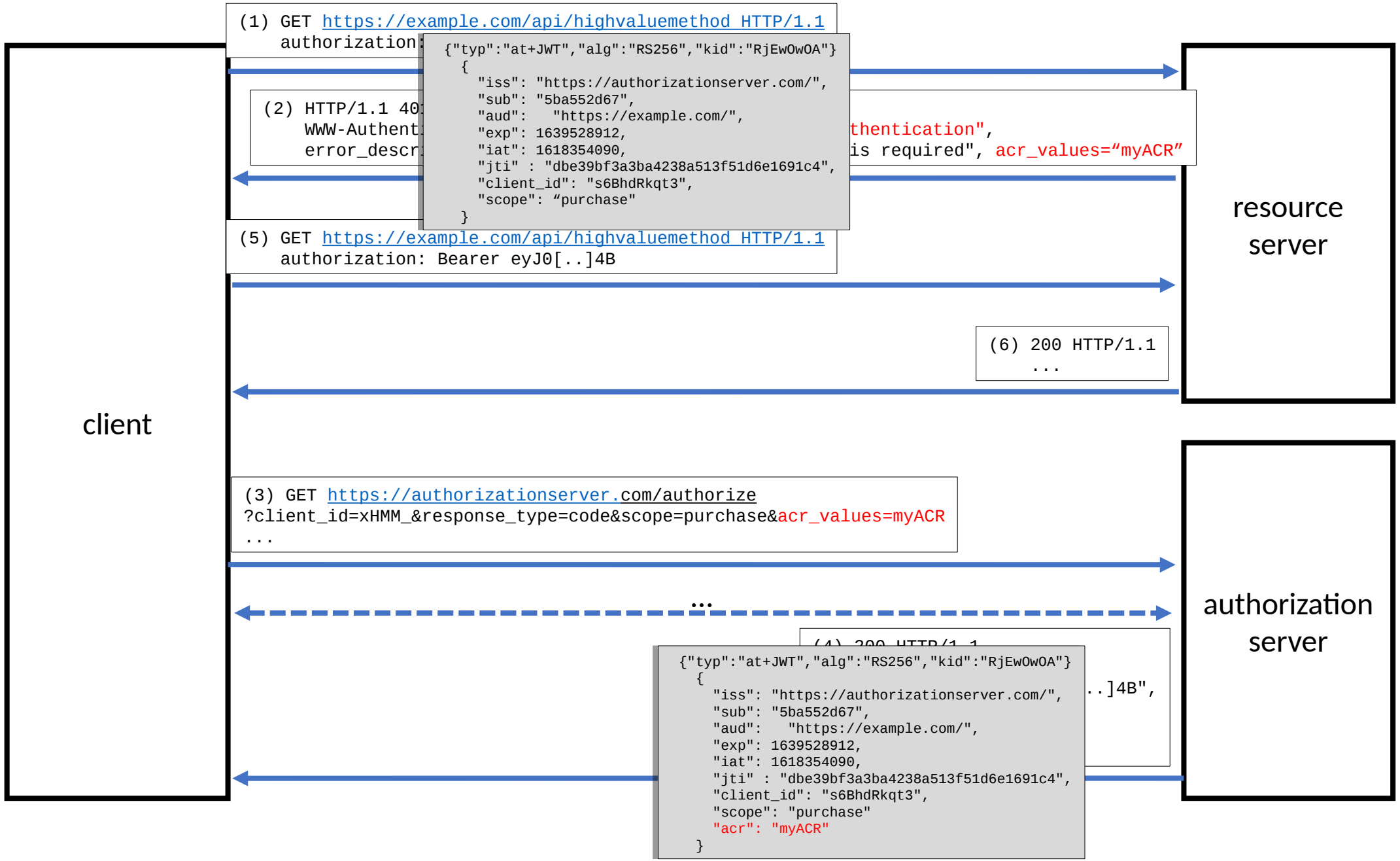
# Advantages

- Interoperable stepup can now be enshrined in client SDKs, API gateways/SDKs, AS
- Very small incremental step on existing feature sets

# Discussion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