User-Managed Access (UMA) Working Group

Eve Maler, WG chair

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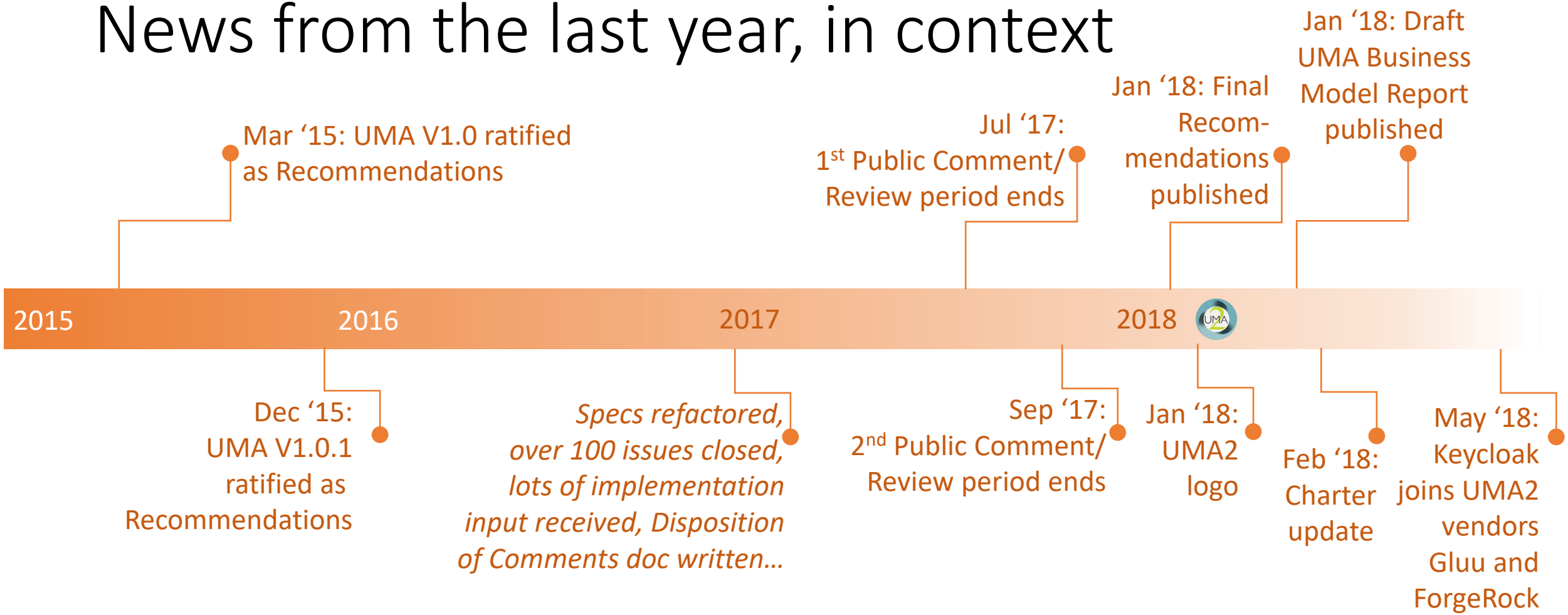
15 May 2018

http://tinyurl.com/umawg/ | @UMAWG

First: Shall we do an UMA explainer?

News from the last year, in context



Some use cases/ecosystems involving UMA

- Financial
  - UK Pensions Dashboard Project / OIX / Origo
  - Examining suitability for a set of Open Banking use cases
- IoT
  - “ACE actors” architecture identifies requirements for authorization to an RqP
- Healthcare
  - Profiled in Health Relationship Trust (HEART) at OpenID Foundation
  - Part of the new OpenMedReady framework, along with HEART

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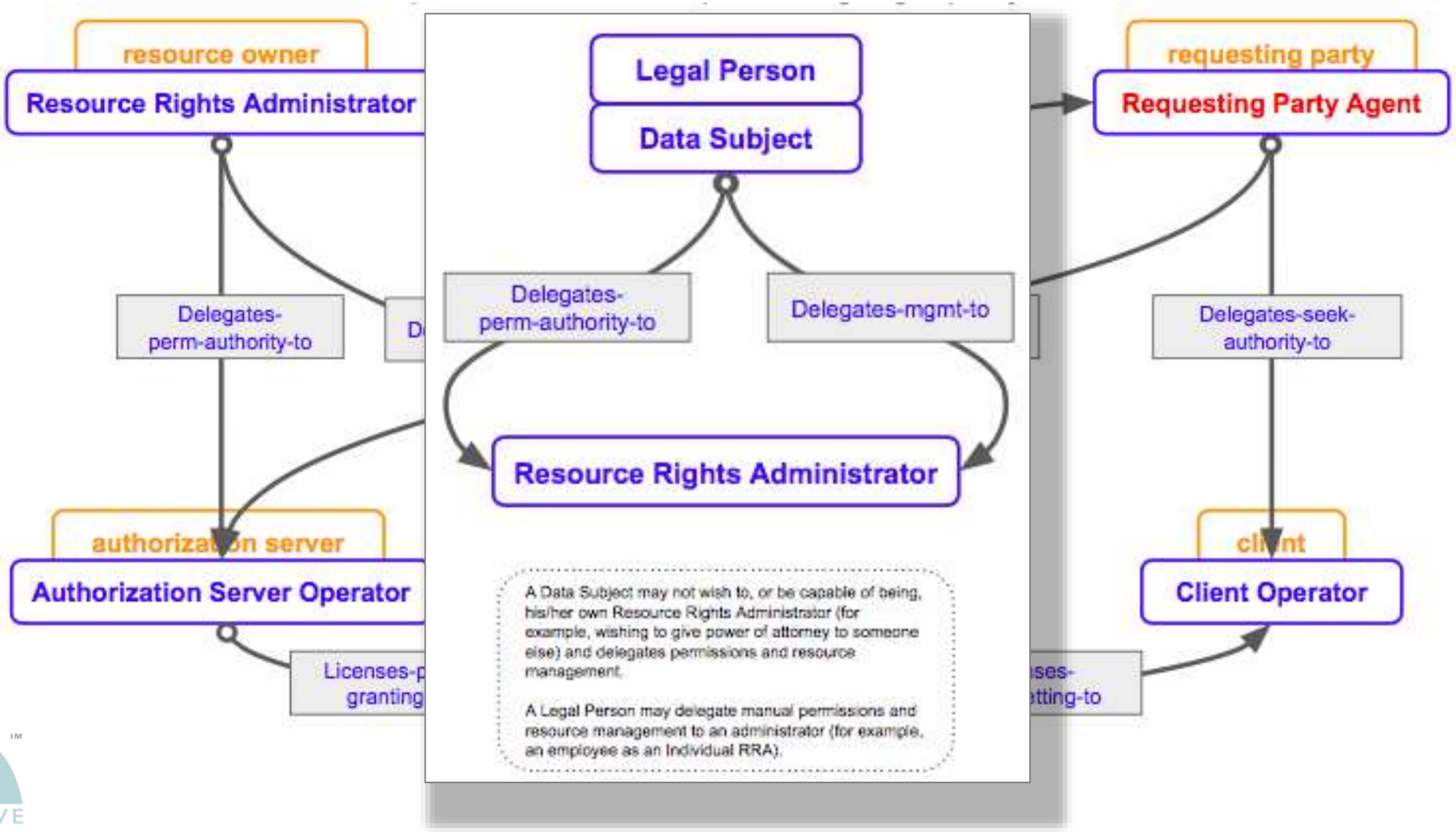
UMA 2

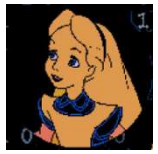
The UMA business model defines how the UMA protocol enables a license-based model for controlling access rights to personal digital assets



Key benefits of UMA to service providers

True security of delegated access

Scalability of resource permissioning



API-first protection strategy

Fosters control for compliance and trust

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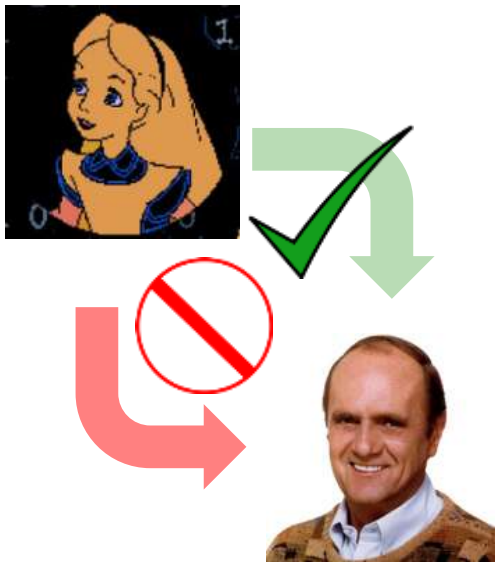
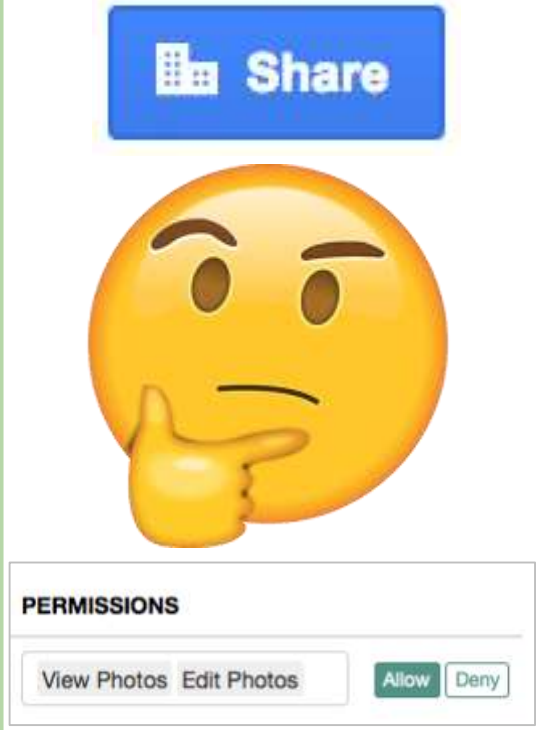
UMA

Key benefits of UMA to consumers

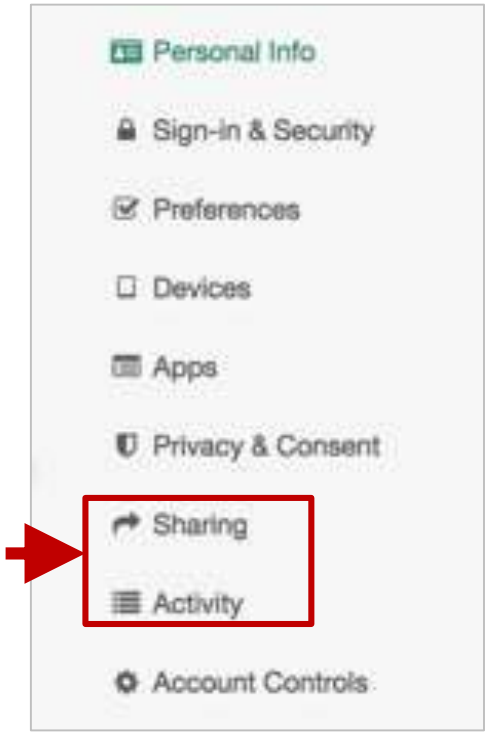
Constrained party-to-party delegation



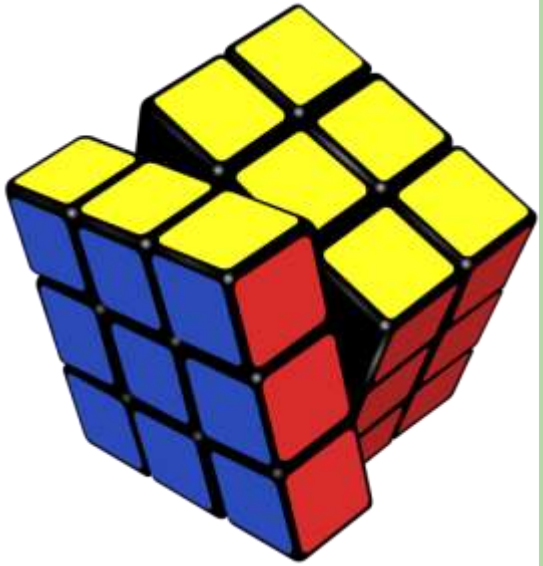
Granting consent without external influence



Centralized monitoring and management



Control of consents at a fine grain



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UMA

OAuth, OIDC, and UMA2: breaking it down

OAuth is for constrained delegation to apps

It has helped to kill the “password anti-pattern”

Resource owner

Client

Authorization server

Resource server

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UMA 2

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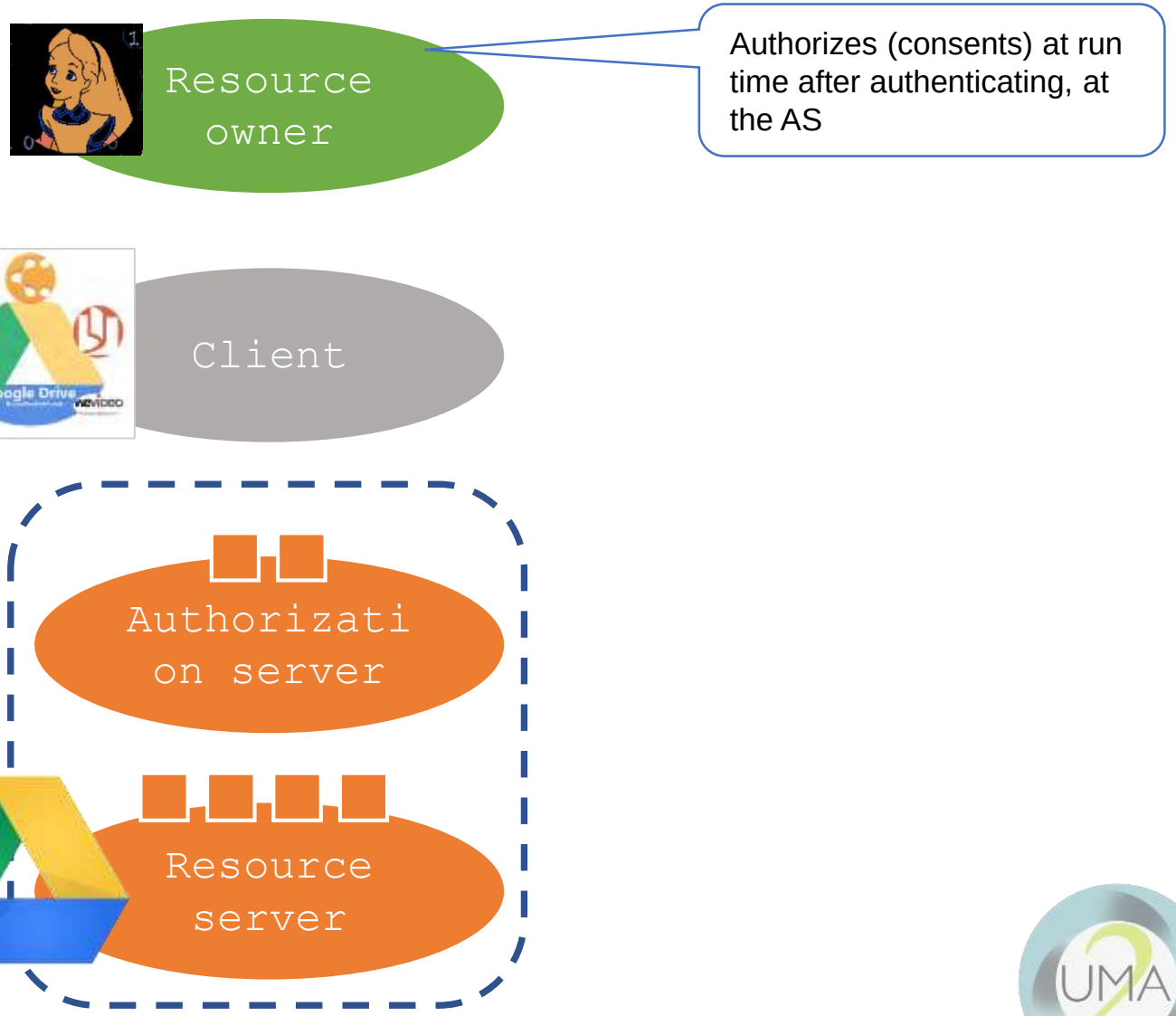

OAuth is for constrained delegation to apps

It has helped to kill the “password anti-pattern”

Resource owner

Authorizes (consents) at run time after authenticating, at the AS

Client

App gets consent based on the API scopes it requested; it has its own identity distinct from the RO’s

Authorization server

Resource server

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Some number of API endpoints that deliver the data or other value-add

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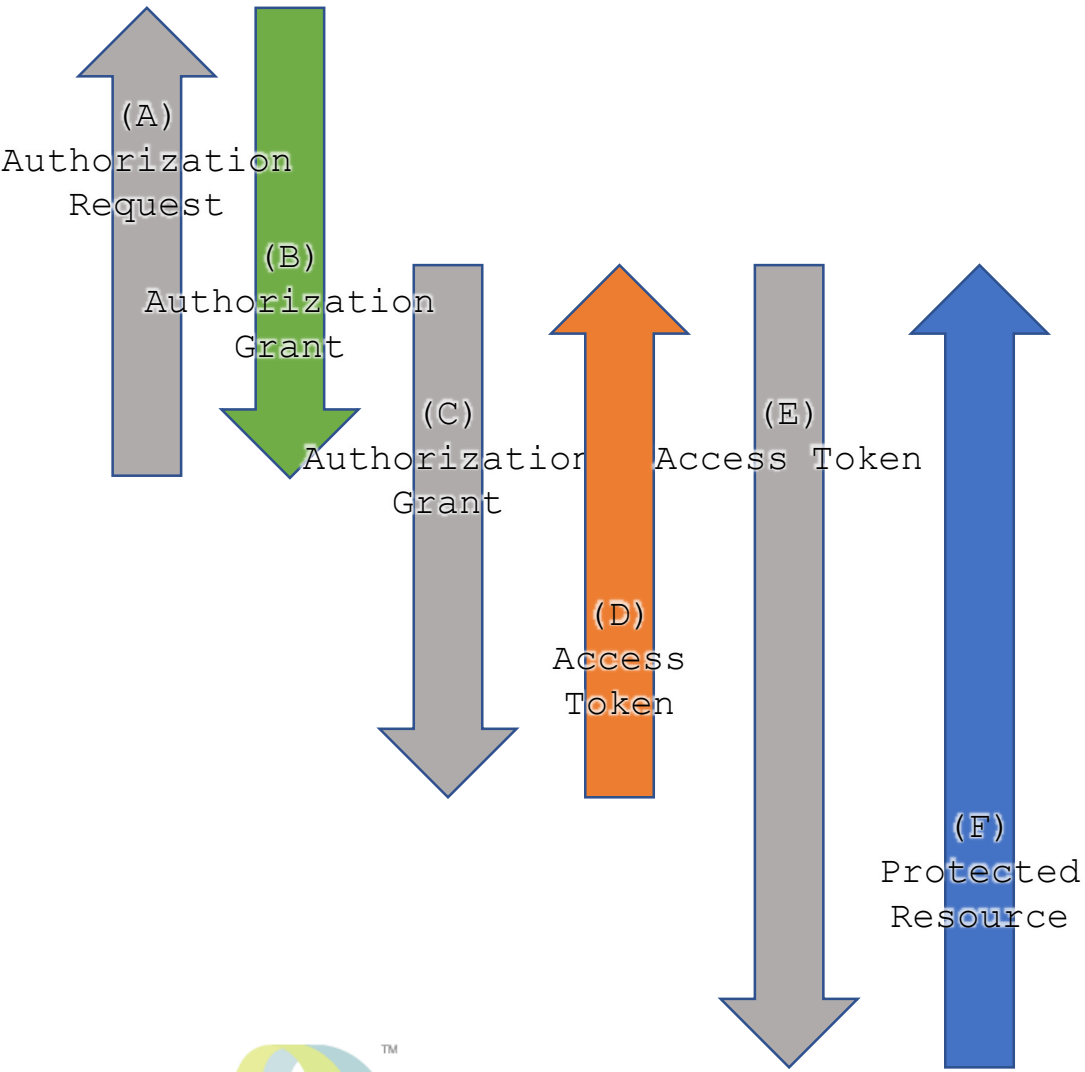

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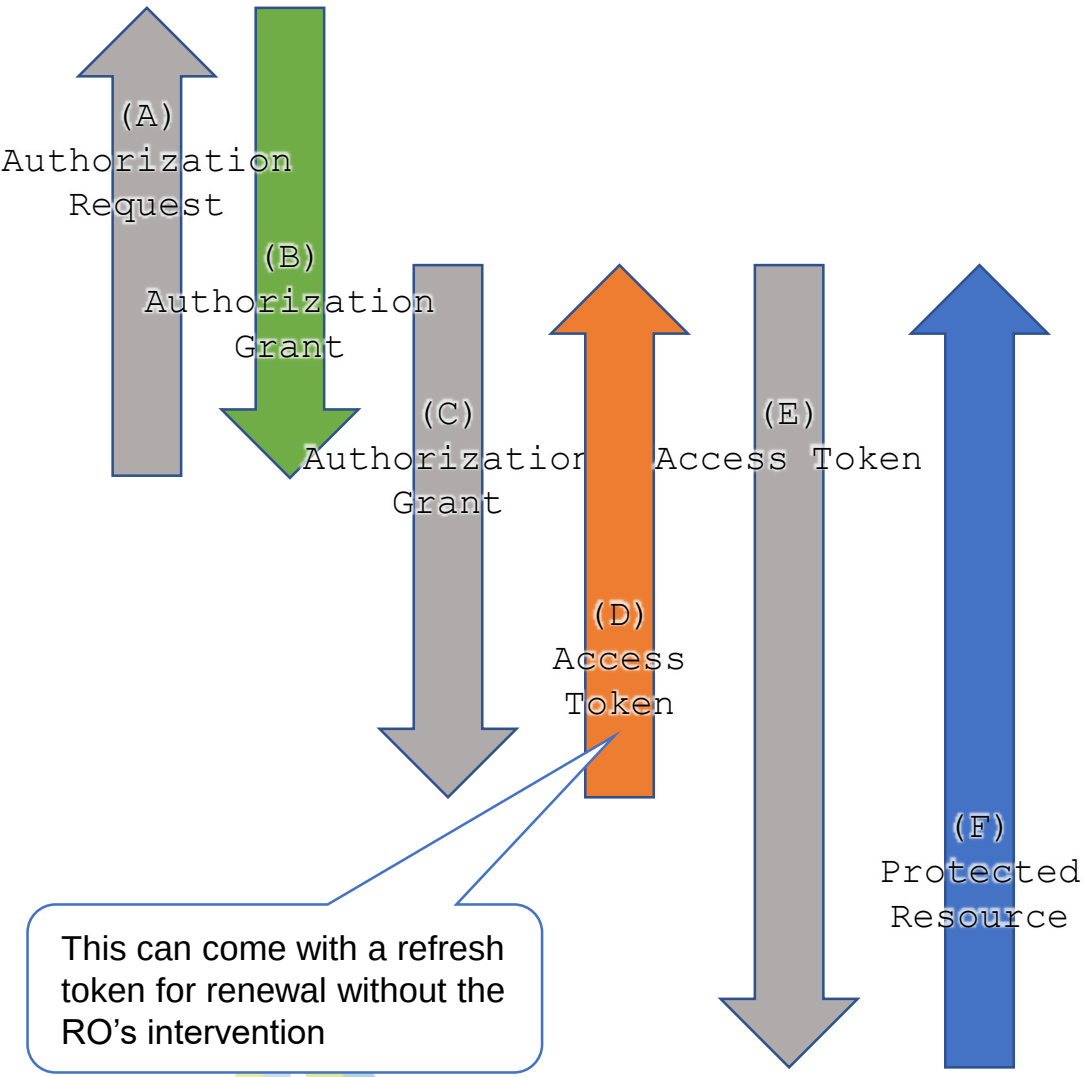

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Some number of API endpoints that deliver the data or other value-add

This can come with a refresh token for renewal without the RO’s intervention

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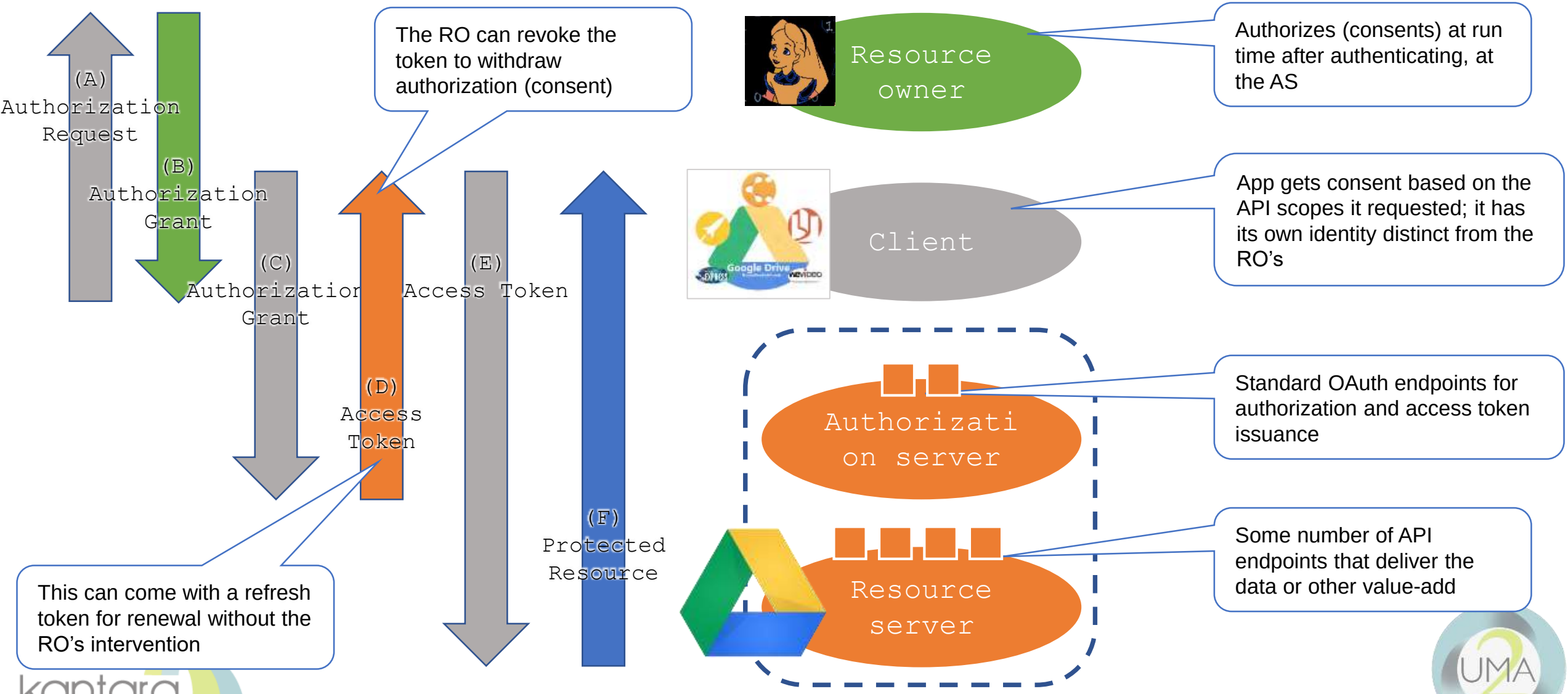

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UMA 2

OpenID Connect does modern-day federation

It is an OAuth-protected identity API, plus a bit more

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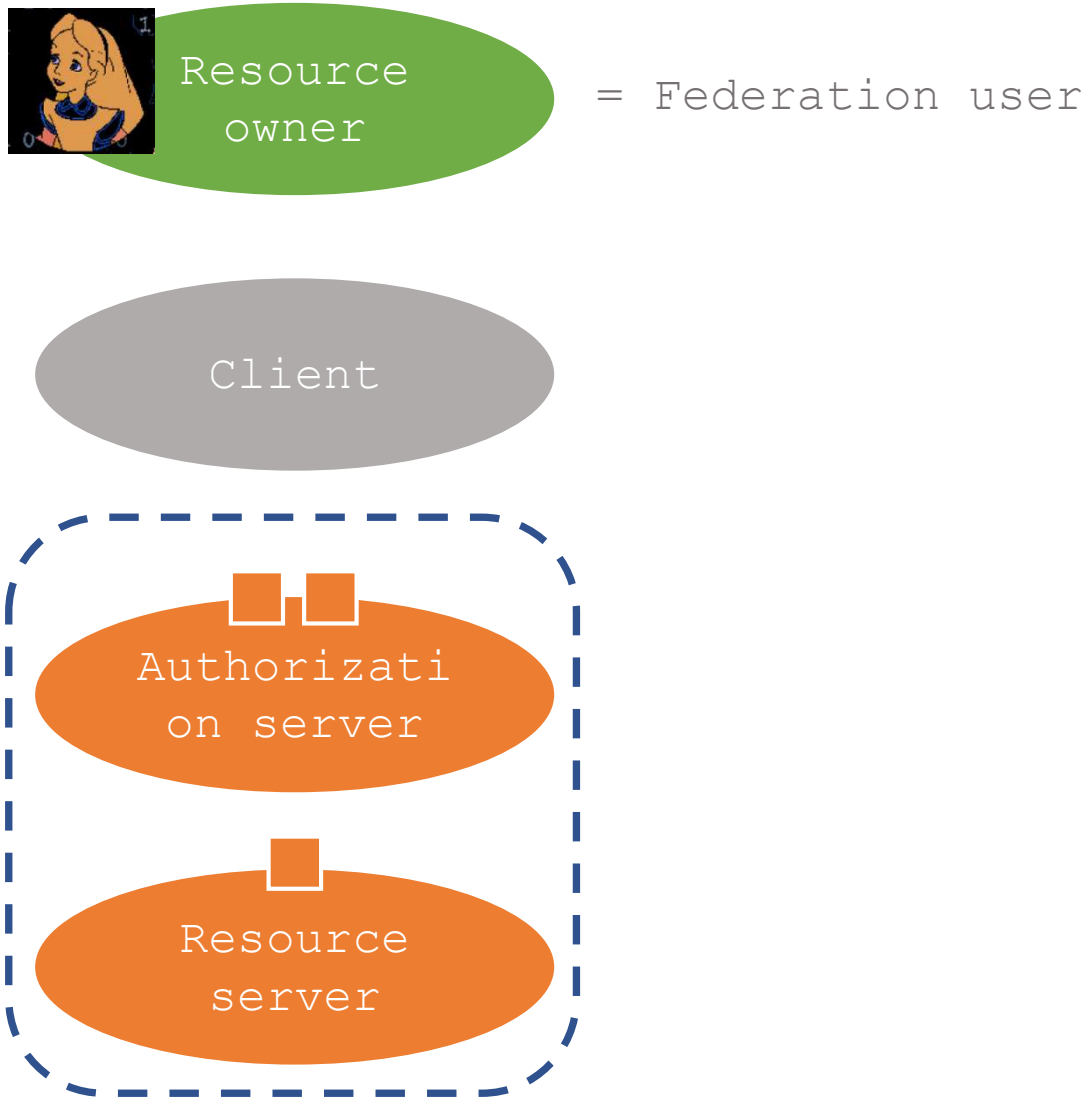

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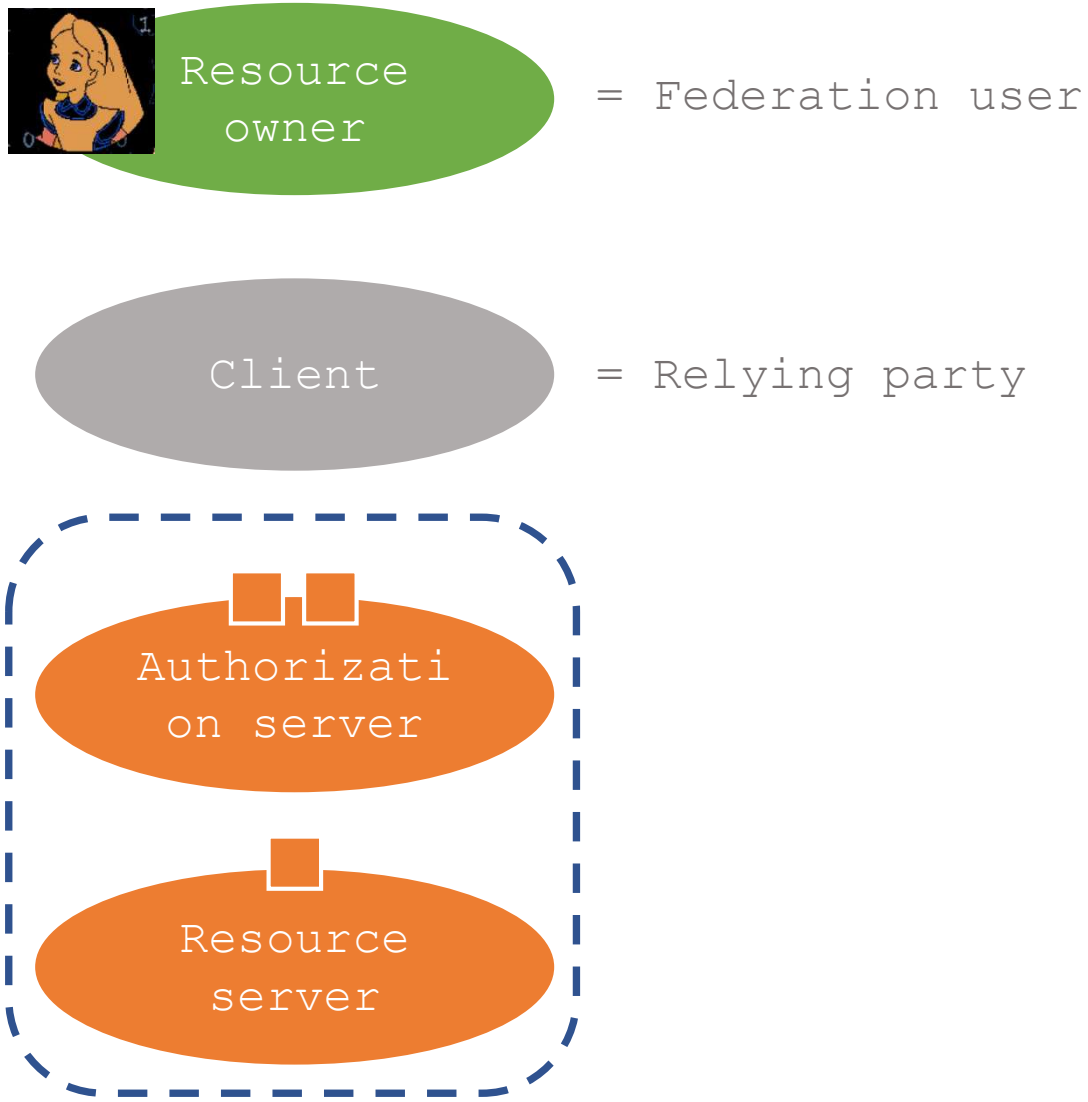

OpenID Connect does modern-day federation

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Resource owner

= Federation user

Client

= Relying party

Authorization server

Resource server

= Identity provider
("OpenID provider")

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Token endpoint typically delivers an “ID token” similar to a SAML assertion

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OpenID Connect does modern-day federation

It is an OAuth-protected identity API, plus a bit more

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= Federation user

Client

= Relying party

Token endpoint typically delivers an “ID token” similar to a SAML assertion

Authorization server

Standard UserInfo endpoint can be called with an access token to look up identity claims

Resource server

= Identity provider (“OpenID provider”)

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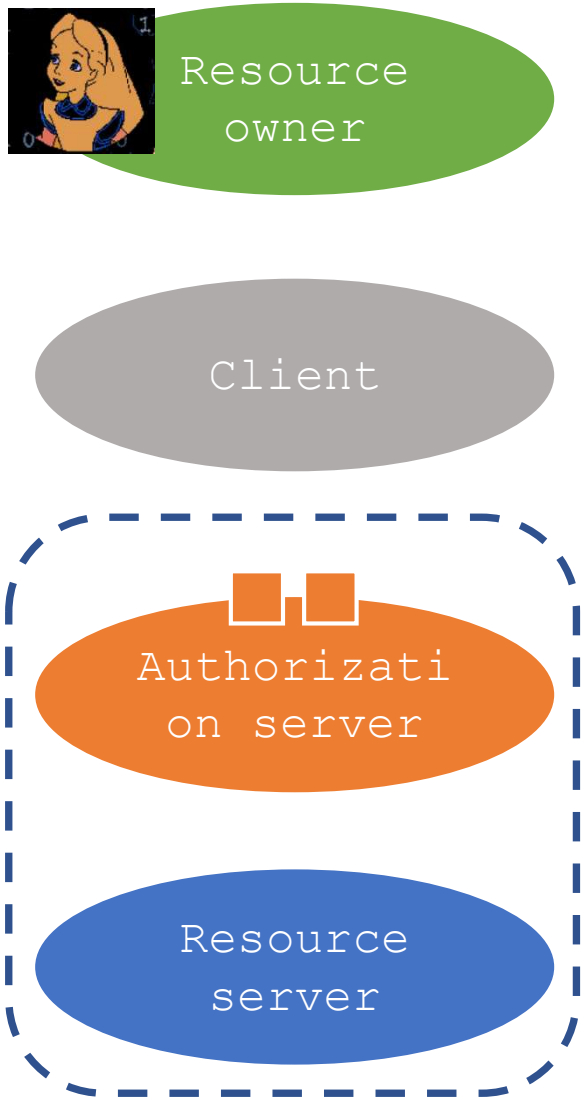
UMA 2

User-Managed Access is for cross-party sharing

UMA brings next-gen delegation and consent to OAuth



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Resource owner

Requesting party

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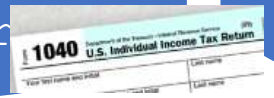

Resource server

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UMA 2

User-Managed Access is for cross-party sharing

UMA brings next-gen delegation and consent to OAuth

Resource owner

Requesting party

At run time

UX

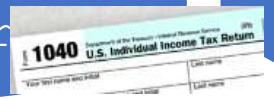
Opt in

Client

Authorization server

Resource server

Resource server



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UMA 2

User-Managed Access is for cross-party sharing

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Resource owner

Requesting party

Ahead of time

At run time

UX

Share

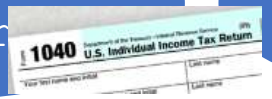
Opt in

Client

Authorization server

Resource server

Resource server



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Resource owner

Requesting party

Ahead of time

At run time

After the fact

UX

Share

Opt in

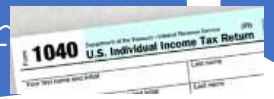
Approve

Client

Authorization server

Resource server

Resource server



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Requesting party

Ahead of time | Anytime | At run time | After the fact

UX

Share | Monitor | Opt in | Approve

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Resource server

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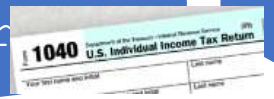

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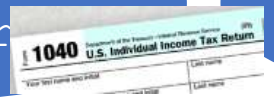

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Questions?
Thank you!
Join us!

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