UMA2 Legal role definitions

Some visualizations

(See the companion draft report *A Proposed Licensing Model for User-Managed Access*, available at: **https://kantarainitiative.org/reports-recommendations/**)

Formal UMA business model

Legal relationships: Basic conventions

Color conventions:

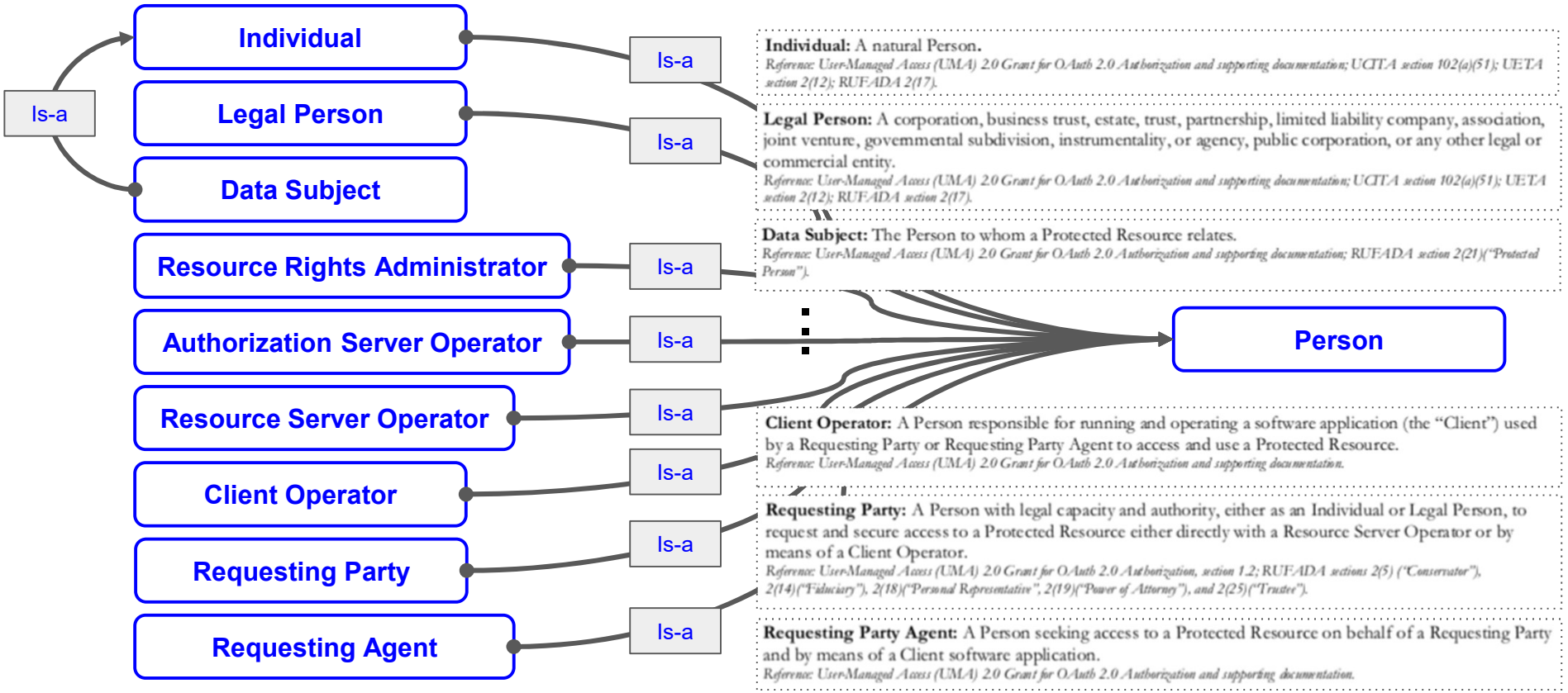
- **Legal (upper capital, blue)** **technical (lowercase, orange)** ***/issue/question/note (red)**

Basic relationship types:

- Party role A is a kind/species of party role B: **Is-a** *(for more detail, see Business Model definitions appendix)*
- Party role A acts in technical entity role A: **Acts-as-a** *(maps party defined in Business Model to technical entity defined in specs)*

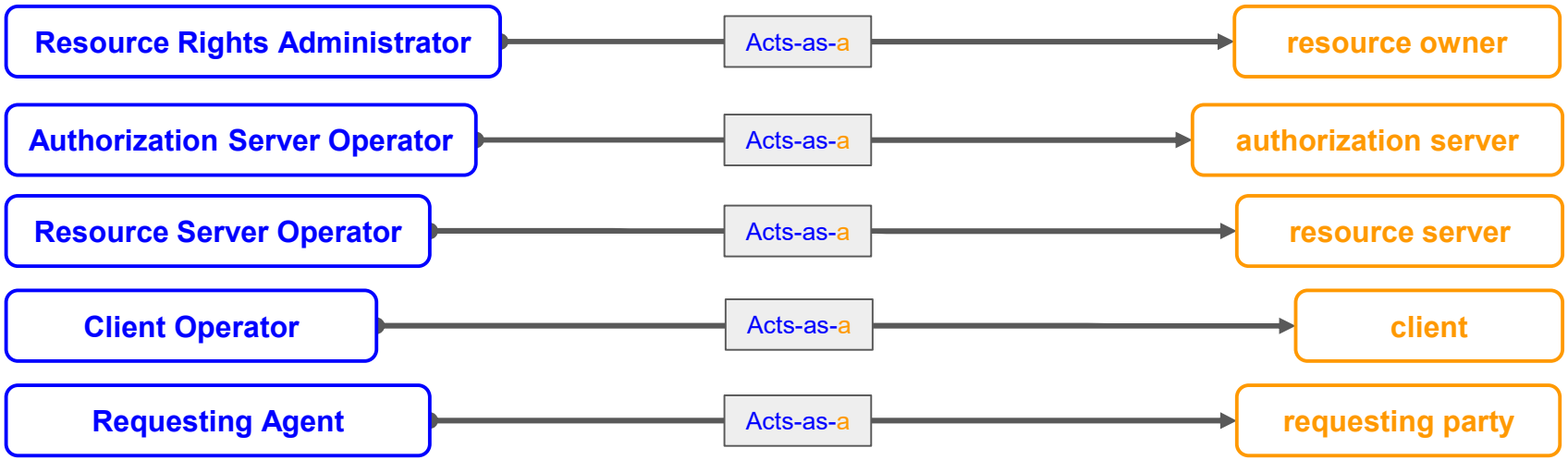
Legal relationships: Persons

Establishing basic party roles: Individual, Legal Person, Data Subject



Legal relationships: Legal-to-technical role bridges

Establishes how parties in legal roles can take part in UMA messaging flows



resource owner
: An entity capable of granting access to a protected resource, the "user" in User-Managed Access. The resource owner MAY be an end-user (natural person) or MAY be a non-human entity treated as a person for limited legal purposes (legal person), such as a corporation.

requesting party
: A natural or legal person that uses a client to seek access to a protected resource. The requesting party may or may not be the same party as the resource owner.

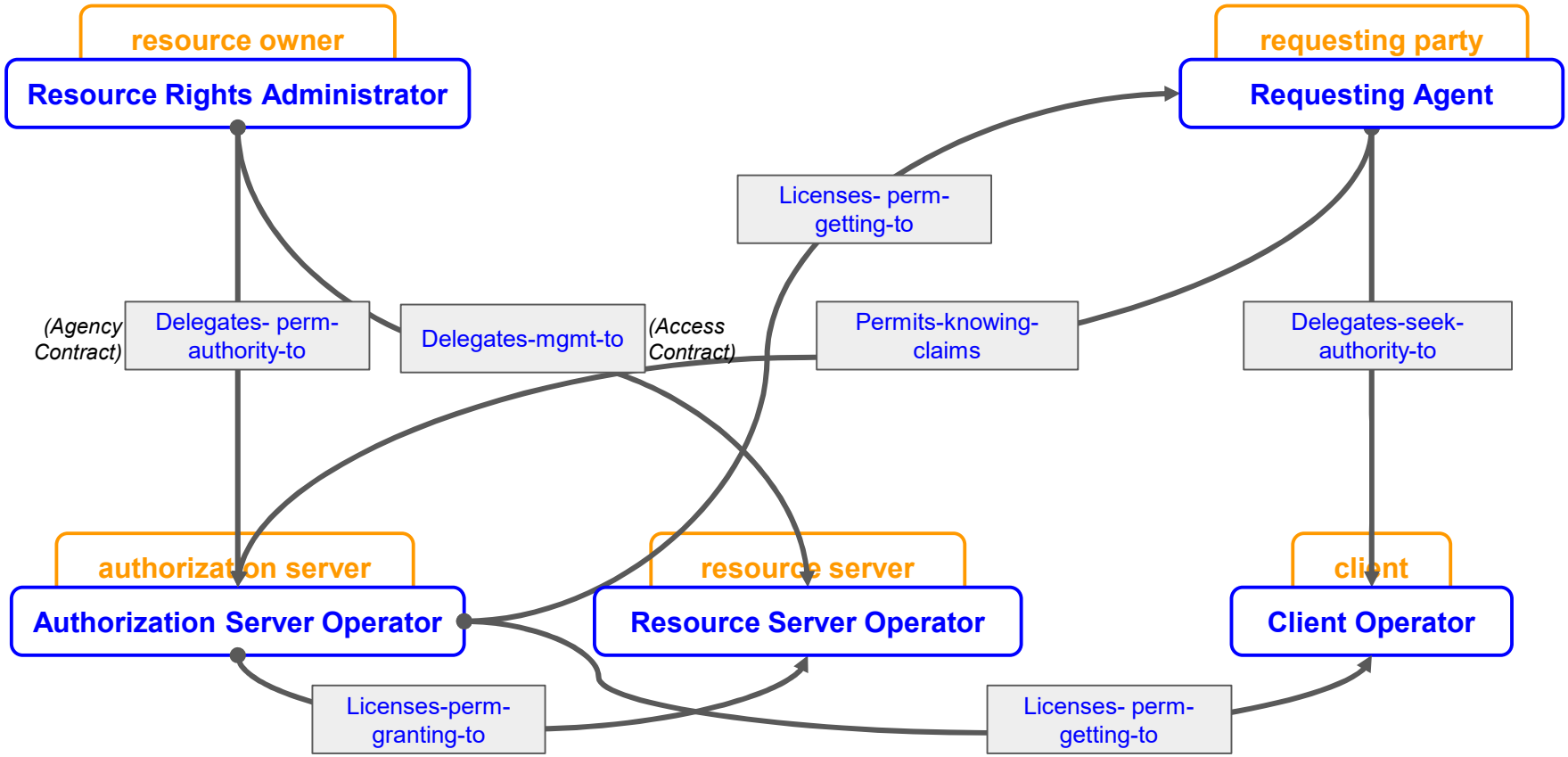
⋮

Legal relationships: Business relationship types

- Delegates authority for granting and managing access permissions to: **Delegates-perm-authority-to**
  - aka Agency Contract
- Delegates resource management to: **Delegates-mgmt-to**
  - aka Access Contract
- Licenses granting access permissions to: **Licenses-perm-granting-to**
- Licenses receiving access permissions to: **Licenses-perm-getting-to**
- Delegates access seeking authority to: **Delegates-seek-authority-to**
- Delegates permission to know/persist to: **Permits-knowing-claims**
- Party in role A also acts in role B: **Acts-as-a**

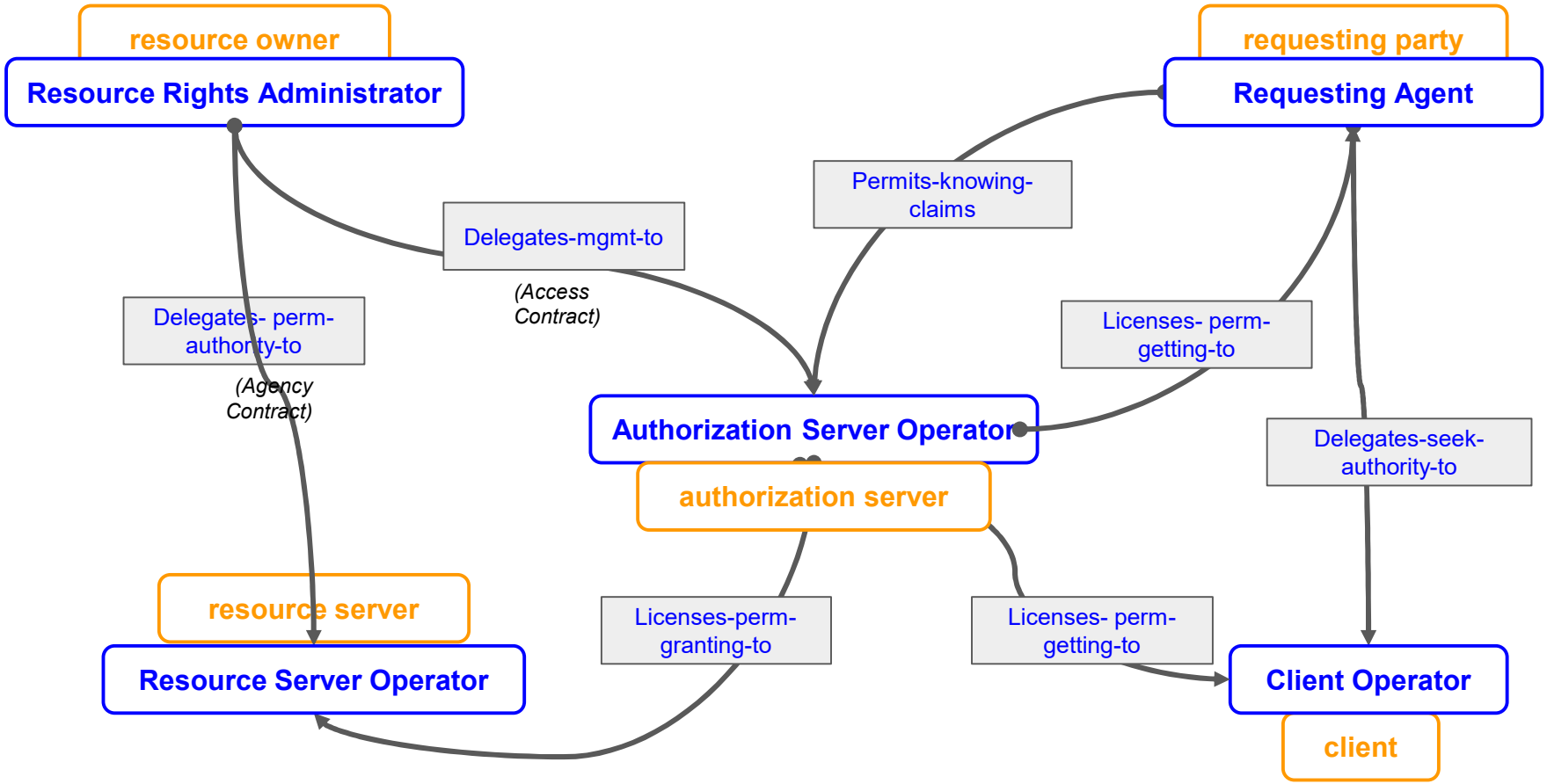
Legal relationships: “Endpoint to endpoint”

Intra-protocol relationships among parties in legal roles, illustrated



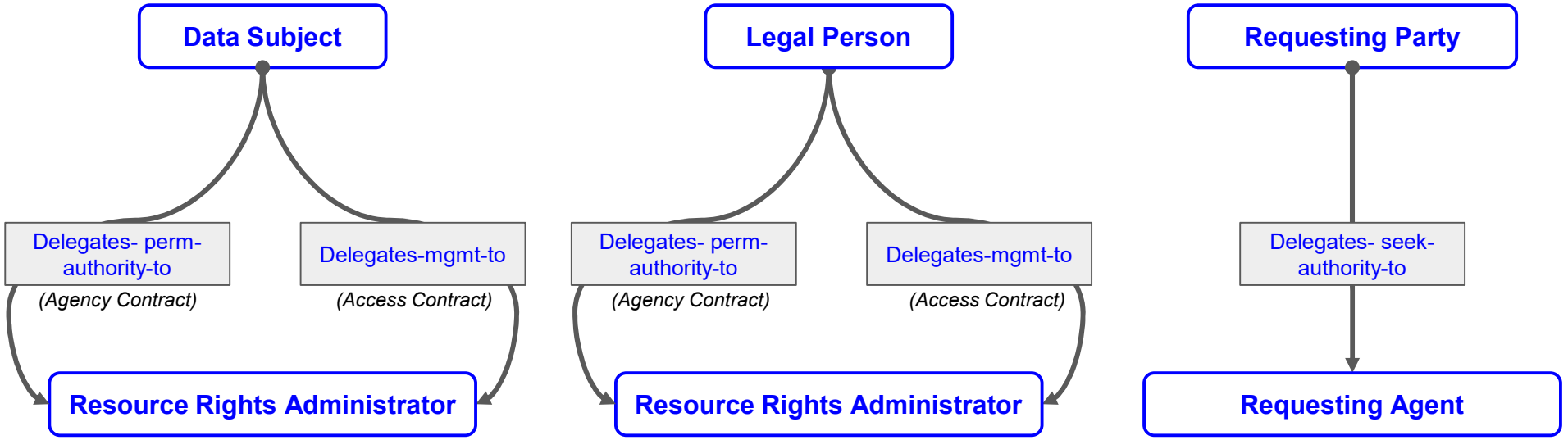
Legal relationships: “Endpoint to endpoint” - Flattened

Intra-protocol relationships among parties in legal roles, illustrated



Legal relationships: “Extending the ends”

How “offline” types of parties may play delegation roles, illustrated



A Data Subject may not wish to, or be capable of being, his/her own Resource Rights Administrator (for example, wishing to give power of attorney to someone else) and delegates permissions and resource management.

A Legal Person may delegate manual permissions and resource management to an administrator (for example, an employee as an Individual RRA).

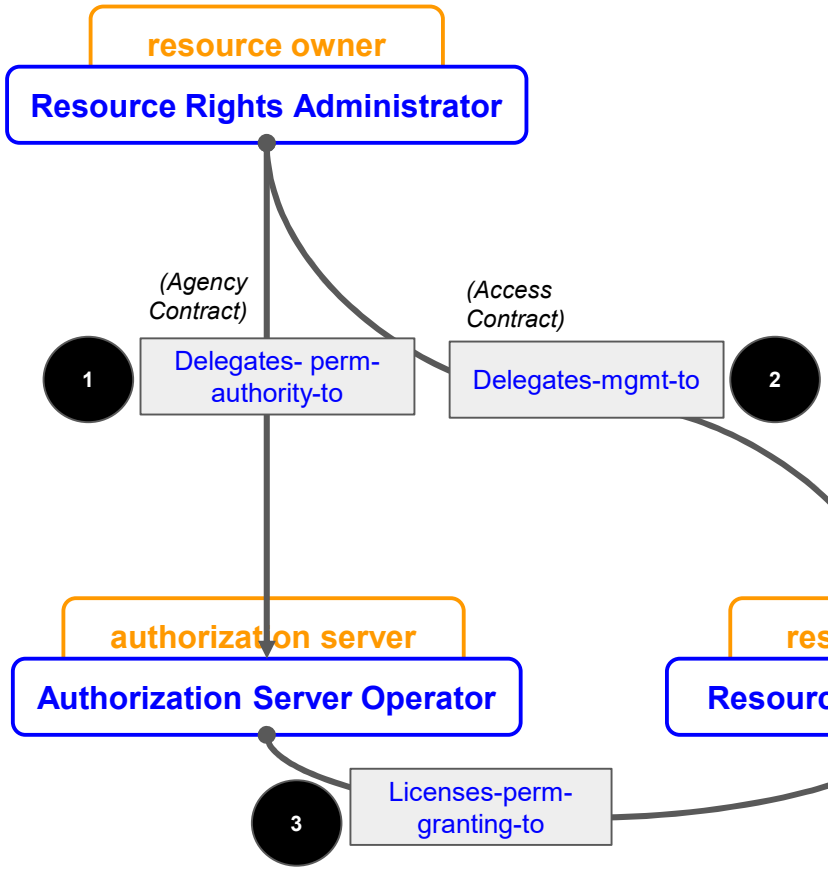
NOTE: It is not currently in the scope of the UMA Legal subteam to consider such use cases.

A Requesting Party may be an Individual or a Legal Person, and a Requesting Agent may also be an Individual or a Legal Person. The former may not wish to be, or be capable of being, its own Agent.

In that case, a Requesting Party may delegate access-seeking authority to another party on its behalf (for example, in the case of a hospital having a specific clinician seek access as its employee, an Individual RqPA).

Legal relationships: Devices and artifacts

Making relationships and their changes auditable and machine-readable



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Legal devices: ToS, privacy notice (when an Individual)

Technical artifacts: Consent management record (outside UMA scope)

2

Legal devices: ToS, privacy notice (when an Individual)

Technical artifacts: Consent management record (outside UMA scope)

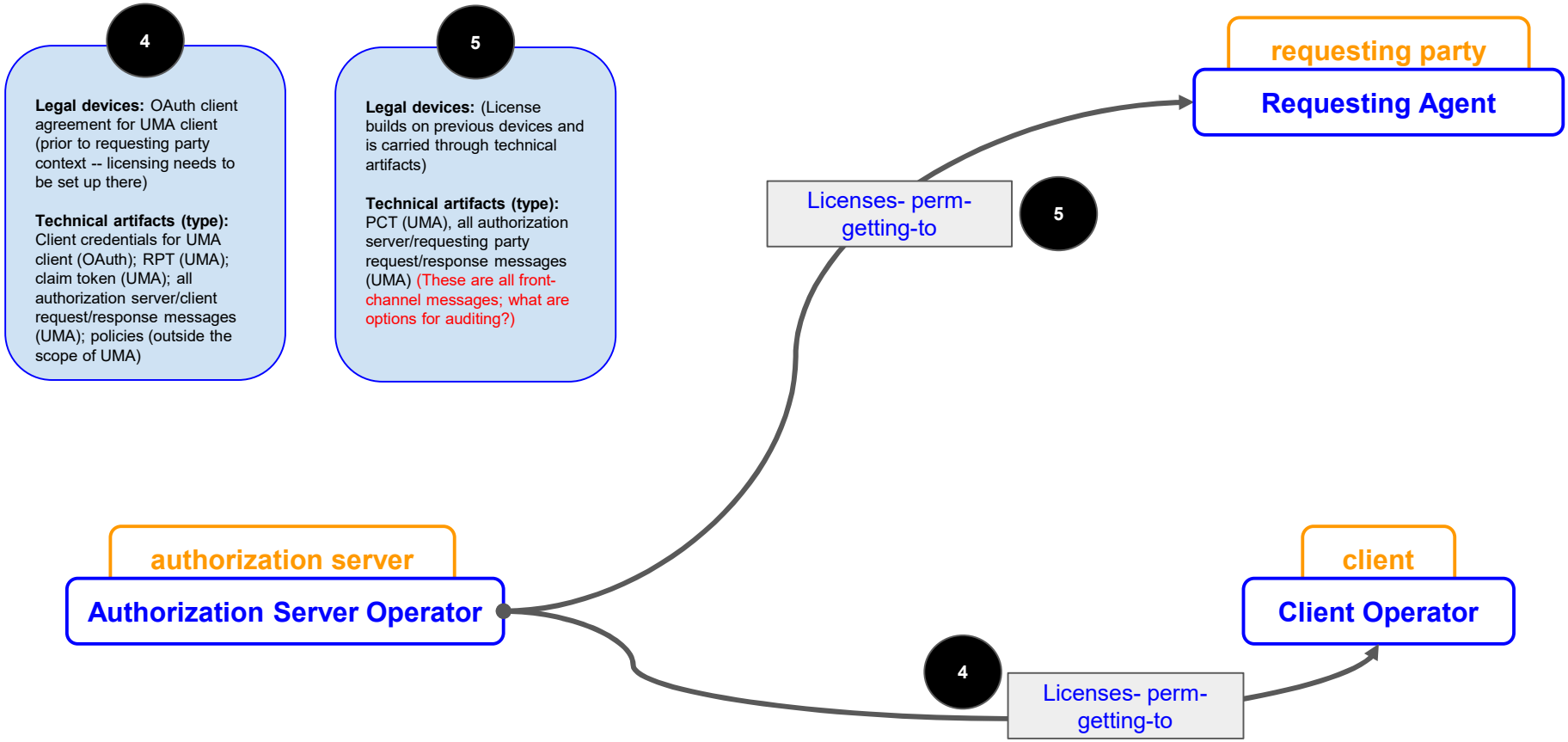
3

Legal devices: OAuth client agreement (prior to resource owner context -- licensing needs to be set up there)

Technical artifacts (type): Client credentials for UMA resource server (OAuth); PAT (UMA); all request/response messages between authorization server and resource server (UMA)

Legal relationships: Devices and artifacts

Making relationships and their changes auditable and machine-readable



Legal relationships: Devices and artifacts

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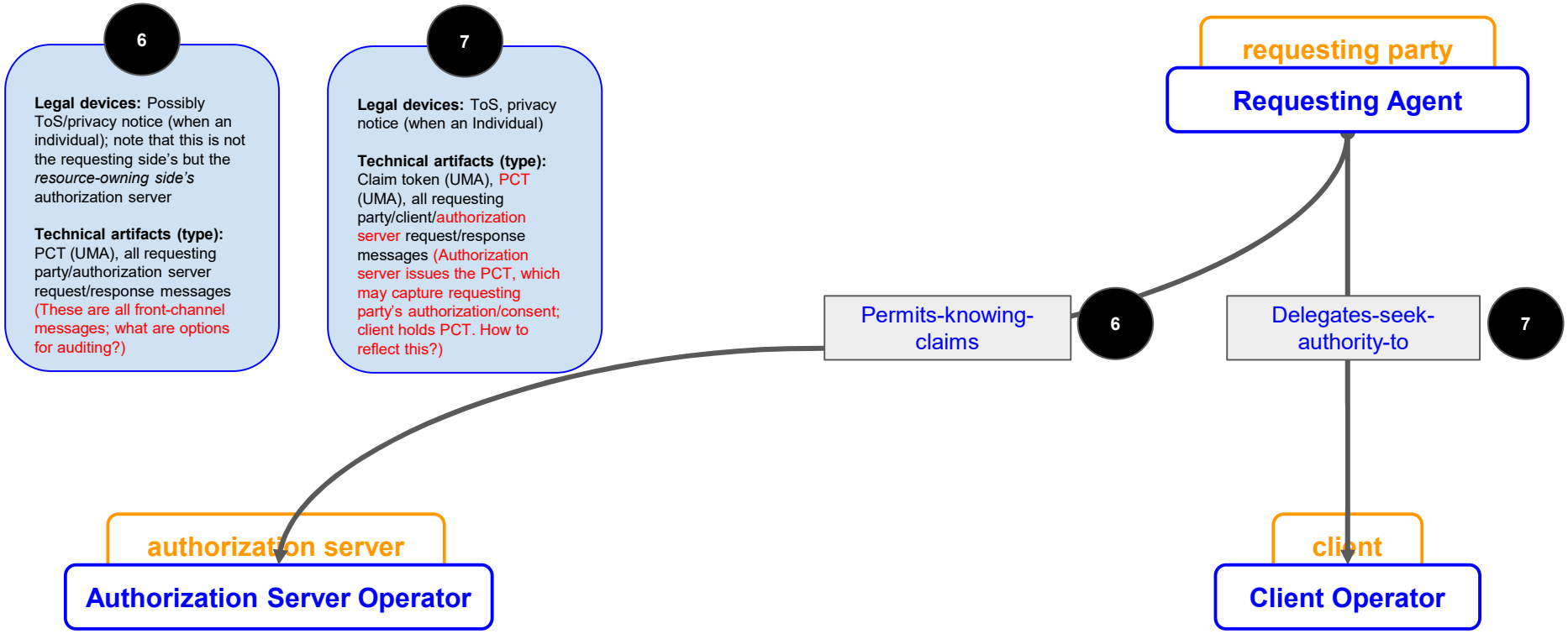
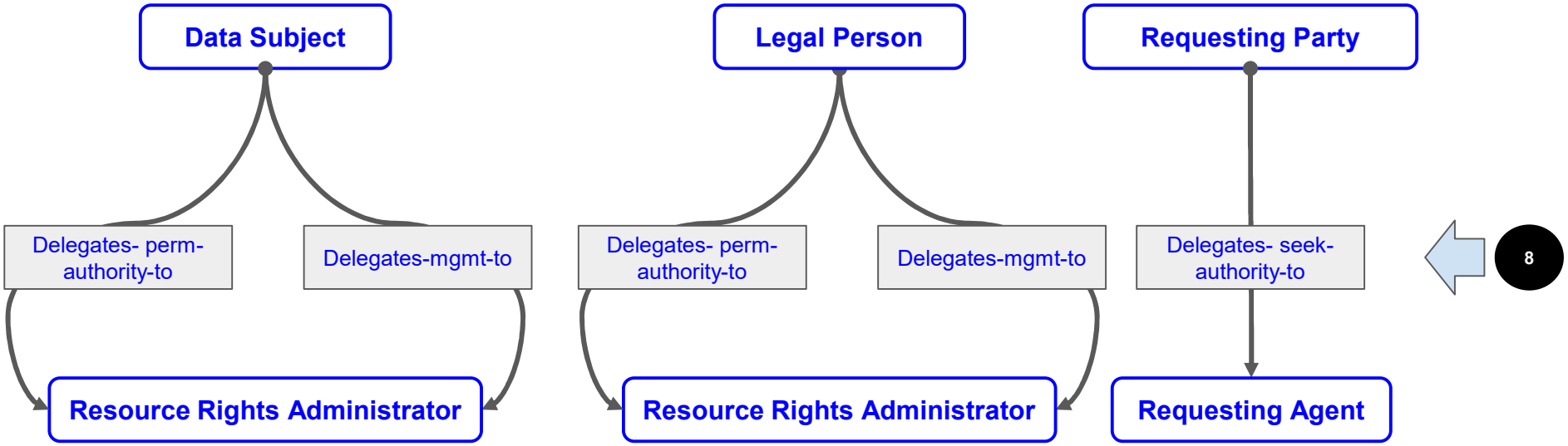


Legal relationships: Devices and artifacts

Making relationships and their changes auditable and machine-readable



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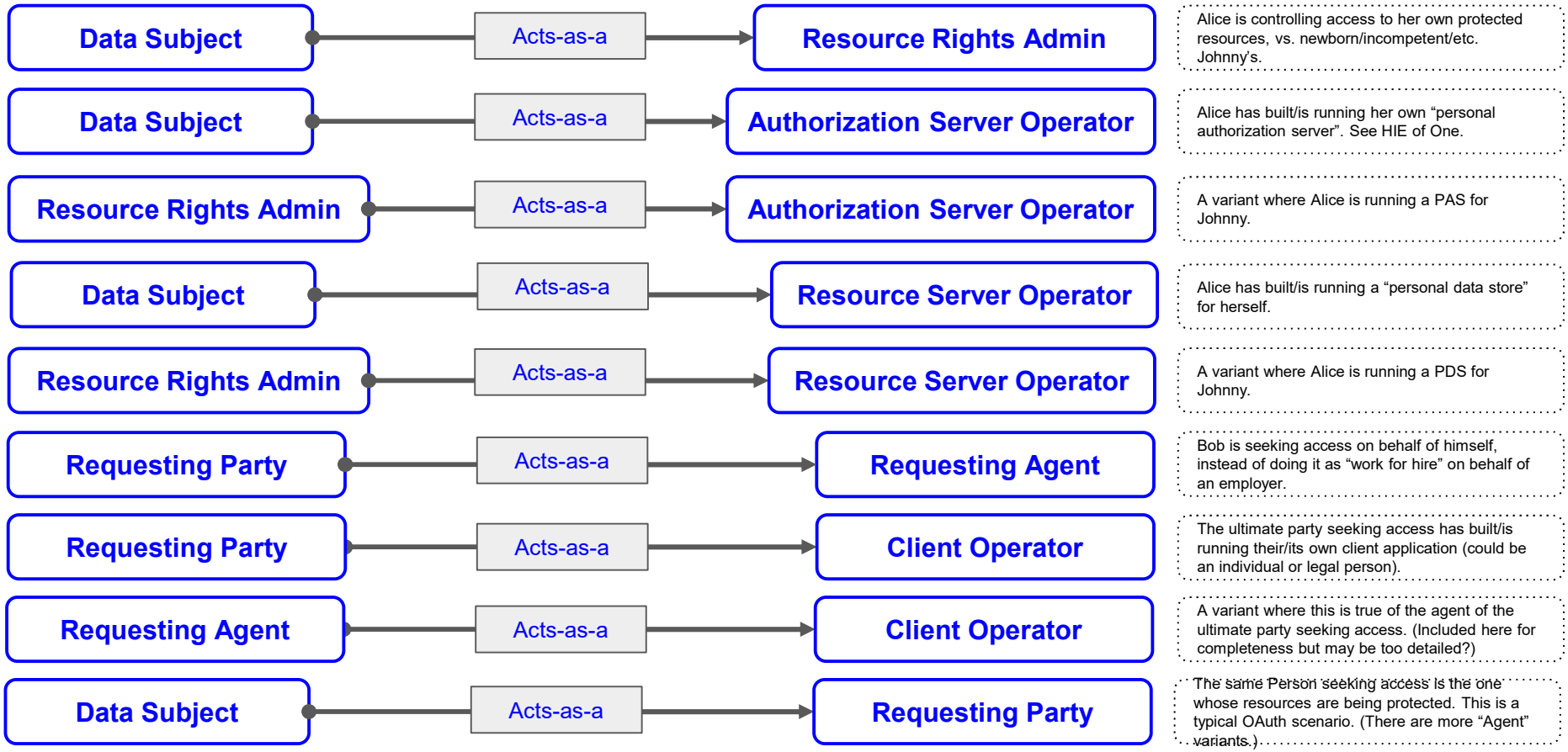
Legal devices: Law or contract

Technical artifacts: Outside UMA scope

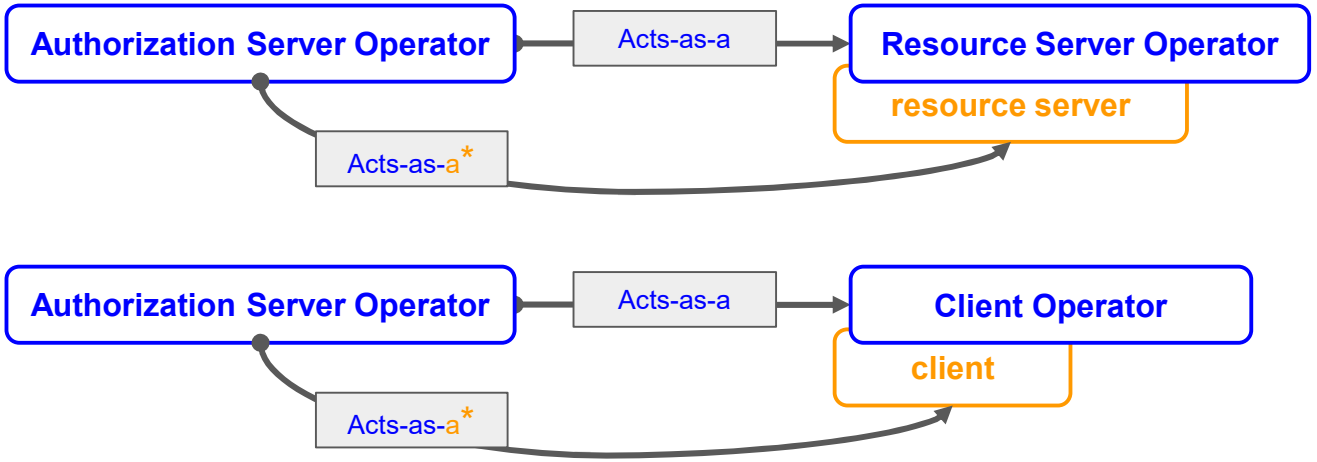
Legal relationships: One-party/multi-role scenario patterns

In some cases...



Legal relationships: More scenario patterns

In some cases...



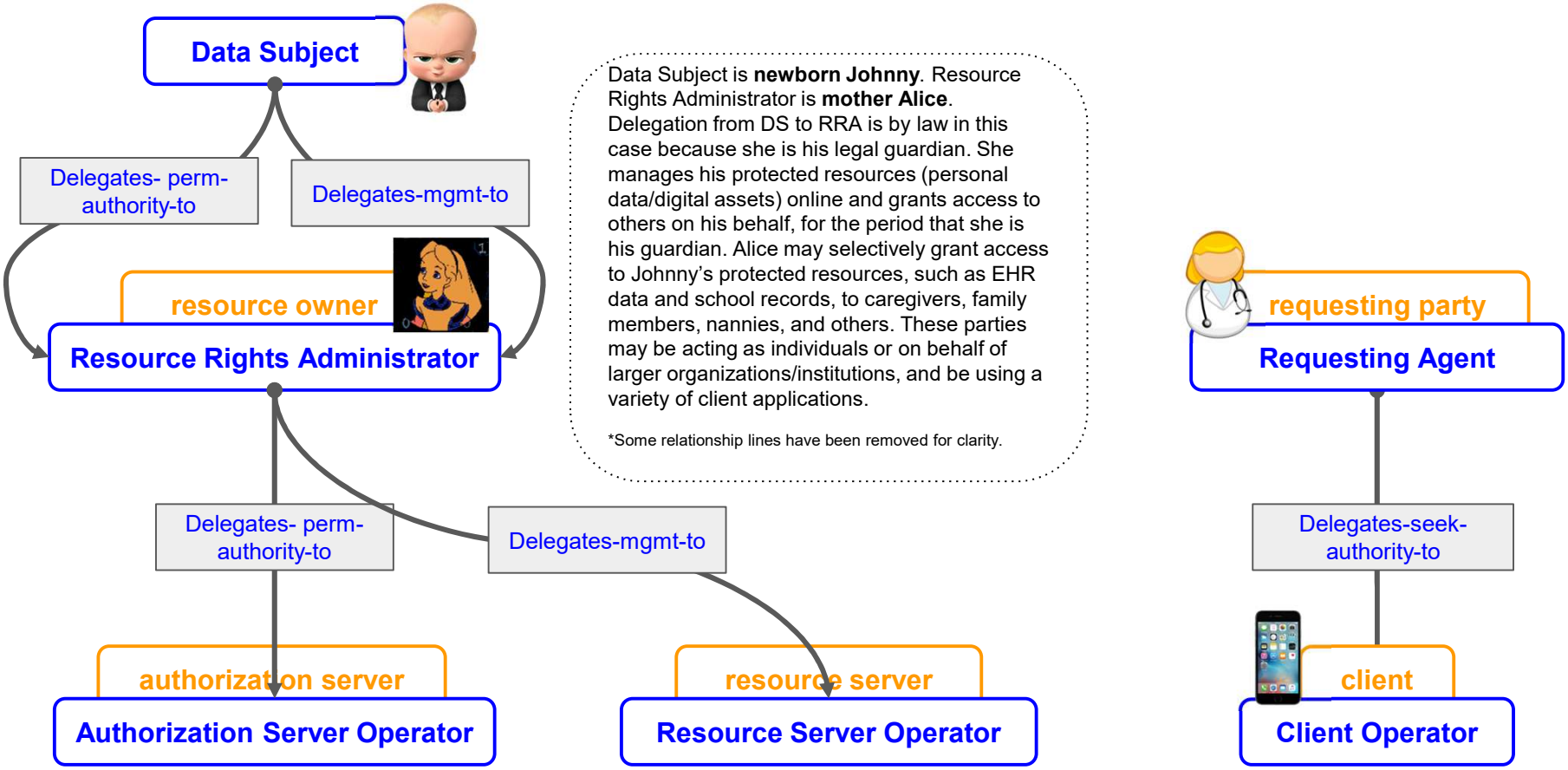
* ...and ASO *runs all available resource servers*. This relatively tighter ecosystem is consistent with how most OAuth deployments are run; it may still be interested in exposing the UMA Federated Authorization (protection API) interface for auditability reasons.

* ...and ASO *runs all available clients*. This tighter ecosystem (possibly in combination with the above) may still be interested in having the authorization server expose the various UMA interfaces for auditability reasons.

There are a variety of deployment options possible for sourcing resource owner identity (and requesting party claims). A business layer such as a trust framework can take into account identity assurance, authentication, and claims requirements. ("Identity Provider" is not an UMA-related party role and UMA is agnostic as to identity, identification, and authentication.)

Scenario: Cradle-to-grave

1. Data Subject is too young to use digital assets

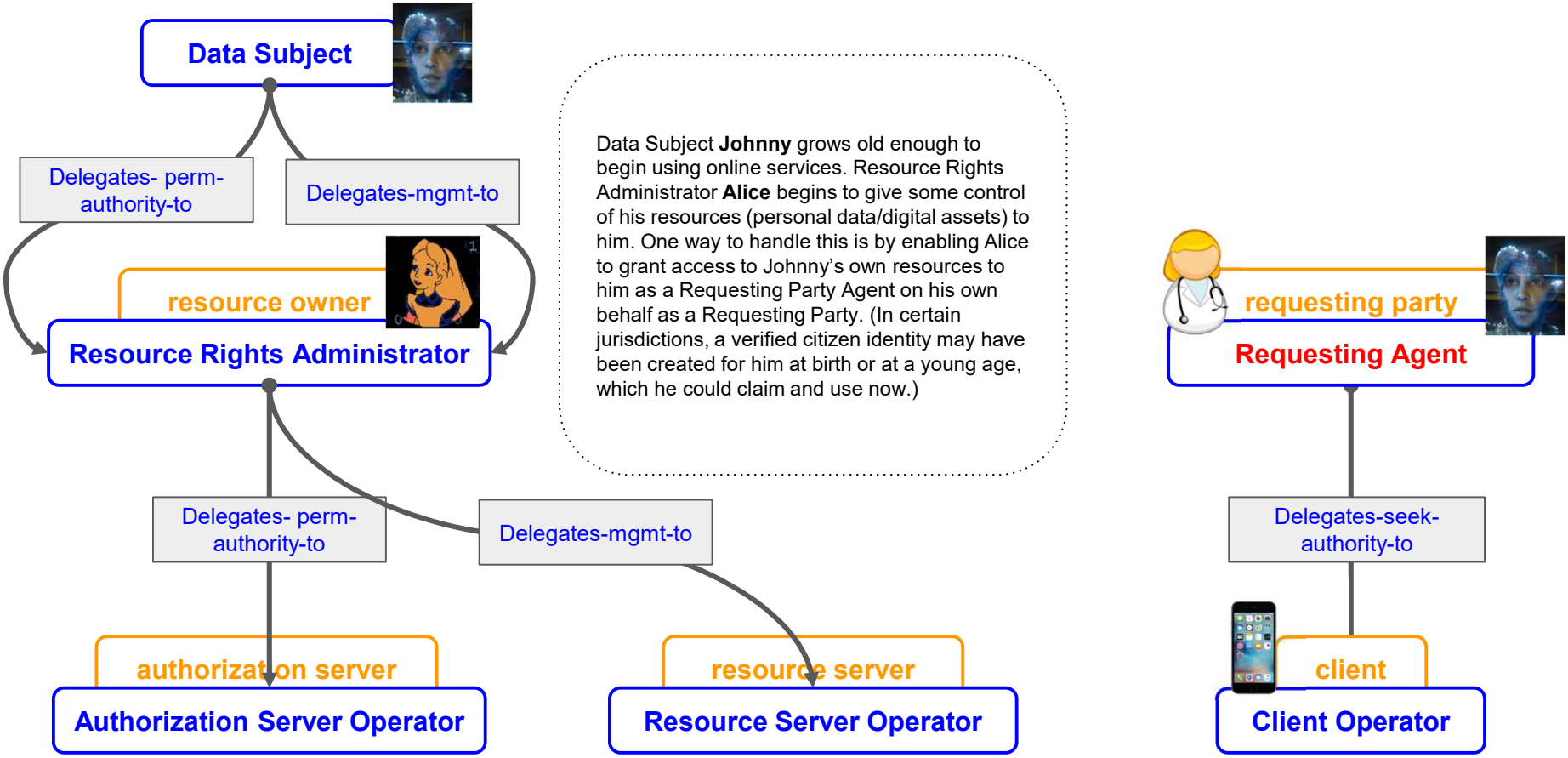


Data Subject is **newborn Johnny**. Resource Rights Administrator is **mother Alice**. Delegation from DS to RRA is by law in this case because she is his legal guardian. She manages his protected resources (personal data/digital assets) online and grants access to others on his behalf, for the period that she is his guardian. Alice may selectively grant access to Johnny's protected resources, such as EHR data and school records, to caregivers, family members, nannies, and others. These parties may be acting as individuals or on behalf of larger organizations/institutions, and be using a variety of client applications.

*Some relationship lines have been removed for clarity.

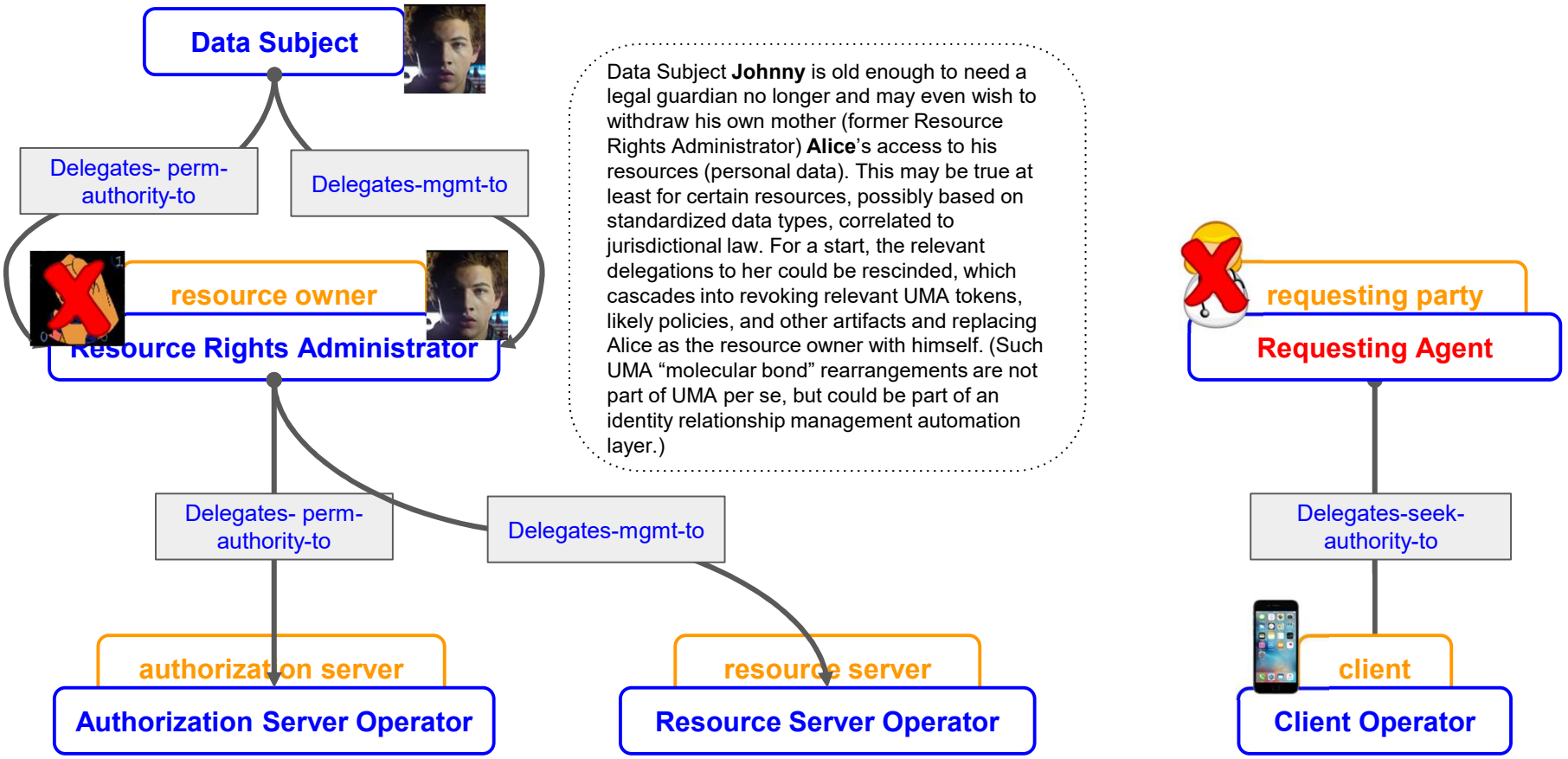
Scenario: Cradle-to-grave

2. Data Subject is old enough to use assets but too young to consent to their use



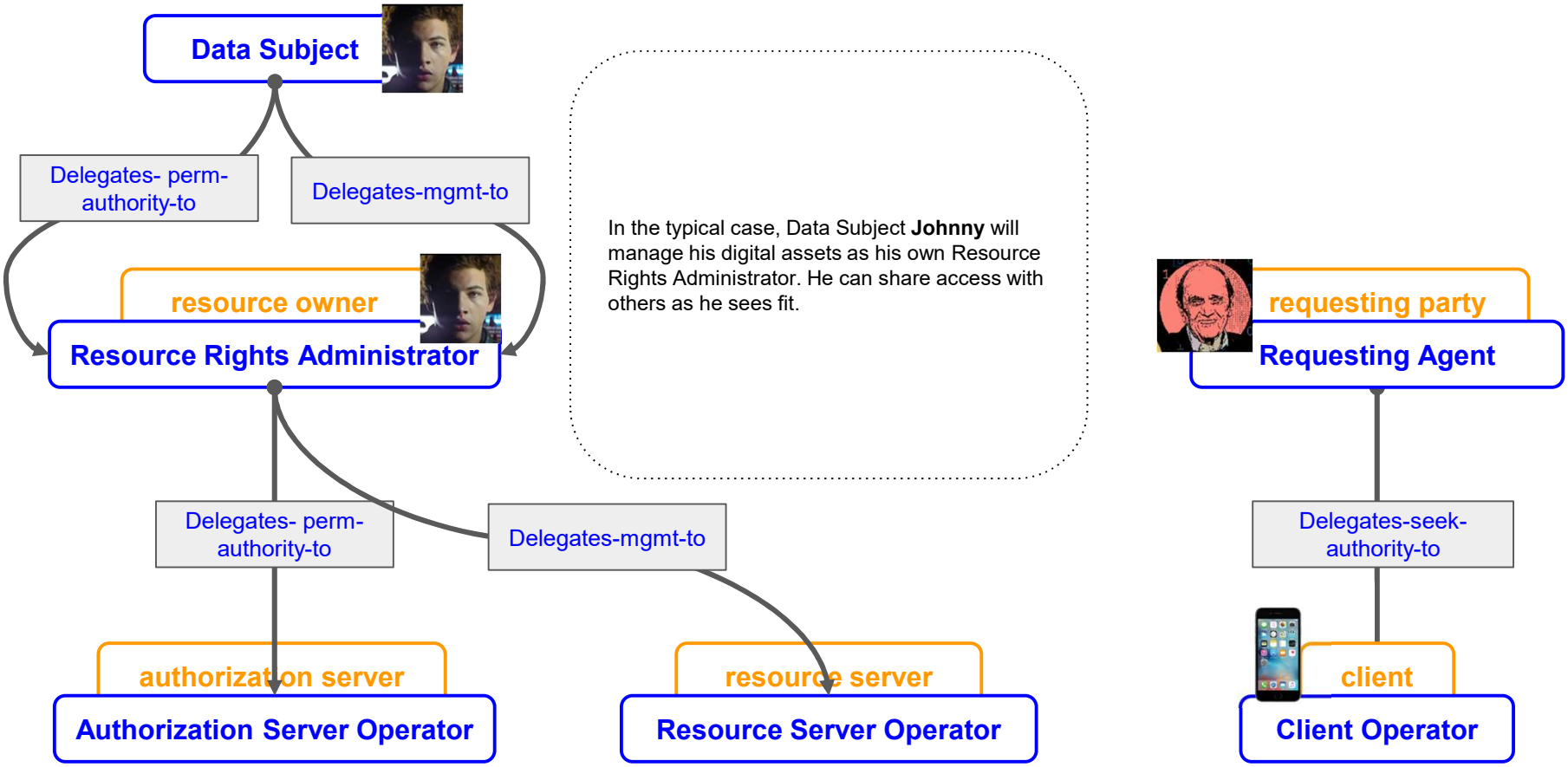
Scenario: Cradle-to-grave

3. Data Subject is old enough to consent to their use and manages digital assets themselves



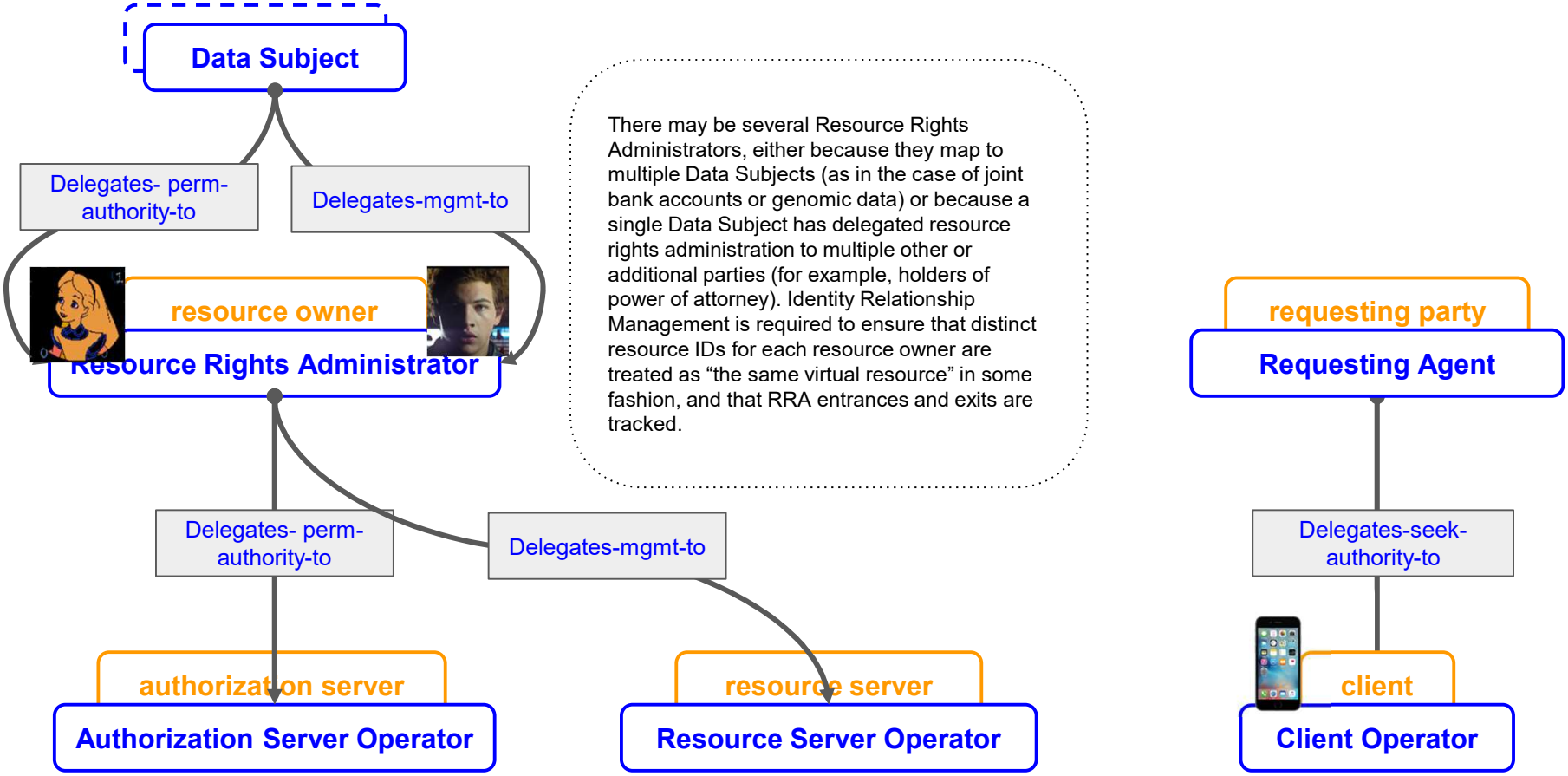
Scenario: Cradle-to-grave

3a. Steady state: Data Subject manages their own digital assets



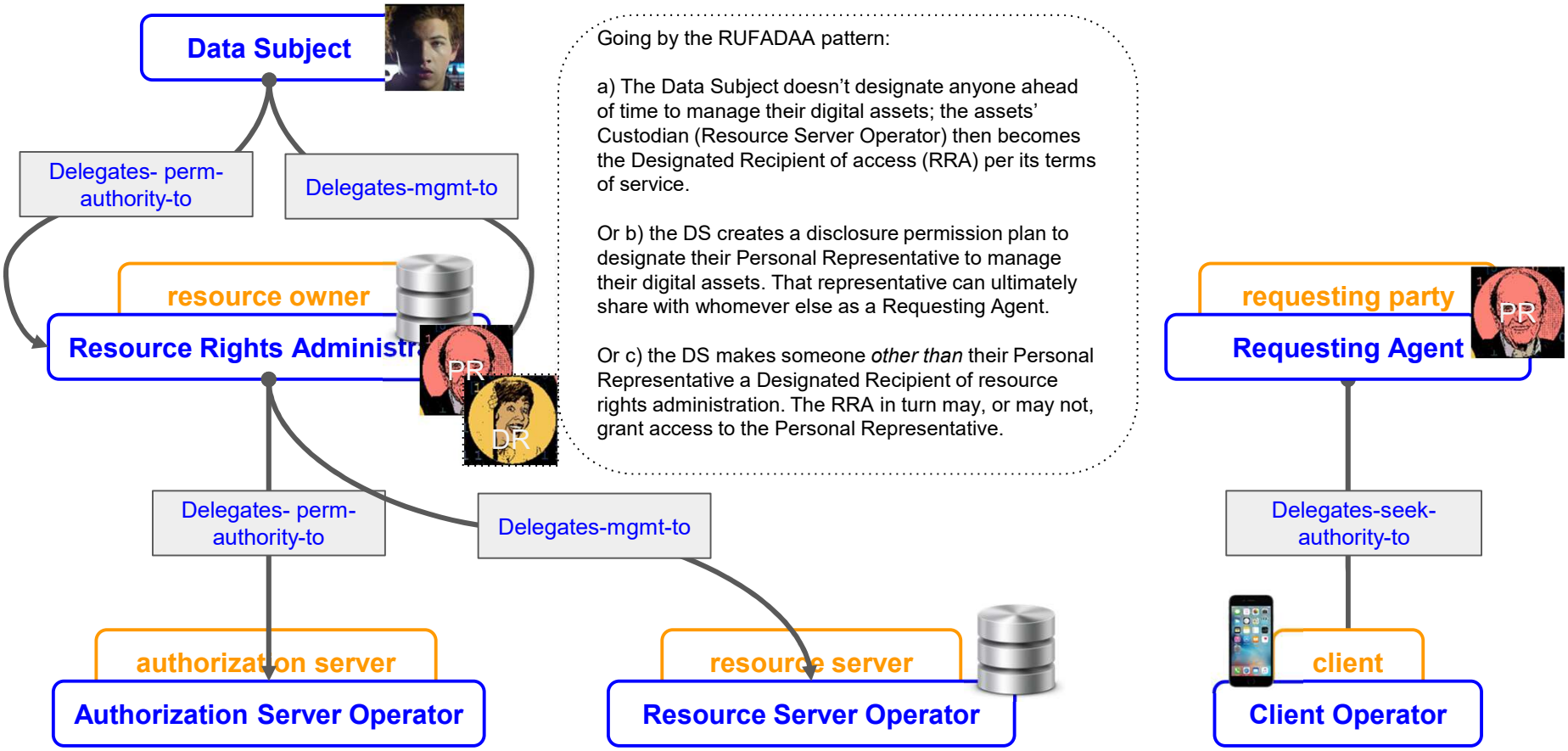
Scenario: Cradle-to-grave

4. There are multiple administrators of resource rights



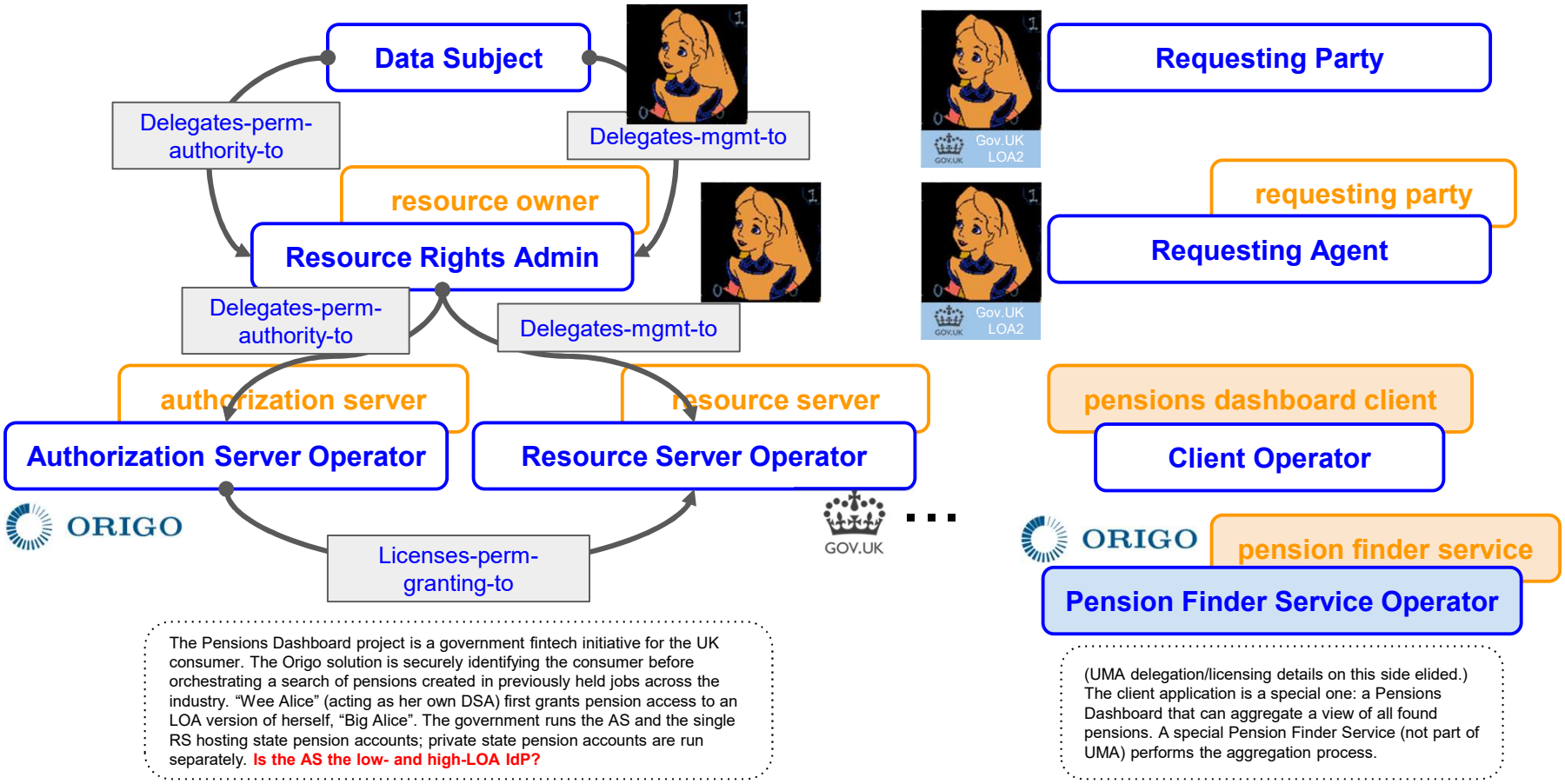
Scenario: Cradle-to-grave

5. Data Subject becomes mentally incapacitated or dies



Scenario: UK Pensions Dashboard

Step 1

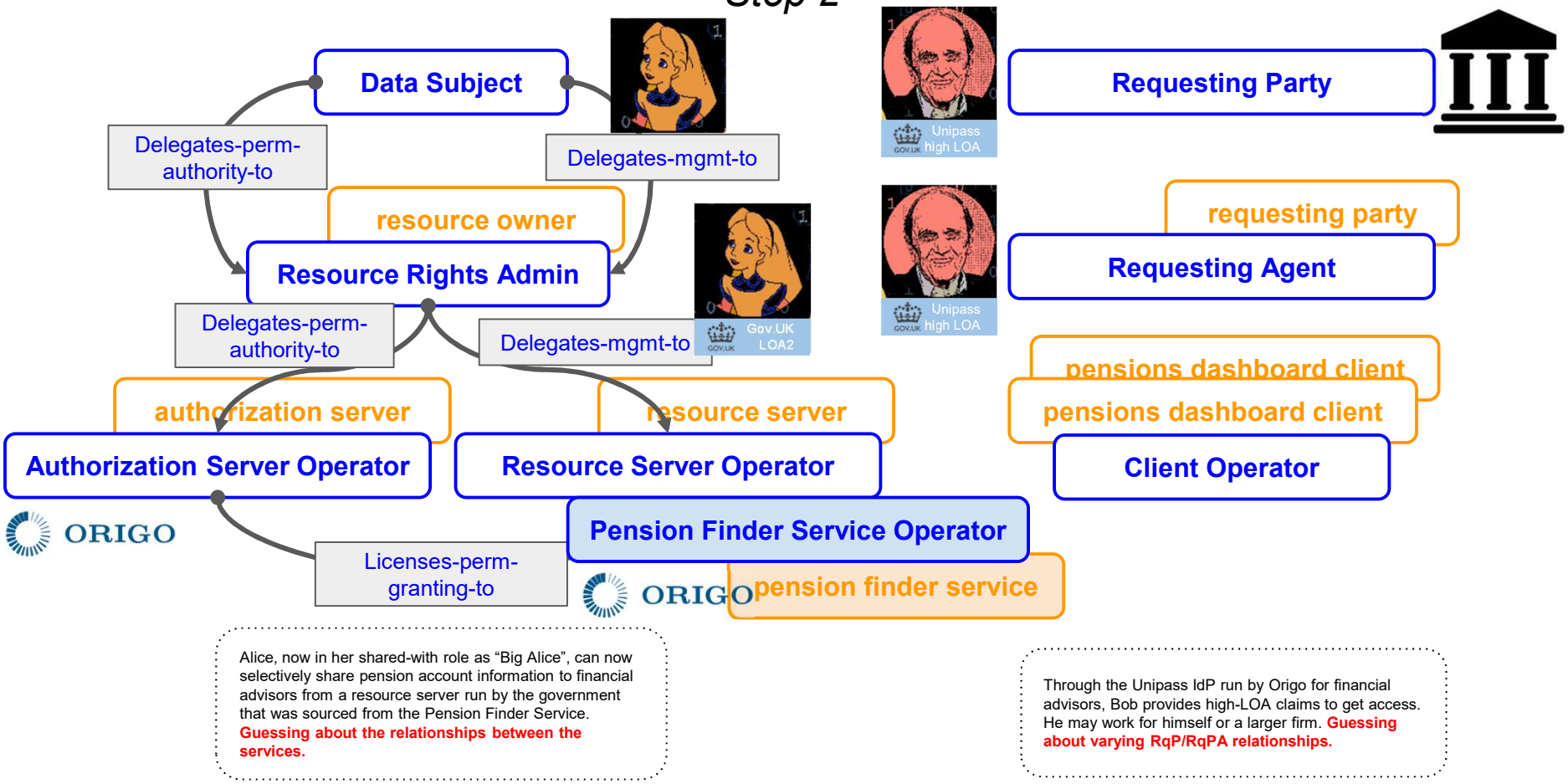


The Pensions Dashboard project is a government fintech initiative for the UK consumer. The Origo solution is securely identifying the consumer before orchestrating a search of pensions created in previously held jobs across the industry. “Wee Alice” (acting as her own DSA) first grants pension access to an LOA version of herself, “Big Alice”. The government runs the AS and the single RS hosting state pension accounts; private state pension accounts are run separately. **Is the AS the low- and high-LOA IdP?**

(UMA delegation/licensing details on this side elided.) The client application is a special one: a Pensions Dashboard that can aggregate a view of all found pensions. A special Pension Finder Service (not part of UMA) performs the aggregation process.

Scenario: UK Pensions Dashboard

Step 2



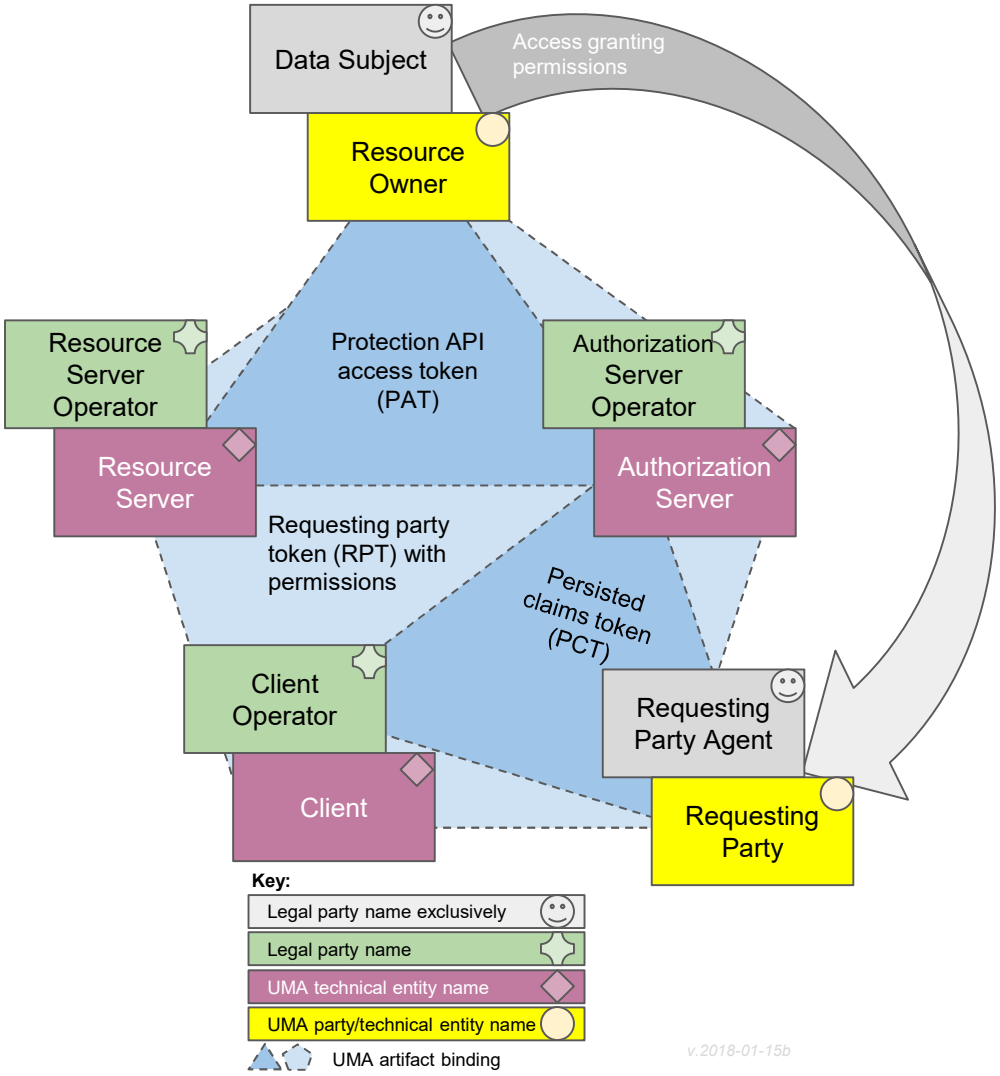
Alice, now in her shared-with role as "Big Alice", can now selectively share pension account information to financial advisors from a resource server run by the government that was sourced from the Pension Finder Service. **Guessing about the relationships between the services.**

Through the Unipass IdP run by Origo for financial advisors, Bob provides high-LOA claims to get access. He may work for himself or a larger firm. **Guessing about varying RqP/RqPA relationships.**

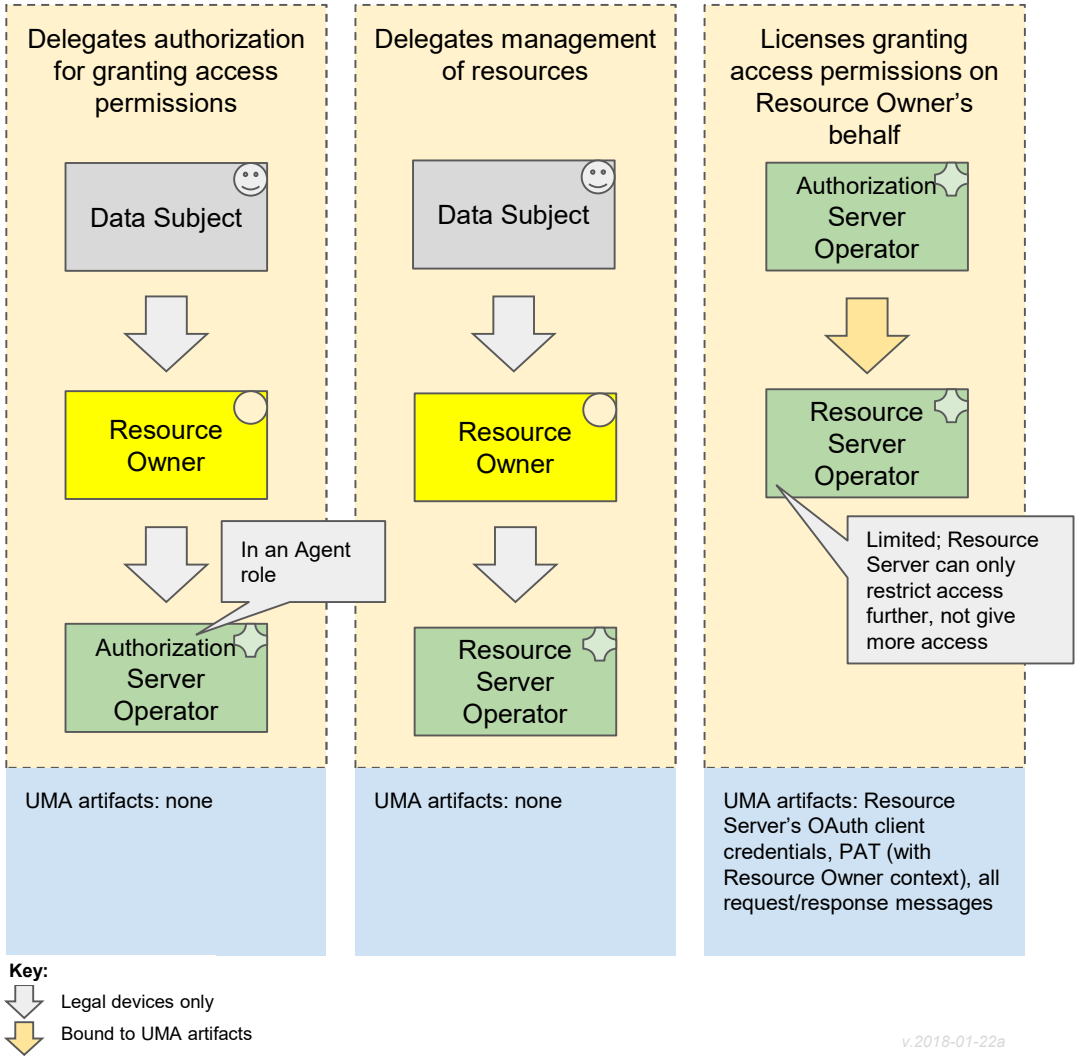
Diagrams used in report

(now a bit historical)

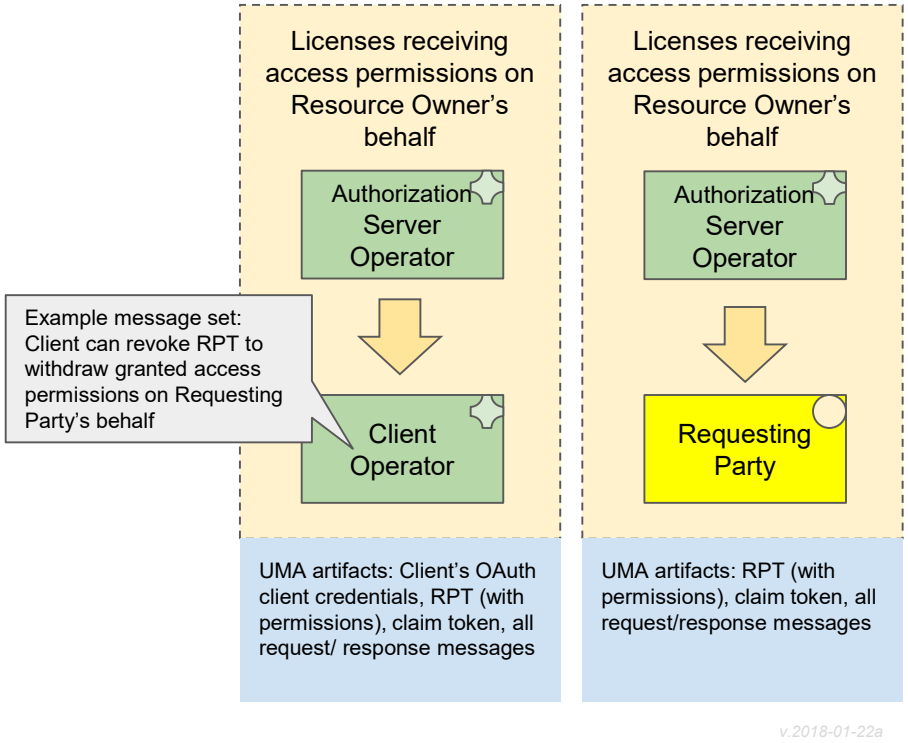
Legal roles and artifact interactions



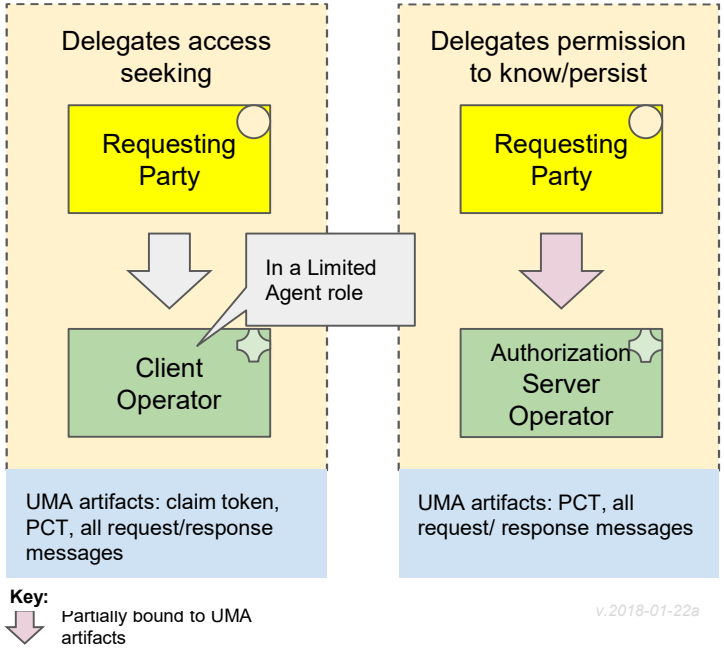
Delegation and licensing: RO-centered



Delegation and licensing: receiving permissions



Delegation and licensing: RqP-centered



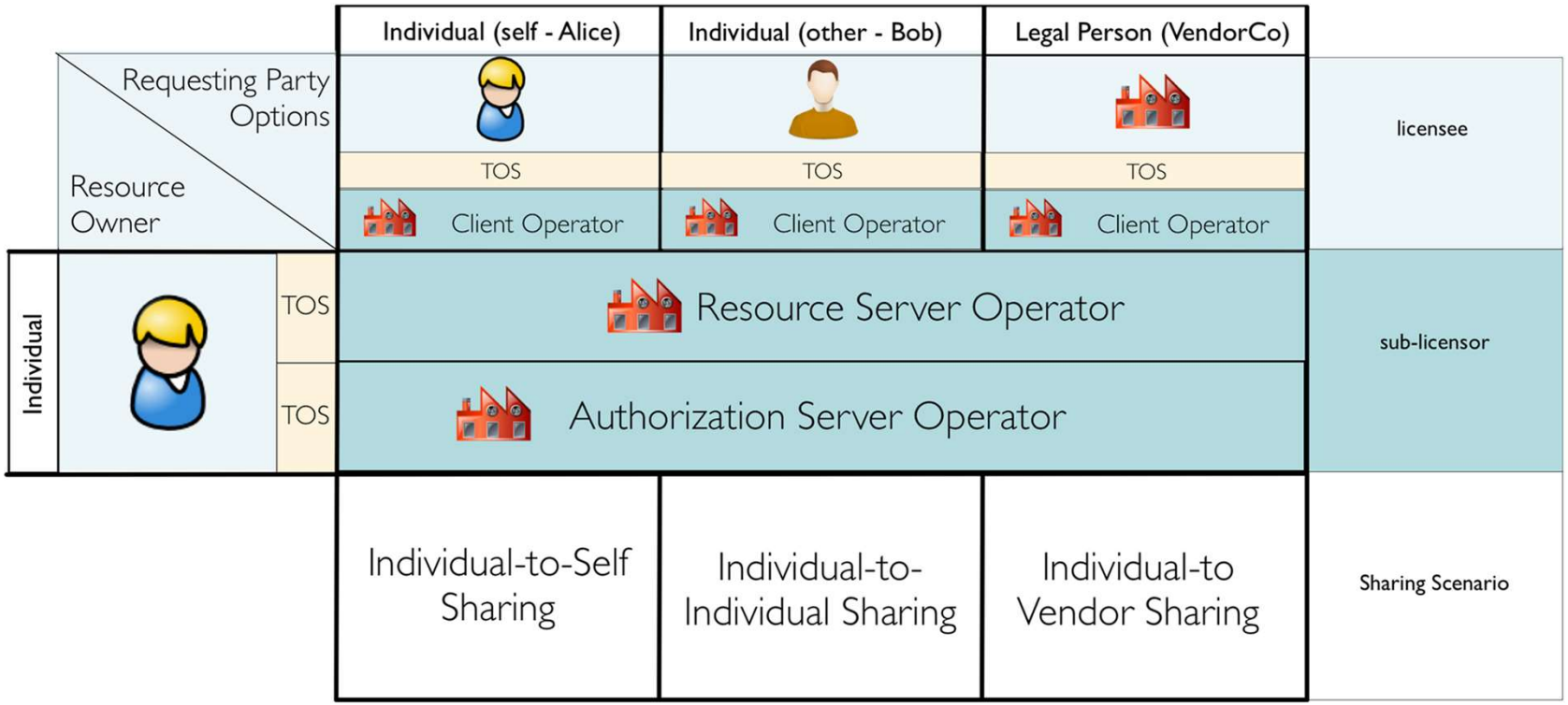
Earlier group musings

End-to-end licensing relationship

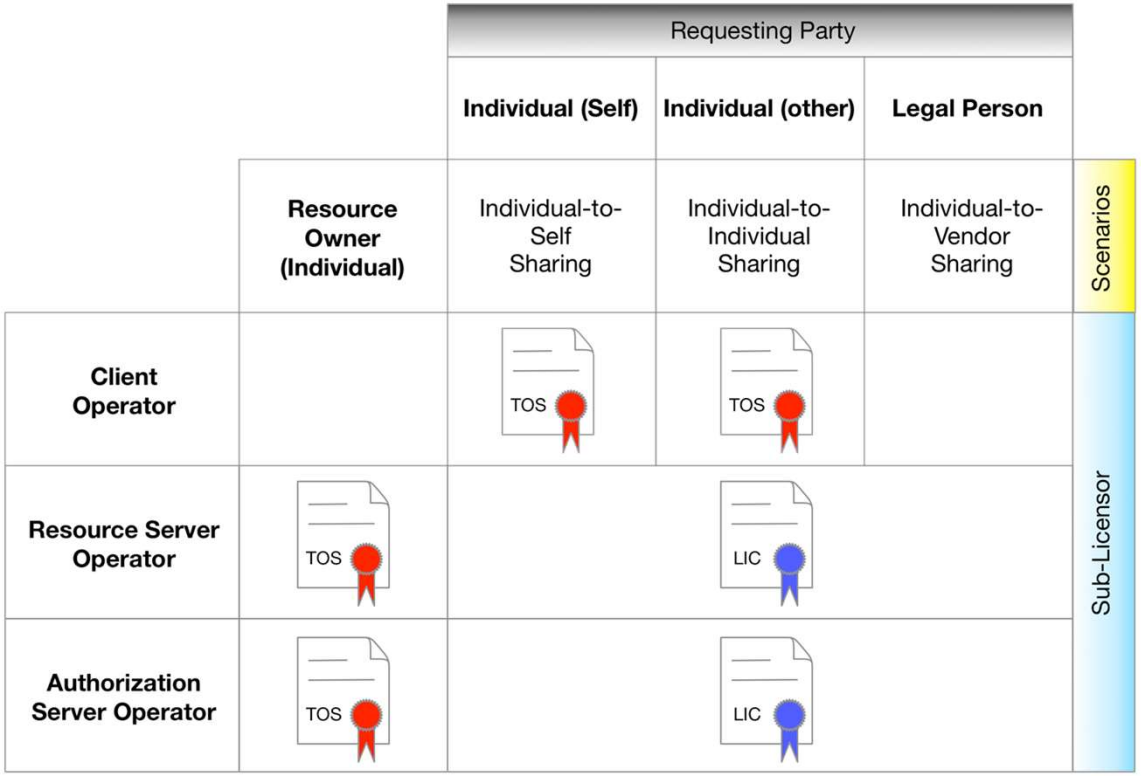
Resource Owner \ Requesting Party	Individual (Bob)	Legal Person (VendorCo)	licensee of resource permissions
Individual (Alice)	Individual-to-Vendor	Individual-to-Individual	Sharing Scenario
licensor of resource permissions			

Should these be switched? <->
Left is Bob to Alice
JW You are correct! - Eve

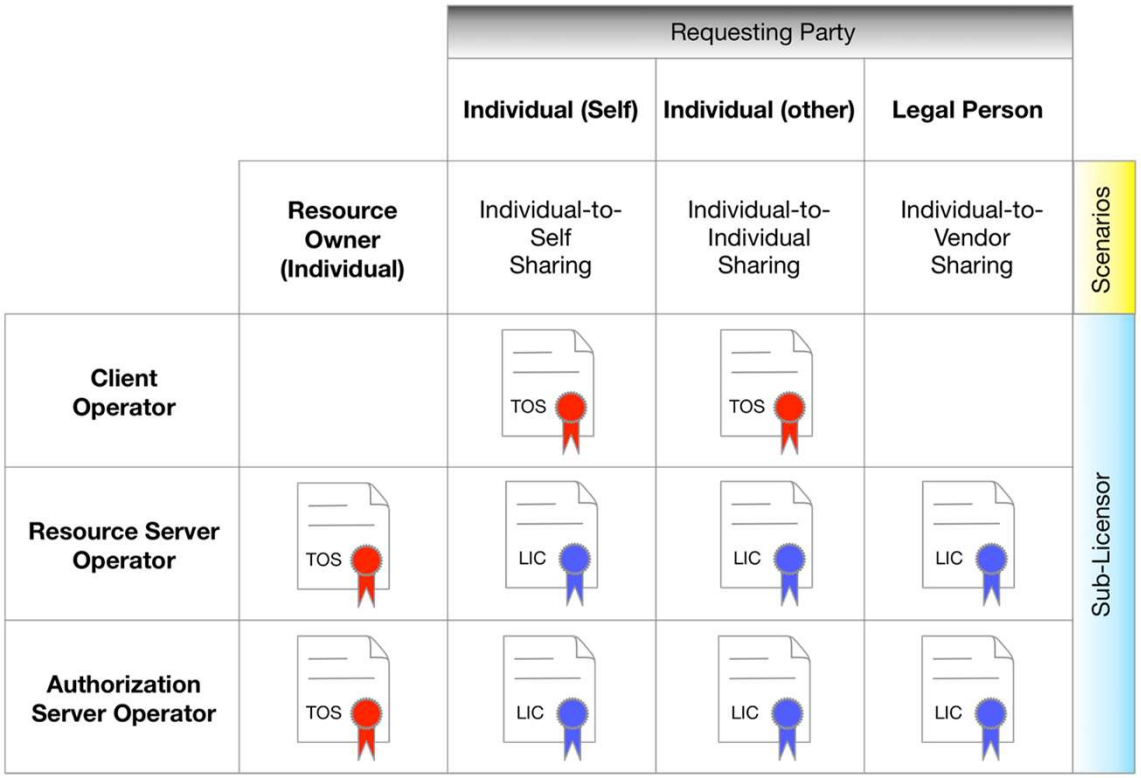
Sub-licensing intermediaries



End-to-end licensing relationship (new candidate 2)



End-to-end licensing relationship sharing scenarios

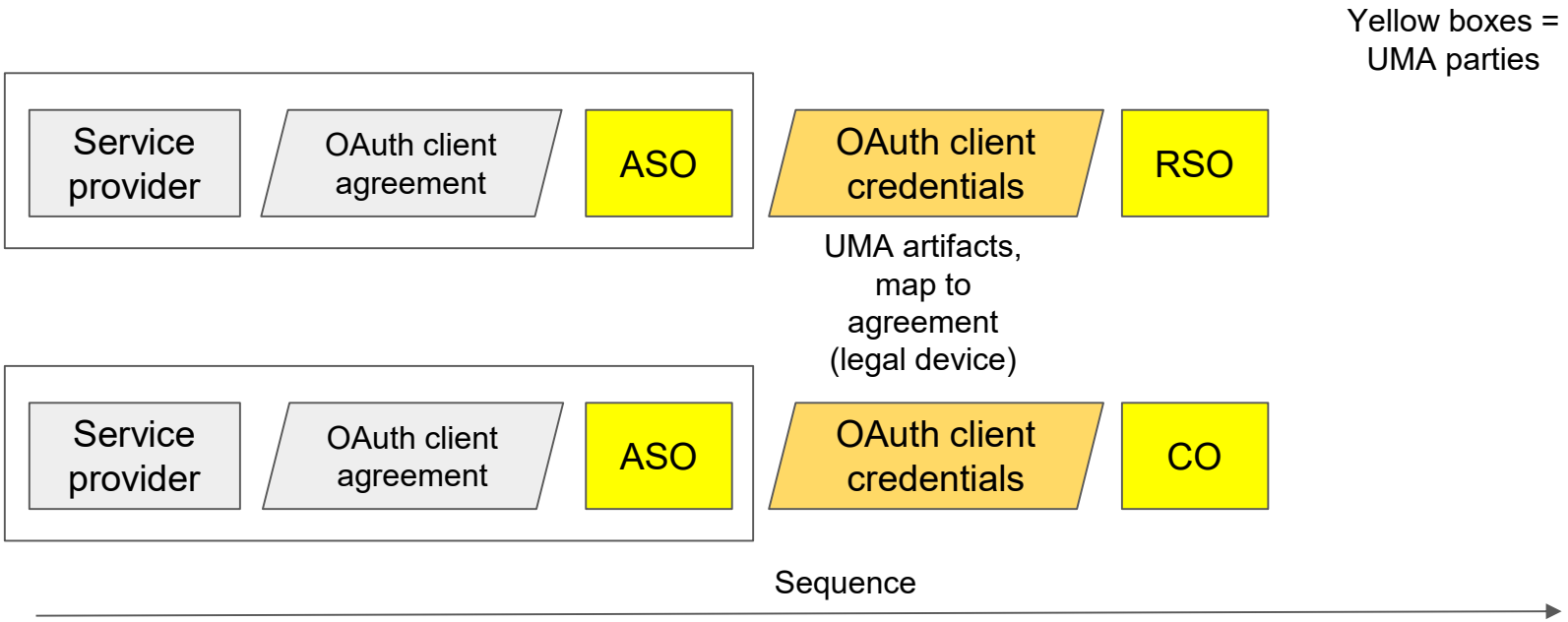


Not sure if this can be incorporated visually, but the arrow of autonomy might be nice. That is to say, who WRITES the TOS or LIC

If written by RO or rep, autonomy favouring. If by other entity, less so.

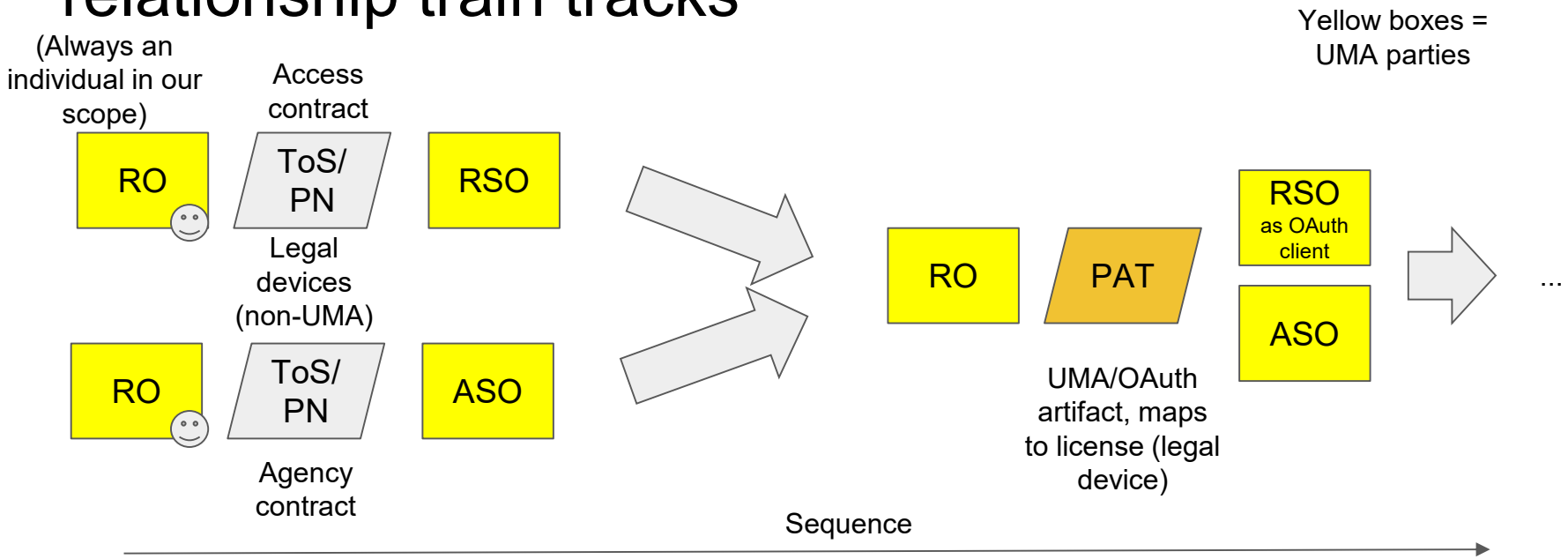
JW

How RSO and CO become known to ASO



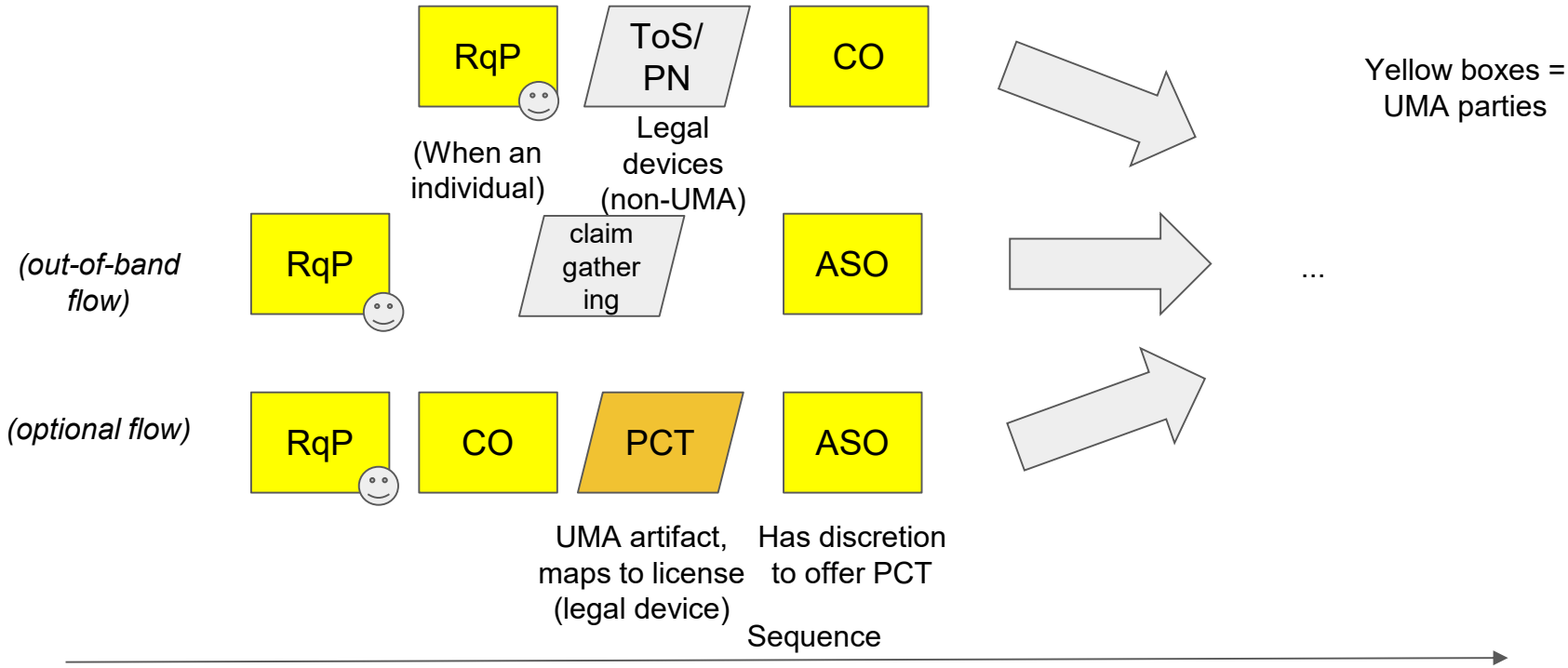
- Clause text would be supplied for both ToS/PN (non-UMA) and PAT artifacts
- This diagram does not include the RqP-side provisions
- Arrows imply ability for clause text to have the indicated order dependencies

Merging RO-RSO, RO-ASO, and RO-RSO-ASO relationship train tracks



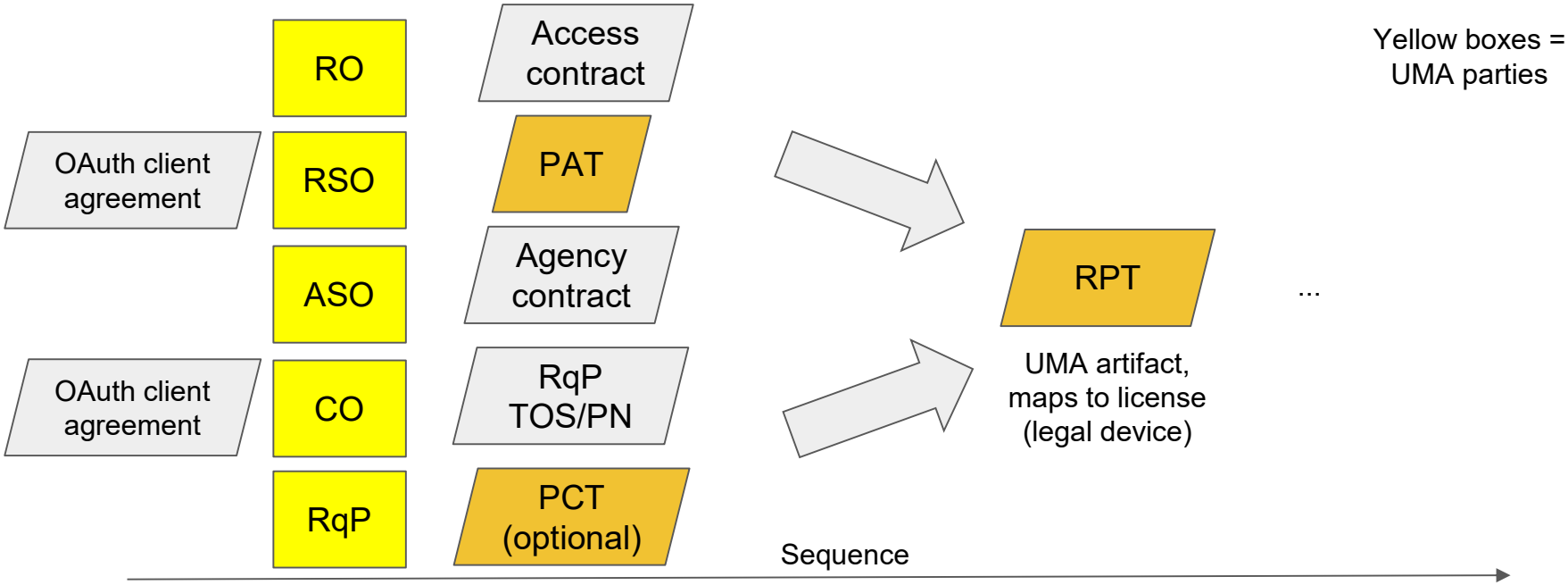
- Clause text would be supplied for both ToS/PN (non-UMA) and PAT artifacts
- This diagram does not include the RqP-side provisions
- Arrows imply ability for clause text to have the indicated order dependencies

Merging RqP-CO, RqP-ASO, and RqP-CO-ASO relationship train tracks



- Clause text would be supplied for ToS/PN (non-UMA) artifacts????? Not sure right now
- This diagram does not include the RO-side provisions
- Arrows imply ability for clause text to have the indicated order dependencies

RO-RSO-ASO-CO-RqP relationship



- Arrows imply ability for clause text to have the indicated order dependencies

(Fill in withdrawal/undoing flows)

Example of relationship, legal device, and technical artifact

Legend:

- Red: Pairwise relationship role with greater power
- Green Pairwise relationship role with lesser power
- Blue: Legal device used between them
- Orange: Technical artifact on the UMA wire

The ASO and the RSO have a business contract wherein the ASO, as sub-licensor of resource permissions on behalf of the RO, sub-licenses to the RSO and enables the RSO to sub-license to COs and RqPs by virtue of giving access/giving content.

RqP vs RqPA relationship

Sharing Scenario B: RqPA was shared with directly by the RO; they are human (Individual). They work for an organization (Legal Person) with which they have an employment agreement (or similar) that is outside the scope of any UMA technical artifacts. Others in the organization might get access by non-UMA methods in downstream fashion, as must be governed by the UMA-enabled license.

Sharing Scenario B: RqP was shared with directly by the RO; they are an organization (Legal Person). They have humans (Individuals) working for them, with an employment agreement (or similar) that is outside the scope of any UMA technical artifacts, who gets access through non-UMA methods in downstream fashion as governed by the UMA-enabled license.

Technology/legal stack relationships