A view of the MIMI discovery problem

as described in draft-bertola-mimi-discovery-dns-00, sections 2-3

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Defining the discovery problem

Service-independent user identifier
(one, but users may have more)
(human-friendly)
(either MIMI-specific or from another service, such as email address or telephone number)

Service-dependent account identifier
(one or more)
(machine-friendly)
(in standard format, including all the necessary information to establish a connection)

multiple 1-to-many non-exclusive unidirectional relations
Use cases

1. User A wants user B to contact them, and gives them a MIMI-specific identifier

2. User A wants user B to contact them, and gives them an «external» identifier from another service (email address, telephone number)

3. User B already knows user A’s «external» identifier in another service (email address, telephone number) and wants to try contacting them
Requirements on user identifiers

• Being reachable on MIMI by an external identifier is optional and subject to the identified user’s active consent
  • This implies that we also need MIMI-specific user identifiers

• MIMI-specific identifiers should be simple and human-friendly (writeable, speakable, transmittable)

• Both users and providers (and anyone else) could create, own and manage MIMI-specific identifiers

• The MIMI-specific identifier does not change when the user changes MIMI service, unless it is owned by the old service provider

• Identifiers cannot be easily guessed if the user wants so
Requirements on the solution

- Supports any number of 1-to-many non-exclusive unidirectional relations; can easily scale
- As decentralised as possible, to prevent points of surveillance
- Offers security and privacy; it is not easy to learn other people’s identifiers in transit or acquire batches of identifiers and connections
- Allows for any number of discovery providers; anyone should be able to (self-)host a MIMI service, including discovery at least of their MIMI-specific identifiers
- Uses open standards, with as many implementations as possible; barriers to entry should be as low as possible
Requirements on the solution (non-tech)

• Does not create intellectual property issues (e.g. ownership of identifiers)

• Does not pose significant legal and regulatory issues, or require significant regulatory work; in particular, it is compatible with the main data protection regimes

• Is cost-effective

• Has a business model