

# Per-Entity Metadata Risks and Opportunities

## Risks

- Security
  - Disclosure of private key
  - Clients not checking signatures
  - Intrusion into signing infrastructure
  - DoS attacks on distribution
- Availability
  - The distribution service for entities
    - As discussed in [Agenda and Notes - 2016-08-03](#), it seems feasible that a cost-effective infrastructure can be deployed that can provide at least four nines availability and sufficient capacity for InCommon.
  - The aggregation/signing service
    - This is not a major concern, assuming a separate distribution layer in the architecture.
- Responsiveness / Capacity
  - Capacity is not sufficiently elastic
    - As discussed in [Agenda and Notes - 2016-08-03](#), it seems feasible that a cost-effective infrastructure can be deployed that can provide at least four nines availability and sufficient capacity for InCommon.
    - (We should decide on acceptable response from the distribution service.)
- Cost
  - Cost of elastic capacity not budgeted
    - UK experience indicates that this should be low, a few hundred dollars per month.
  - Staff time and attention

## Opportunities

- Window of opportunity to engage SAML infrastructure components/tools/libraries outside of the usual suspects (Shibboleth, SimpleSAMLphp) to support Federation (large 'F') using MDQ. See [this email from Michael Domingues \(Iowa\)](#) with a fuller explanation.