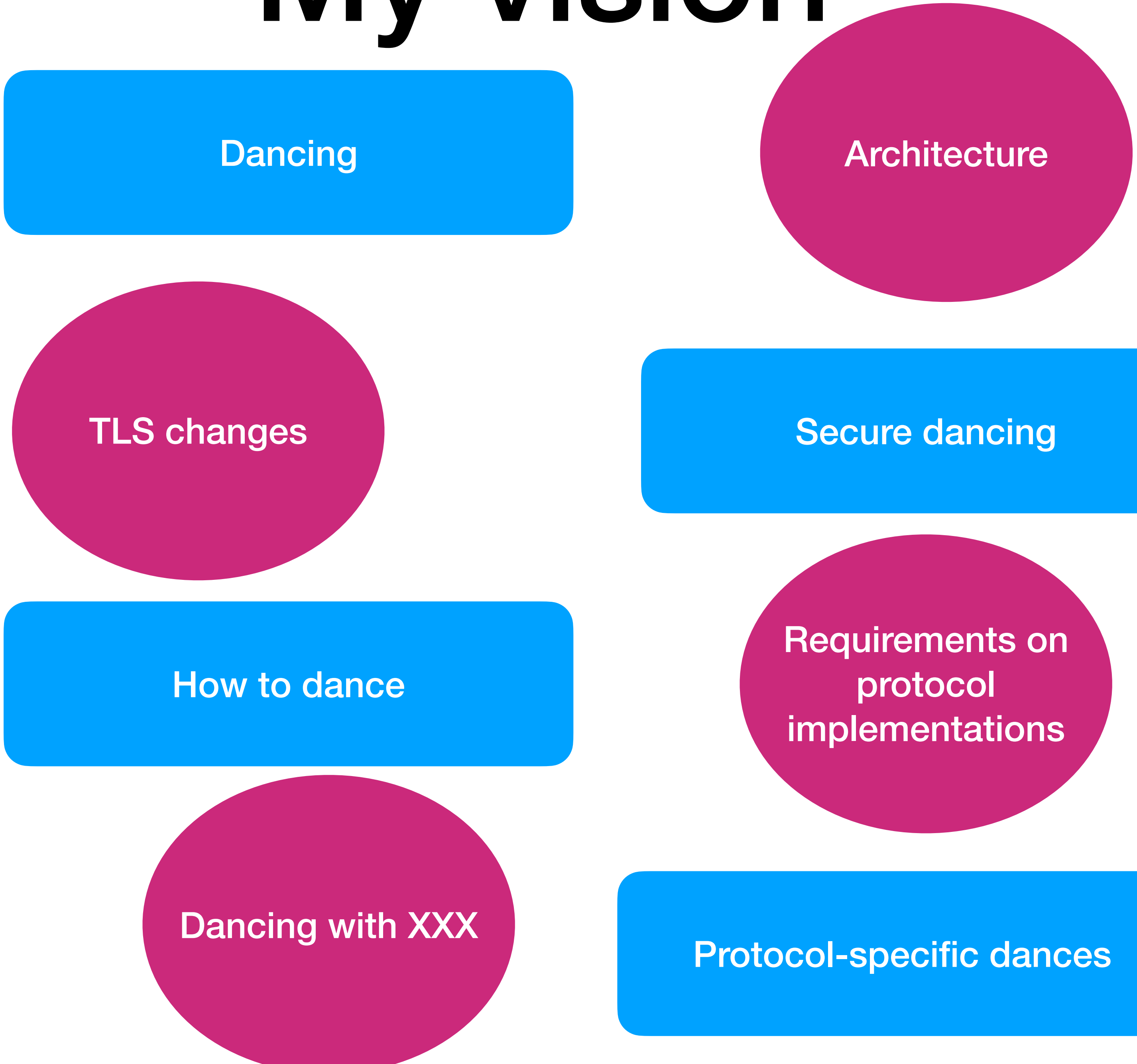
IETF dance update

oej 2022-11-08

Three wg documents

- draft-ietf-dance-architecture-00
- draft-ietf-dance-client-auth-00
- draft-ietf-dance-tls-clientid-00

My vision



Dancing

Architecture

TLS changes

Secure dancing

How to dance

Requirements on protocol implementations

Dancing with XXX

Protocol-specific dances

Architecture-xx is a mess

- A mixture of a lot of things
- How do we clean it up?
- Some protocol-specific parts needs to become separate ” protocol-specific” or ”implementation-specific” docs, like IoT

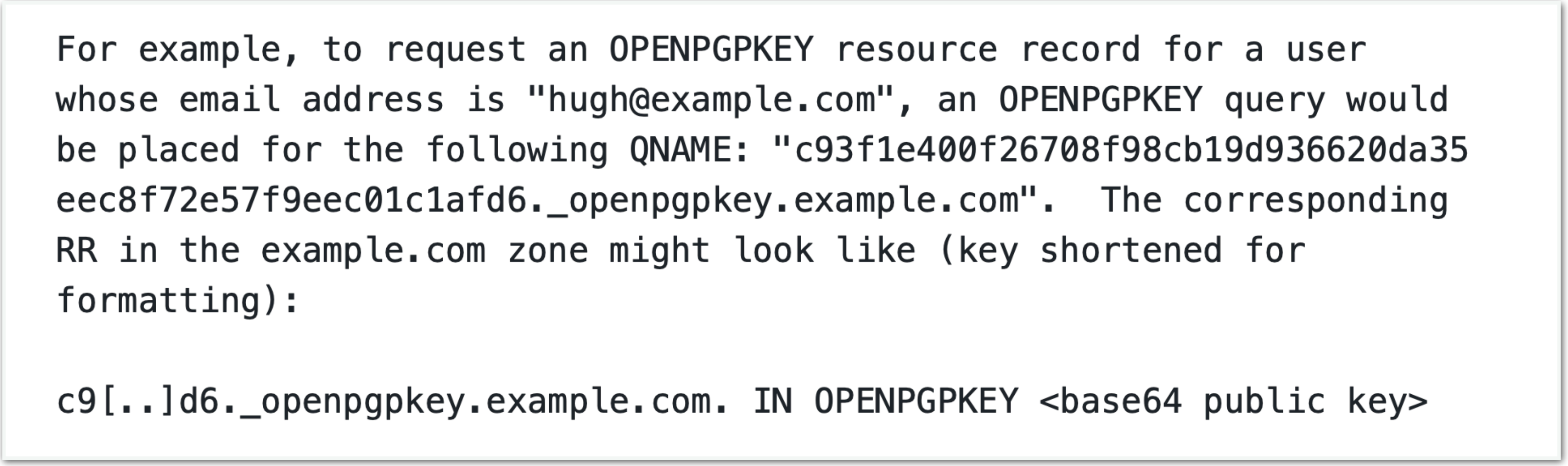
DNS trees

- Most of our docs document a flat namespace
- DNS gurus suggest a more hierarchical namespace, like ENUM or PTR records
- For me, this is ”how to dance”

Privacy

- If we’re looking at using Dance for protocols with email style adresses, then we can’t use the URI as the index in the DNS

- Check RFC 7929 (DANE/OpenPGP) for hints



```
For example, to request an OPENPGPKEY resource record for a user
whose email address is "hugh@example.com", an OPENPGPKEY query would
be placed for the following QNAME: "c93f1e400f26708f98cb19d936620da35
eec8f72e57f9eec01c1afd6._openpgpkey.example.com".  The corresponding
RR in the example.com zone might look like (key shortened for
formatting):

c9[..]d6._openpgpkey.example.com. IN OPENPGPKEY <base64 public key>
```

Reorganize

- Make ”draft-huque-dane-client-cert-08” into a DANCE implementation requirement document - ”how to dance”
- Find candidates for protocol specific documents - ”Dancing with xxx” and find energy there
- Focus where there’s energy
- We need one for _service and one for _device at least, if we still want them both
- Are there other patterns to explore on how to code an identity into a DNS name?

Time to code?

- Ash had some code somewhere
- Demo with Curl (libcurl) + Openssl + <server> ?
- Demo with <COAP library> ?
- Dance extension needs to exist in libraries in order to become successful and used.