PKI Resources Query Protocol Status Update

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Outline

- Document Updates
  - **Editorial Changes**
  - **New Sections**
- Current Activities
  - **Deployment of PRQP in TACAR**
- Future Plans for PRQP
  - **Integration with TAMP**

PRQP & Document Status

- Last published version -00
- Recent Document Activities
  - **Definition of new OIDs**
  - **Text for defined OIDs and their meaning (more on this later)**
- To ease PRQP deployment
  - **Adding section on how to provide clients with RQAs addresses**
    - DHCP
    - DNS SRV records

Updated Data Structures

- Changes in the Response Token

```
ResourceResponseToken ::= SEQUENCE {
   serviceId                 OBJECT IDENTIFIER,
   ResourceLocator      [0] EXPLICIT SEQUENCE OF IA5String,
   Version              [1] INTEGER              OPTIONAL,
   TextInfo             [2] UTF8String           OPTIONAL      }
```

- Eliminated ResourceInfo

```
ResourceInfo ::= SEQUENCE {
    resourceUri          IA5String,
        --- resource locator
    version          [0] INTEGER              OPTIONAL,
        --- version of the protocol or data format }
```

Updated OIDs

- Fixed and ambiguity in ADs for browser-based services (data format vs transport protocol)

```
--- HTML (Browsers) based services
id-ad-prqp-htmlRevokeCertificate
                              OBJECT IDENTIFIER ::= {id-ad-prqp 30}
        --- HTML Based Certificate Revocation Service
id-ad-prqp-htmlRequestCertificate
                              OBJECT IDENTIFIER ::= {id-ad-prqp 31}
        --- HTML Based Certificate Request Service
id-ad-prqp-htmlRenewCertificate
                              OBJECT IDENTIFIER ::= {id-ad-prqp 32}
        --- HTML Based Certificate Renewal Service
id-ad-prqp-htmlSuspendCertificate
                              OBJECT IDENTIFIER ::= {id-ad-prqp 33}
        --- HTML Based Certificate Suspension Service
```

Updated OIDs (cont.)

- Added two new Service OIDs

- TAMP service

```
--- Trust Anchor Management Services
id-ad-prqp-tampUpdate    OBJECT IDENTIFIER ::= {id-ad-prqp 70}
```

- CA Incident Report

```
--- Risk Management Services
id-ad-prqp-caIncidentReport
                         OBJECT IDENTIFIER ::= {id-ad-prqp 90}
```

PRQP Deployment Activities

PRQP Deployment for TACAR

- PRQP Deployment for TACAR CAs
  - **Dartmouth College will run a Trusted RQA**
- TACAR project
  - **provides a trusted repository of CA certificates and Certificate Practice Statements**
- Participating Bodies
  - **EuGridPMA**
  - **IGTF**
  - **EduGain**
  - **Others**

PRQP Deployment: status

- Slow progress due to lack of resources
- Agreed on Operational Protocol for Phase I
  - **RQA operators procedure**
- Deployment Agenda
  - **RQA running in PTA – December 2008**
  - **RQA in authorized mode – March 2008**
  - **Integration with Browsers – February 2008**

Considerations and Future Work

- Speed up the deployment of PRQP for TACAR
- Interactions with other PKIX work
  - **TAMP and PRQP to provide usable TAM (next slide)**
- Still no progress on DHCP interaction
  - **RQA service entry for DHCP and DHCPv6**
- Future work
  - **Move forward with the P2P specification for PRQP deployment (PRQP I-D section A.2)**

PRQP and TAMP

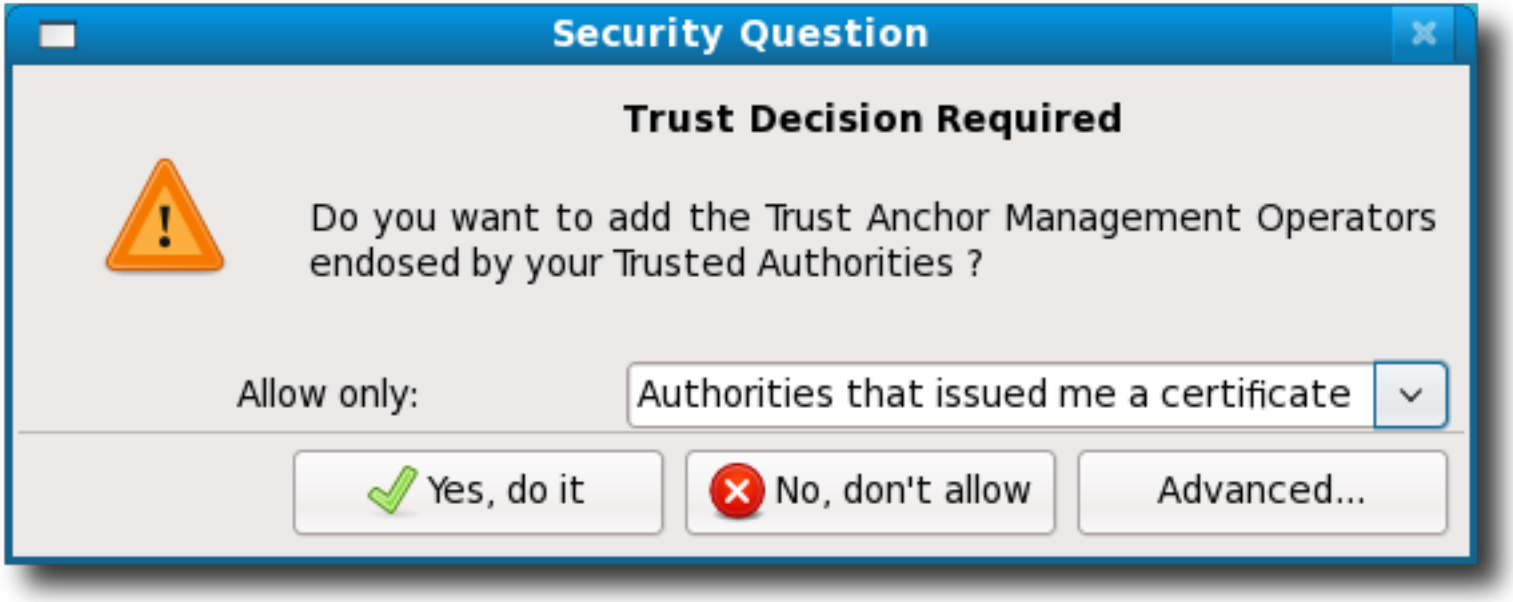
- PRQP can enable Organizations to endorse
  - **Its own TAM service**
  - **Externally provided services**

- Provide multiple pointers to external TAM service
  - **Trust between the TAM provider and the client must exists or shall be established**

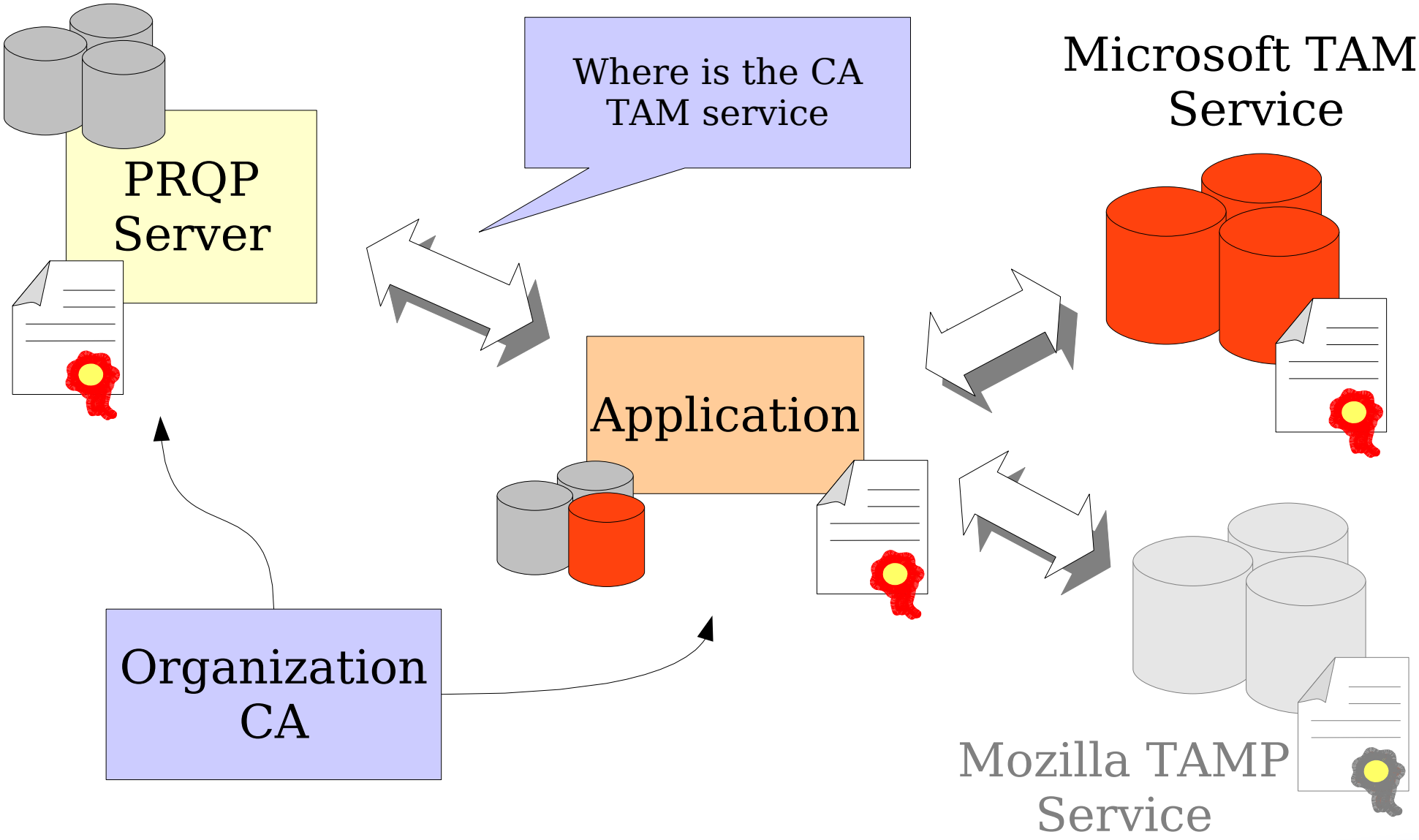
- Background
  - **One or more TA present in the application**
    - Mozilla Corp. for Firefox
    - Microsoft and Verisign for IE
    - Your organization's CA certificate for any app

User Interface Example

- PRQP can enable a dialog similar to the following



User Interface Example



Questions & Contacts

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PKI Resource Discovery Protocol