Trust Anchor Management (TAM) Specifications

November 20th, 2008

Carl Wallace

cwallace@cygnacom.com

Suggested Way Forward (from Dublin)

- Update requirements draft and progress as Informational
- Adopt modified TAMP draft as a Standards track working group draft
 - Move TrustAnchorInfo specification from TAMP to separate draft
 - Provide capability to manage alternative TA formats
 - Minimally, Certificate and TBSCertificate
 - Extensible to support TrustAnchorInfo (and others?)
 - TAMPUpdate would be the primary structure
 - Suitable for directory-based distribution
- Submit new TrustAnchorInfo and CMS Content Constraints drafts compatible with PKIX TAMP

Since Dublin

- Performed each of the suggested items
- Current drafts
 - draft-ietf-pkix-ta-mgmt-reqs-02
 - Two revisions since Dublin
 - draft-ietf-pkix-ta-format-00
 - New draft split out from TAMP
 - draft-ietf-pkix-tamp-00
 - draft-ietf-pkix-cms-content-constraints-00
 - Mostly minor changes vs. -00 individuals submissions

TAM requirements changes

- Initiated WG LC for -01 draft
 - Addressed comments and submitted -02 draft
- Changes
 - Adopted 2119 language throughout
 - Collapsed old requirements 3.8 and 3.9 into one section
 - Added additional security considerations
 - Various clarifications/edits

TAMP changes

- TrustAnchorInfo format moved to standalone specification
- TAMP messages extended to support managing trust anchors other than TrustAnchorInfo
- Certificate option added per WG comments.
- tbsCert added as alternative to TrustAnchorInfo for associating constraints with a certificate.

```
TrustAnchorChoice ::= CHOICE {
certificate [0] EXPLICIT Certificate,
tbsCert [1] EXPLICIT TBSCertificate,
taInfo [2] EXPLICIT TrustAnchorInfo }
```

TA Format changes

- Separates format from protocol spec
 - Text is essentially same as what was removed from TAMP
 - Added an extensions field
 - Made contingency key field optional in ApexTrustAnchorInfo

CCC changes

 No significant changes vs. -00 individual submission

Document Reorganization

- Remove CCC from working group
 - Re-submit as personal draft (as before)
- Remove CCC and clearance constraints fields from TrustAnchorInfo structure
 - Remainder will be compact representation of TA information that allows binding constraints to a certificate
 - Add new content type for sequence of trust anchors
 - CCC and clearance constraints can be carried as extensions by those who want to use them

Document Reorganization (continued)

- Remove CCC fields from TAMP
 - Relocate sequence number conveyance to signed attribute (possible)
- Clarify requirements draft as addressing TA management for push environments only

Suggested Way Forward

- New working group last call for new requirements draft after IETF
 - draft-ietf-pkix-ta-mgmt-reqs-03.txt
- Hold working group last call for revised TrustAnchorInfo draft as soon as practical
 - draft-ietf-pkix-ta-format-01.txt
- Revise TAMP spec
 - draft-ietf-pkix-tamp-01.txt
 - Aim for last call shortly after San Francisco