Update on BRSKI-AE – Support for asynchronous enrollment

draft-ietf-anima-brski-async-enroll-04

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BRSKI with Pledge in Responder Mode (BRSKI-PRM)

draft-ietf-anima-brski-prm-00

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IETF 112 – ANIMA Working Group

Discussion on draft split

- Original BRSKI-AE discussed two use cases, which have evolved into different directions
- Discussion (ANIMA Design Teamm, mailing list) to split the draft along the two use cases
- UC1 stays as "Support of Asynchronous Enrollment in BRSKI (BRSKI-AE)" covering the application of alternative enrollment protocols. It will cover the description of utilizing other enrollment protocol than EST /simpleenroll in general and using Lightweight CMP specifically. Focus is the interaction between pledge and registrar.
- UC2 became "BRSKI with Pledge in Responder Mode (BRSKI- PRM)", and addresses the communication between the pledge and the registrar by reversing the initiator and responder role (compared to RFC 8995) introducing a registrar-agent component to facilitate the communication.

BRSKI-AE Status
History of changes

- From version 02 to version 03
  - Housekeeping, deleted open issue regarding YANG voucher-request in UC2 as ietf-voucher-request was enhanced with additional leaf.
  - Included open issues of Voucher YANG model in UC2 regarding assertion value agent-proximity and CSR encapsulation using SZTP sub module.

- From version 03 to version 04
  - Moved UC2 related parts defining pledge in responder mode to BRSKI-PRM (#19).
  - Updated references to the Lightweight CMP Profile.
  - Change of authors: Added David von Oheimb as co-author. Thomas Werner left.

BRSKI-AE
Next Steps

- Clarification of open issues stated in the draft (currently no open issues on ANIMA git)
- Further update general description using alternative enrollment protocols and the concrete examples
  - Lightweight CMP Profile
  - EST with /fullCMC
- Updates will be circulated
- WG review appreciated
- PoC implementation ongoing → Interest from others welcome for interop testing

BRSKI-PRM Status
History of changes from BRSKI-AE-03 to BRSKI-PRM-00

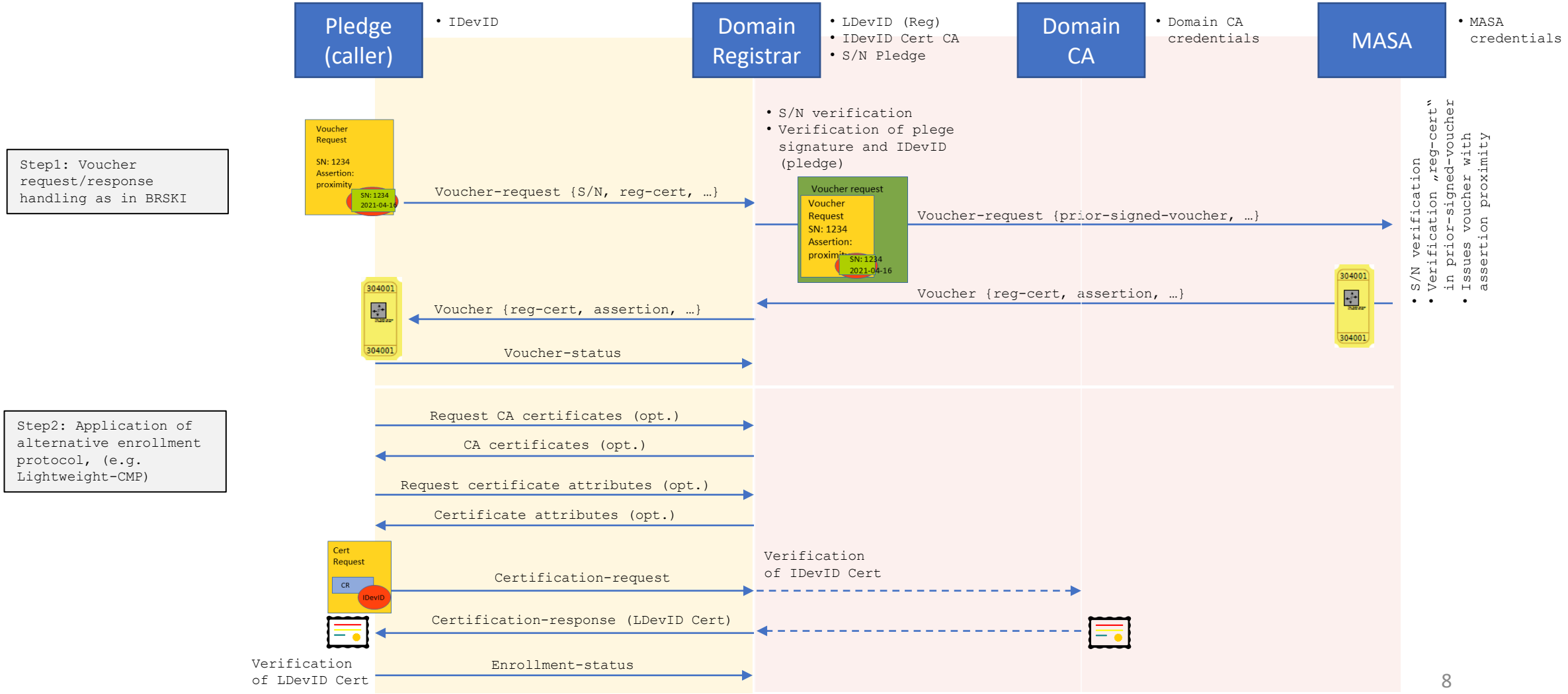
- Moved UC2 defining pledge in responder mode from BRSKI-AE-03 to BRSKI-PRM-00.
- Yang doctor early review addressed (ietf-voucher-request enhancements (Section 6, Security Considerations Section).
- Aligned naming of ietf-voucher-request-xxx with other ANIMA drafts (#20).
- Utilized ietf-voucher-request-prm in voucher exchanges (to use enhancements for agent-signed-data).
- Included changes from draft-ietf-netconf-sztp-csr-06 regarding the YANG definition of csr-types into the enrollment request exchange.

BRSKI-PRM Status
Next Steps

- Further rework the draft (structure and application examples)
- Clarification of open issues stated in ANIMA git and also in the draft
  - Verification of usage of ietf-ztp-types to convey PKCS#10 in BRSKI-PRM enrollment request (#5)
  - Option to generate multiple CSRs (domain specific, application specific) (#7)
  - Signature on enrollment response object? Protection of additional data contained or identification of registrar providing the certificate (audit) (#8)
- Circulate outcome on the mailing list for further discussion
- WG review appreciated
- PoC implementation ongoing → Interest from others welcome for interop testing

Backup

BRSKI-AE
Abstract Protocol Overview



BRSKI-PRM
Abstract Protocol Overview