Update on
JWS signed Vouchers
draft-ietf-anima-jws-voucher-03

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JWS Voucher

• RFC 8366 specifies CMS-signed JSON for Voucher artifacts
• This draft proposes JWS-signed JSON as another option
• Makes no YANG changes to RFC 8366

• Can be used by BRSKI RFC 8995
• BRSKI-PRM relies on JWS form factor
JWS Options

• JWS Compact Serialization (RFC 7515 #3.1) was used initially
  • Encodes the three pieces (header.payload.signature) in Base64URL
  • This choice was arbitrary
  • To be replaced by “General JWS JSON Serialization”

• JWS JSON Serialization (RFC 7515 #3.2), concrete “General JWS JSON Serialization”
  • Switch from JWS Compact Serialization to “General JWS JSON Serialization”
  • Opens up the support of further use cases requiring more than one signature to the Voucher object
  • Multiple signatures are already supported by existing voucher form factors:
    • JSON-in-CMS - RFC 8366
    • CBOR-in-COSE_Sign - draft-ietf-anima-constrained-voucher
    • Voucher in JSON-in-JWS - draft-ietf-anima-jws-voucher (this draft)
    • should support same feature set as other Voucher forms (e.g. JSON-in-CMS), without limitation
Voucher Representation
General JWS JSON Serialization syntax and example

anima-jws-voucher.html#figure-1:
Voucher Representation in General JWS JSON Serialization Syntax

anima-jws-voucher.html#figure-4:
Example Voucher Response
History of changes - draft-ietf-anima-jws-voucher-03

• Mainly switch from “JWS Compact Serialization” to “General JWS JSON Serialization”

• Include syntax and examples for Voucher request and response objects (PVR, RVR, Voucher)
JWS Voucher - Next Steps

• Further enhance description of “General JWS JSON Serialization”
• Alignment in BRSKI design team calls
• Circulate outcome on the mailing list for further discussion
• PoC implementation and interop in combination with BRSKI-PRM
• WG review appreciated
Abbreviations

• JWS - JSON Web Signature

• PVR - Pledge voucher-request

• RVR - Registrar voucher-request