

HMAC-authenticated Diffie-Hellman for MIKEY

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draft-ietf-msec-mikey-dhmac-04.txt

Update & Status

Changes against –02.txt

Changes against –03.txt

- Two updated drafts produced since Vienna.
- Only editorial changes and clarifications.
- Changes against draft-ietf-msec-mikey-dhmac-02.txt:
 - Text allows both random and pseudo-random values for x_i .
 - Exponentiation $**$ changed to $^$.
 - Notation aligned with MIKEY-07.
 - Clarified that the HMAC is calculated over the entire MIKEY message excluding the MAC field.
 - Section 4.2: The AES key wrap method SHALL not be applied.
 - Section 1: Relationship with other, existing work mentioned.
- Changes against draft-ietf-msec-mikey-dhmac-03.txt:
 - RFC 3552 available; some references updated.

Status & Way Forward

- Working Group Last Call during August completed with very little feedback received.
- Some discussion on MSEC mailing list afterwards.
- "Do we need the IETF standardizing yet another DH-based key management protocol ?"
 - ⇒ Yes, there are use cases that leverage the limitations of MIKEY-DHSIGN (PKI dependency, need for PFS, "real-time" capable key management)
- "How does DHHMAC fit into group security?"
 - ⇒ As a registration protocol between group controller and endpoint.
 - ⇒ Point-to-Point characteristic of DH rules out group deployment.
 - ⇒ Applicable for example in group-based IP telephony.
 - ⇒ Common GC and shared key assumption simplifies group setup.
 - ⇒ Shared key infrastructure has different trust model than general PKI.
- Conclusions:
 - Draft should better explain these issues (→ -05)

Thank You!

It's time for questions...