EMSK Key Hierarchy

draft-ietf-hokey-emsk-hierarchy-00.txt

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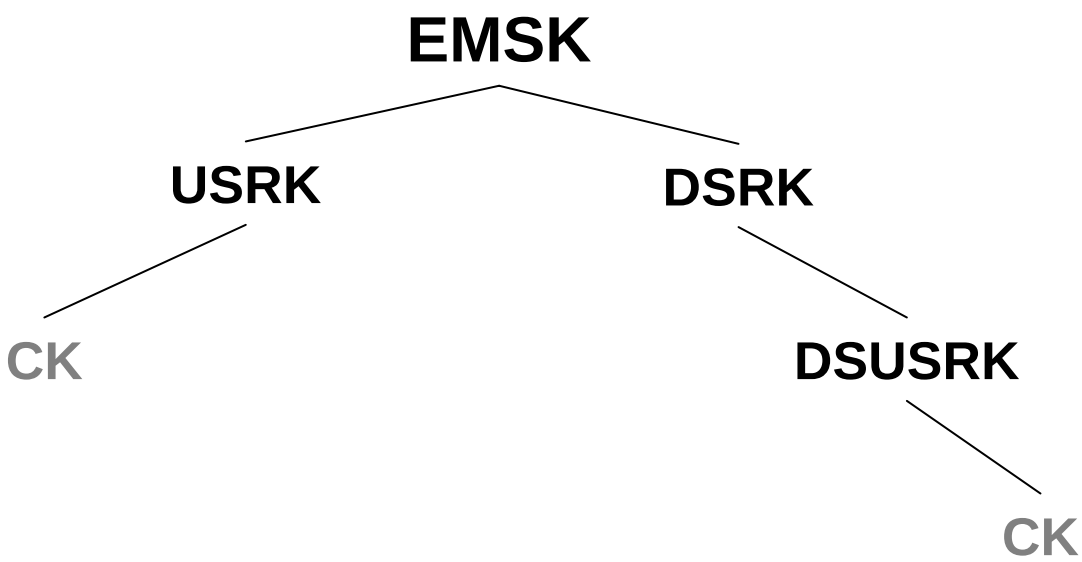
Proposal for EMSK Hierarchy



KDF Prototypes

KDF(key, usage label, domain label, opt data)

USRK = KDF(EMSK, usage label, null, opt data)

DSRK = KDF(EMSK, dsrk@ietf.org, domain label, opt data)

DSUSRK = KDF(DSRK, usage label, domain label, opt data)

Note: dsrk@ietf.org is a usage label, not a domain label.

Hierarchy Branches

- Domain independent root
  - Usage specific root key (USRK) derived from EMSK
- Domain specific root
  - Domain specific root key (DSRK)derived from EMSK
  - Domain specific usage specific keys (DSUSRK) derived from a DSRK
- Usage definition defines if keys may be derived from the USRK, the DSUSRK or both
- Cryptographic usage keys (CK) are derived according to usage definition