Encrypted Key Transport for SRTP
draft-mcgrew-srtp-ekt-06

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Encrypted Key Transport for SRTP

- In-band key transport protected by separate RTP session-level key
  - Conveys SRTP master key and ROC
- Layer of indirection between Key Management and SRTP
  - Avoids layer violation
  - Key management should be oblivious to RTP Sources, SSRCs, Seq Nums, Rollover Counter
  - Indirection is important for large groups
1. DTLS-SRTP-KTR (1:1)

Group Controller

Diagram showing a group controller connected to multiple devices.
2. EKT (1:Many)
Looking back and forward

- EKT defined 2006-2007
  - Expired pending implementation and interest
  - We now have both!
- EKT is only way to avoid layer violations
  - Essential for scalability to large groups
EKT Changes

• Now fully described using DTLS-SRTP
  – DTLS-SRTP has better security than SDESC
  – DTLS-SRTP is IETF standard for SRTP keying

• EKT in an SRTP packet no longer an Appendix
  – Provides key and data for new speaker
  – Fate-sharing of key and data encrypted with that key

• WG item?