

SDP Security Descriptions for Media Streams

`draft-ietf-mmusic-sdescriptions-03.txt`

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Purpose

- Establish secure media streams by sending security descriptions with ciphers, keys, etc. in SDP
- Divided into core framework and an SRTP-specific part:
 - High-level Operation and parameter definition
 - Use with Offer/Answer
 - Use outside Offer/Answer
 - Grammar

Overview of Changes

- Removed support for multicast and multipoint SRTP sessions
 - Point-to-point media streams only
 - SIP forking addressed via workaround
 - Turn multipoint into multiple point-to-point instead.
- Removed SRC parameter
 - SSRC, SEQ and ROC no longer signaled
 - ROC must always be zero when joining a session
- Send and receive keys now required to be unique to avoid two-time pad problem during SSRC collisions.

Overview of Changes, cont.

- Expanded on rules for creating and removing crypto contexts
- Added new “tag” parameter for offer/answer
- Clarified whether each parameter is negotiated or declarative in offer/answer
- Modified IANA registry structure
- Incorporated various other review comments received

Minor Issue - Address Change

- Scenario:
 - A has performed initial offer/answer exchange
 - Crypto context established
 - A performs a subsequent offer/answer exchange and receives a new media stream destination address
- Issue:
 - Cannot assume new destination address has access to old crypto context ROC value
- Solution:
 - Need to either reset ROC (to zero) or use new SSRC whenever destination address changes (IP or port)
 - Note that ROC is not an issue for all types of ciphers

Next Steps

- Ready for WGLC