SRTP STORE-AND-FORWARD USE CASES AND REQUIREMENTS

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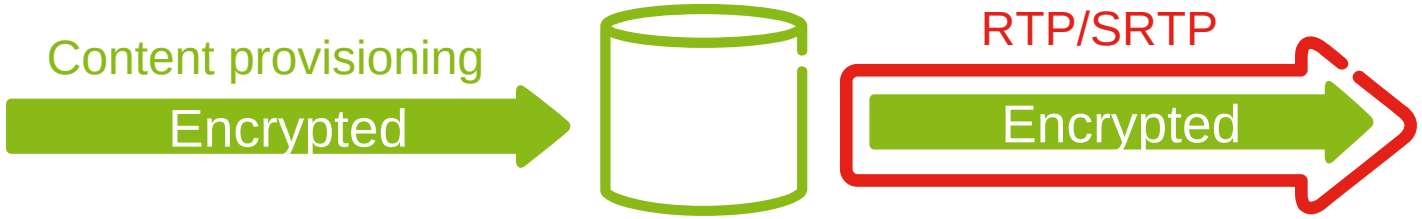
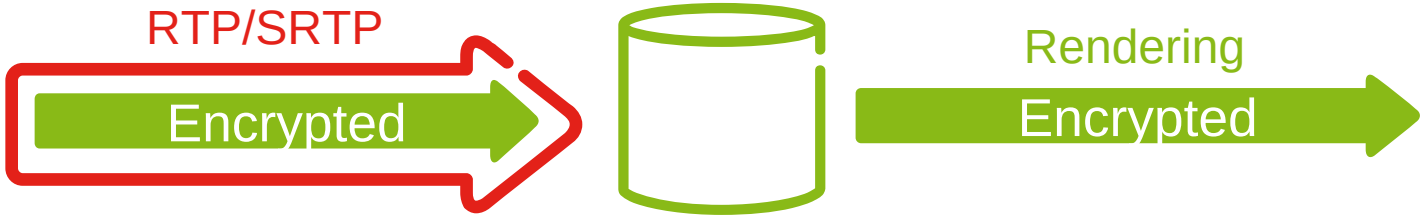
USE CASES

› Any application where an untrusted middlebox needs to store and later forward encrypted media.

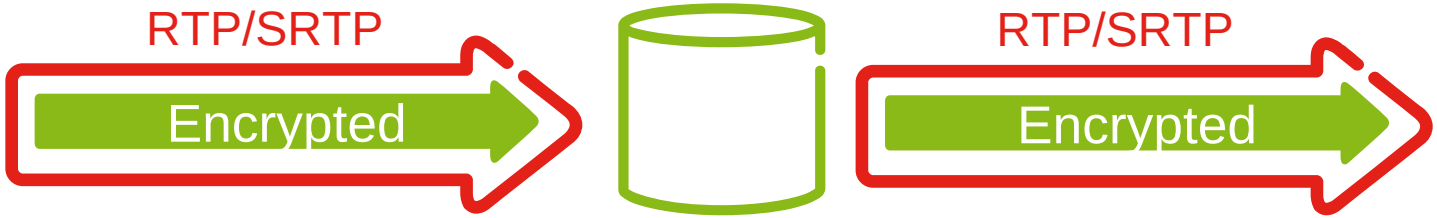
1) Server streaming pre-encrypted media.



2) Client recording streamed encrypted media.



3) Network node caching/recording streamed encrypted media.



WHY AN EXTENSION IS NEEDED

- Can existing protocols be used for Encrypted ?

- Transport protection in SRTP is dependent on the header.
  - Needed: Header independent payload protection.

- Context identification in SRTP is dependent on transport parameters.
  - Needed: Context identification independent of transport parameters.

- Other protocols (i.e. ISMACryp) are not published by a recognized standards development organization (SDO). As ISMA has ceased to exist, active maintenance is questionable
  - Needed: Lightweight solution published by a recognized SDO

REQUIRED AND DESIRED FEATURES

- Required features
  - Header independent payload protection providing confidentiality, integrity and replay protection.
  - Context identification independent of transport parameters.

- Desired features
  - Reuse SRTP security functions and transforms.
    - Enables fast and easy implementation
    - Enables reuse of key management protocols
  - Lightweight solution
  - Independent of whether RTP/SRTP is used for transport.

RELEVANT INTERNET-DRAFTS

- **SRTP Store-and-Forward Use Cases and Requirements**
  - draft-mattsson-srtp-store-and-forward-04
- **The Use of the Secure Real-time Transport Protocol (SRTP) in Store-and-Forward Applications**
  - draft-naslund-srtp-saf-04
- Co-authors welcome!

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