draft-ietf-perc-private-media-framework-01

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Topics

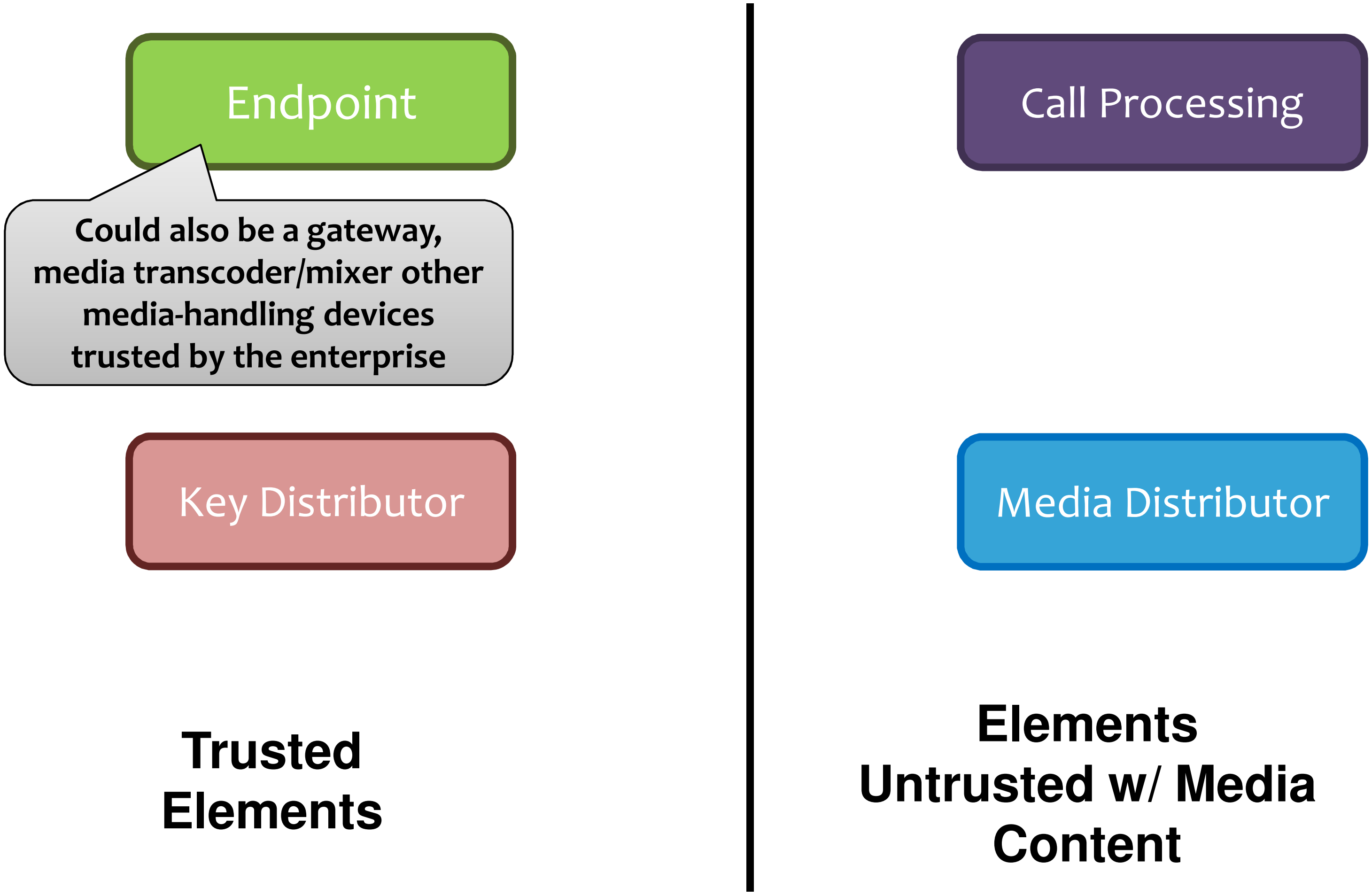
- Differences in -01
- Framework Outline Refresher
- Action Item List

Differences in -01

Simplify some entity names & reduced acronym dependence in text, diagrams.

- KMF >> Key Distributor
- MDD >> Media Distributor

Entities and Trust with Media



Endpoint

Could also be a gateway, media transcoder/mixer other media-handling devices trusted by the enterprise

Key Distributor

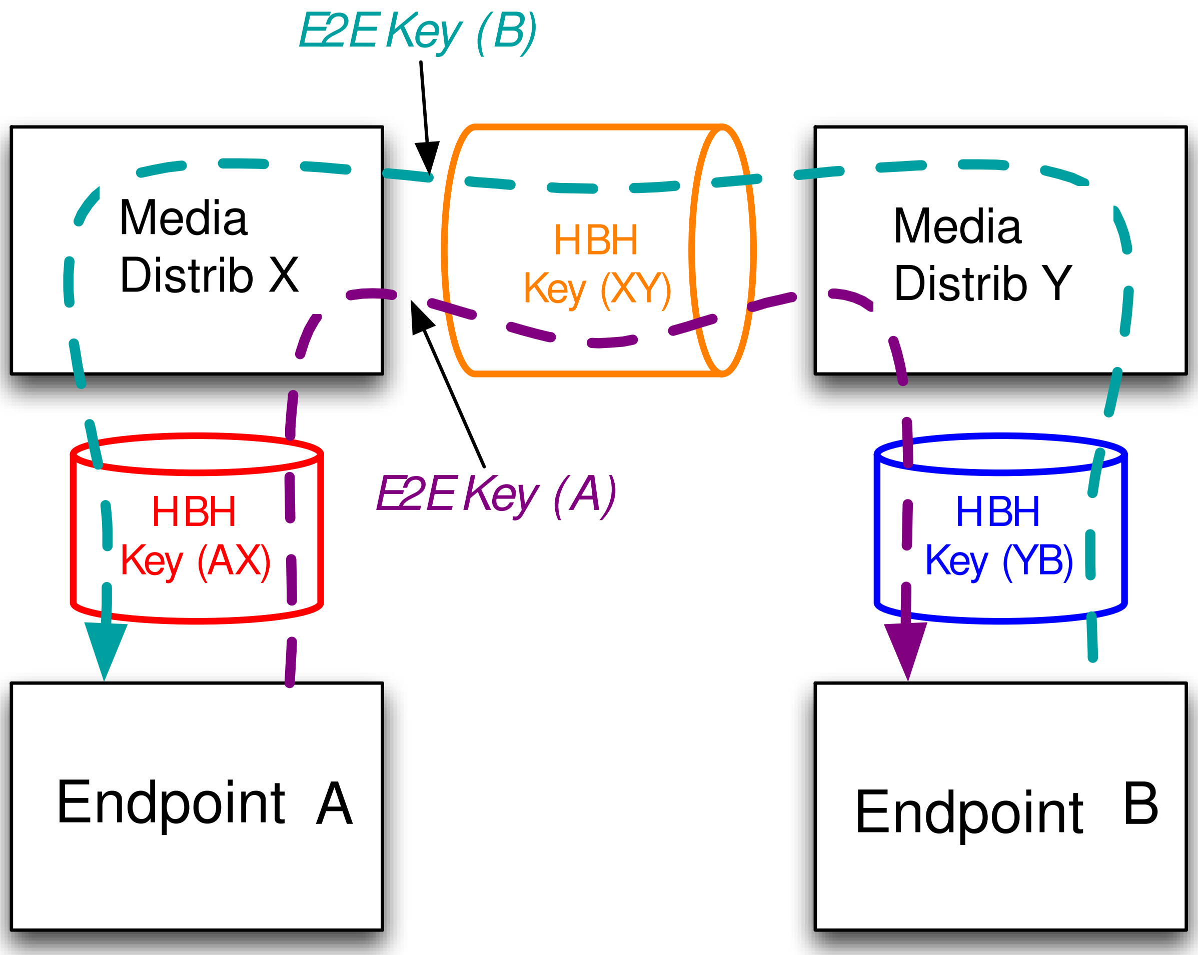
Trusted Elements

Call Processing

Media Distributor

Elements Untrusted w/ Media Content

"Outer" (HBH) and "Inner" (E2E) Authenticated Encryption



Operational Details: draft-ietf-perc-double

E2E Keys

Generation

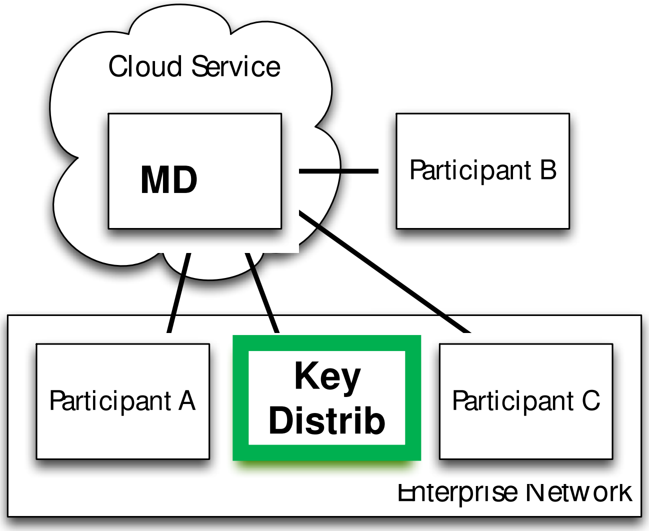
- An “Outer” SRTP master key is created by each endpoint, E2E Key(i), for media it transmits.

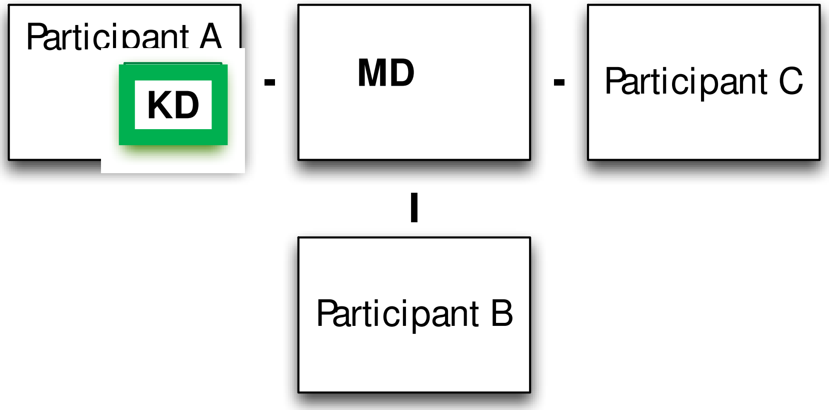
Confidentiality thereof

- A conference-wide key encryption key (ie, EKT Key) is used to encrypt an endpoint’s “Outer” master key for sharing with all the (valid) endpoints in a conference.
- Conference-wide key encryption key can change during the life of conference, such as triggered by an event.
- More Operational Details: draft-ietf-perc-srtp-ekt-diet

Where Keys Come From

- Key Distributor
  - Conference-wide key encryption key (EKT Key)
  - HBH Keys between Endpoints and Media Distributors (AX, BY)
- Endpoints, Media Distributors generate the others





More Operational Details: [draft-jones-perc-dtls-tunnel]()

Framework Action Items

- Media Distributor requirements and constraints to rfc7667 topology mapping
  - TOPO-PtP-translator
  - SFM w/ single, common SSRC space
  - Others?

- Add a list of RTP header extensions that should/must not be E2E encrypted?

Framework Action Items (cont)

- Mapping of endpoints-to-a-given-conference may need to be conveyed.
- Possibly add ability for transmit-only (one-way) devices not trusted for two-way media (hence, would not receive any media from endpoints).
- Expand Entity Trust section
  - Certificate Fingerprint via signaling
  - Identity Assertions