DTLS Tunnel between a Media Distributor and Key Distributor to Facilitate Key Exchange

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What’s New

• Minor editorial changes
• Editor’s note on conference identifiers
• Changed the example ciphers in Section 7 to be “double” ciphers
Editor’s Note on Conference IDs

• We’ll cover in the dtls-id draft
Editor’s Note on Tunnel Affinity

• Current Tunnel draft says this (and similar text for the key distributor):
  “The media distributor MUST forward all messages received from an endpoint for a given DTLS association through the same tunnel if more than one tunnel has been established between it and a key distributor.”

• Since connections break and multiple bi-directional TLS connections could exist, we propose:
  • Introduce a Media Server ID (a UUID) advertised in the first message from the Media Server to the Key Distributor when the tunnel is established
    • All messages should go to the same media server based on this UUID
  • If multiple key servers by the same name exists, we assume any one can receive messages for a given DTLS association
Enhancement to “EndpointDisconnected”

- Alice attempts to join a conference, but is not authorized
- Key Distributor rejects the association; Media Distributor unaware
- Alice could send in bogus media packets
  - Media Distributor discards them
  - Waste of resources
- Proposal:
  - Allow the Key Distributor to send the “EndpointDisconnect” message
    - Reason is not important for the Media Distributor
    - We could add a reason value (e.g., “normal”, “unauthorized”)
    - Media Distributor can terminate the call with Alice
    - Key Distributor can remove a person from the conference at any time
Other Suggestions Received

• Put the version field only in the first message sent
• Use a UUID (or otherwise long random value) for the association ID
• Have a message length before msg_type
• “highest supported version” in the UnsupportedVersion message