Session-ID Requirements
at IETF83

draft-jones-ipmc-session-id-reqts-01

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Purpose of Draft

• Purpose (hopefully) same as this WG’s purpose:
  – To create an identifier that middleboxes won’t muck with that is (nearly) identical in goal to that of the dialog-ID in SIP when there are no middleboxes between UAs in a call (flow/session/whatever).
  
    • i.e., as if no B2BUAs or SBCs were in the signaling path
Illustrating the Problem:
Alice and Bob via B2BUA or SBC

What is the end-to-end dialog identifier?
Alice thinks it is X and Bob thinks it is Y.
BOTH think they are communicating directly with the other.
Session-ID Use-Cases (1/2)

• End-to-end identification of a communication session

• Association of session signaling and media flows, made possible by including the session identifier in media-related messages (e.g., RSVP or RTCP)

• Identification of devices taking part in the same multipoint conference
Session-ID Use-Cases (2/2)

• Tracking sessions transferred from one endpoint to another

• Facilitate the recording of SIP sessions and correlating those sessions

• Logging for the purposes of accounting, billing, debugging, communication tracking (such as for security purposes in case of theft of service), etc.
Session-ID Requirements (1/4)

- **REQ1**: It must be possible for an administrator or an external device which monitors the SIP-traffic to use the identifier to identify a set of dialogs which have a relationship with each other, such that they represent the same SIP session, with as high a probability as possible.

- **REQ2**: It must be possible to identify the end-to-end session when a session is transferred or if two different sessions are joined together via an intermediary (e.g., a B2BUA or SBC).
Session-ID Requirements (2/4)

• **REQ3**: It must be possible to identify all sessions participating in a multipoint or multi-party conference by observing the end-to-end session identifiers of each session.

• **REQ4**: It must be possible to pass the identifier unchanged through SIP B2BUAs or other intermediaries.

• **REQ5**: The identifier must not reveal any information related to any SIP device or domain identity, including IP Address, port, hostname, domain name, username, Address-of-Record, MAC address, IP address family, transport type, etc.
Session-ID Requirements (3/4)

- **REQ6:** The identifier must not reveal to the receiver of it that the Call-ID, tags, or any other SIP header or body portion have been changed by middleboxes, with as high a probability as possible.

- **REQ7:** It must be possible to identify SIP traffic with an end-to-end session identifier from and to end devices that do not support this new identifier, such as by allowing an intermediary to inject an identifier into the session signaling.
Session-ID Requirements (4/4)

- **REQ8**: The identifier should be unique in time and space, similar to the Call-ID.

- **REQ9**: The identifier should be constructed in such a way as to make it suitable for transmission in SIP, H.323, RSVP, and RTCP.
Open Issues

• Should this set of requirements be woven into an early section of WG’s existing milestone, brought forward as a separate milestone, or left to remain a draft only?

• Others?