RTCP extensions for Single Source Multicast sessions

<draft-ietf-avt-rtcpssm-01.txt>

18th July 2002

Julian Chesterfield Eve Schooler Joerg Ott

Overview

Security Discussion
Summary content
Miscellaneous Changes and
Outstanding Issues

Security Progress

Further consideration of the security issues in new document:

http://irg.attlabs.net/rtcp_ssm/rtcp_security.{ps,pdf}

Identifies potential solutions

Considers potential of each case relative to security context

Suggests a solution

Current focus is to identify a level of security that should be mandated by the draft

Security Options

Security solution only needs to provide the same level of guarantee as current RTCP:

Confidentiality, **replay defense**, admission control etc. is not required (although recommended)

Fundamental Security Defense

Authentication of Feedback address information

Data authenticity from RTCP feedback source which controls the bandwidth calculation

In-band signalling of feedback address?

Since some level of source authentication is required on RTCP packets, should feedback information be included in the packet?

Solves the problem of authenticating the feedback address

Also provides more flexibility with respect to changing feedback identifier during session

Out-of-band signalling of feedback address?

Typical method

Uses SDP + transport mechanism

SAP, HTTP (HTTPS), SIP....

Each defines separate security mechanism

Draft requirements

To what extent should this draft specify security requirements

Recommend suitable approaches

(SRTP/GDOI within controlled group, i.e. Using shared group key, or TESLA approach for looser control)

Require suitable level of security (i.e. source data and feedback identifier MUST be authenticated)

Miscellaneous Changes and Open Issues

SDP Identifiers

Rename rtcp attribute in draft to rtcpssm to avoid conflict

Allow both session and media level attributes

Revise IANA considerations

Editorial stuff