

IETF-60 MMUSIC WG

RTSP ANNOUNCE

draft-zeng-mmusic-rtsp-announce-01.txt

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Introduction

- Was draft-zeng-rtsp-end-of-stream-00.txt
 - Presented during IETF-58
 - The consensus then was to use ANNOUNCE
- Outline of this presentation
 - Overview of RTSP announce
 - Examples
 - Specifications
 - Moving Forward

Overview of RTSP ANNOUNCE

- ANNOUNCE becomes an extension method to RFC2326bis
- ANNOUNCE can still keep the syntax and semantics in RFC2326
 - Where it only publishes session description
- Now it can also publish events, such as end-of-stream with a new header (Event-Type) and a feature tag:
 - Request URL in ANNOUNCE can be either aggregate or non-aggregate URI
 - This work does not need to address how server can initiate connection to client (in response to comments in IETF-58)
- ANNOUNCE can be C->S and S->C

Example of RTSP conversation 1/2

S->C: ANNOUNCE rtsp://foo.com/bar.avi RTSP/1.0

CSeq: 10

Content-Type: application/SDP

Content-Length: xx

v=0

o=- 2890844526 2890842807 IN IP4 66.23.24.15

s=Joe's Birthday Footage

c=IN IP4 66.23.24.15

b=AS: 64

a=control: rtsp://foo.com/bar.avi

a=range:0-200

m=video 49120 RTP/AVP 96

a=fmpt: 96 profile-level-id=1; config=...

a=rtpmap: 96 MP4V-ES/1000

a=control: rtsp://foo.com/bar.avi/streamid=0

Example of RTSP conversation 2/2

S->C: ANNOUNCE **rtsp://foo.com/bar.avi** RTSP/1.0 ← Aggregate URL

CSeq: 10

Session: 12345678

Require: method.announce

Event-Type: End-Of-Stream

Range: npt=10-100

RTP-Info: url= rtsp://foo.com/bar.avi/streamid=0; seq=456,
url= rtsp://foo.com/bar.avi/streamid=1; seq=789

Content-Type: text/parameters

Content-Length: xx

eos-reason: End of file reached.

C->S: RTSP/1.0 200 OK

CSeq: 10

Session: 12345678

/ Second play can reuse SessionID and SSRCS: */*

C->S: PLAY rtsp://foo.com/bar.avi RTSP/1.0

Supported: method.eos

CSeq: 110

Session: 12345678

Range: npt=10-200

Method Specification

- ANNOUNCE method MAY contain an entity (e.g., SDP entity)
- ANNOUNCE method MUST include the following header:
 - CSeq
- ANNOUNCE takes the following optional headers:
 - Event-Type ← new
 - Session, Range, RTP-Info, Require, Supported, User-Agent
 - Session header must be present if Event-Type is End-Of-Stream
- Recipient of ANNOUNCE request MUST reply with one of:
 - 200 OK
 - 551 Option Not Supported – if it does not know the feature tag in Require header

New Header Specification

- Event-Type has the following ABNF:
Event-Type = "Event-Type" ":" event-type
event-type = "Session-Description"
 / "End-Of-Stream"
 / "Error"
 / extension-event-type
extension-event-type = token
- ANNOUNCE without Event-Type has the semantics of RFC2326 announce

Proposed change: add numerical code

S->C: ANNOUNCE rtsp://foo.com/bar.avi RTSP/1.0
CSeq: 10
Session: 12345678
Require: method.announce
Event-Type: 2001 End-Of-Stream
....
....

What Next

- Acceptable as MMUSIC WG work item?
- Reasons for it:
 - ANNOUNCE has been taken out of RTSP core spec (rfc2326bis)
 - Announcing End-Of-Stream is useful if say audio track is shorter than video track
 - Announcing SDP is useful in multicast case where it is not convenient for clients to use DESCRIBE to obtain SDP (there may not be point-to-point connection)
 - Announcing SDP is useful when new media has been added in the middle of a session
 - Announcing SDP is useful for the old RECORD feature in RFC2326