

# Bitrate header in RTSP

## draft-wei-mmusic-rtsp-bitrate- header-01

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# Background

- Sometimes a user wants to know bitrate range of media source and change transport bitrate.
  - Selecting a suitable bitrate to start with
  - Applying to bandwidth reservation by RSVP
  - Applying to increase access bandwidth
  - Changing transport bitrate according to the user's perception of quality during the playing

# Requirement

- A large number of alternative bitrates and their private descriptions will result in a very large SDP offer.  
Future advanced video codec can provide more and more bitrates within one media file, such as hundreds or thousands of bitrates .
- Can we optimize media description to increase efficiency and flexibility? If there are some alternative bitrates of the same codec, we only offer a default bitrate to the client.

# Example

m=video 0 RTP/AVP 98  
a=rtpmap:98 MP4V-ES/90000  
a=fmtp:98 profile-level-id=8;  
b=AS:44  
a=control:trackID=4  
a=X-initpredecbufperiod:98000  
b=AS:16  
a=control:trackID=3  
a=X-initpredecbufperiod:48000  
b=AS:104  
a=control:trackID=5  
a=X-initpredecbufperiod:150000

m=video 0 RTP/AVP 98  
b=AS:44  
a=rtpmap:98 MP4V-ES/90000  
a=control:trackID=4  
a=fmtp:98 profile-level-id=8;  
a=X-initpredecbufperiod:98000

C->S GET\_PARAMATER  
rtsp://...../ trackid=4  
    bitrate  
S->C 200 OK  
    bitrate: 44K, 16K, 104K  
  
C->S PLAY rtsp://...../trackid=4  
    Bitrate: 104K  
S->C 200 OK  
    Bitrate: 104K  
    x-initpredecbufperiod: 150000

# Approach

- Inquire—GET\_PARAMETER bitrate

bitrate: 512K, 1M, 2M; bitrate: 512K-1.5M

- Change—PLAY Bitrate

Bitrate: 512K

***Any questions?***

thanks