Media Rate API Proposal

Mahesh Chapalamadugu

verizon

Problem Statement and Solution

Problem Statement:

Client video streaming experiences are negatively impacted due to a lack of information about maximum allowed bandwidth. This results in:

Packet loss and degraded video quality: Clients, especially those using adaptive bitrate protocols like HLS or DASH, are unable to optimize their streams without knowing the network's limitations.

Inefficient use of network resources: Video policing mechanisms implemented to enforce bandwidth restrictions add complexity and overhead.

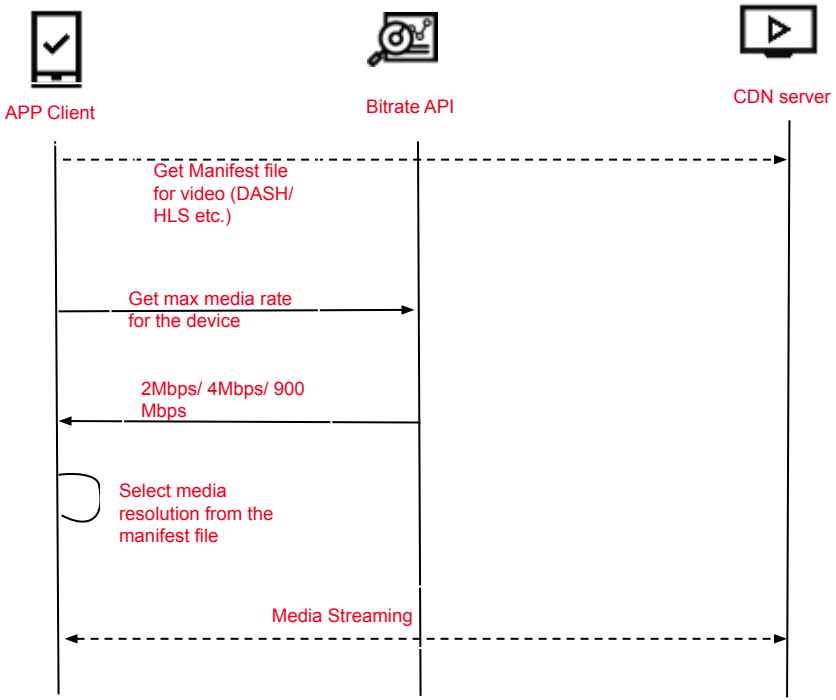
Solution:

Implement a Media Rate API that communicates the maximum allowed media rate to the client before the video session begins. This allows the client to:

Select an appropriate video resolution: Clients can choose a resolution that aligns with the available bandwidth, preventing buffering and ensuring smooth playback.

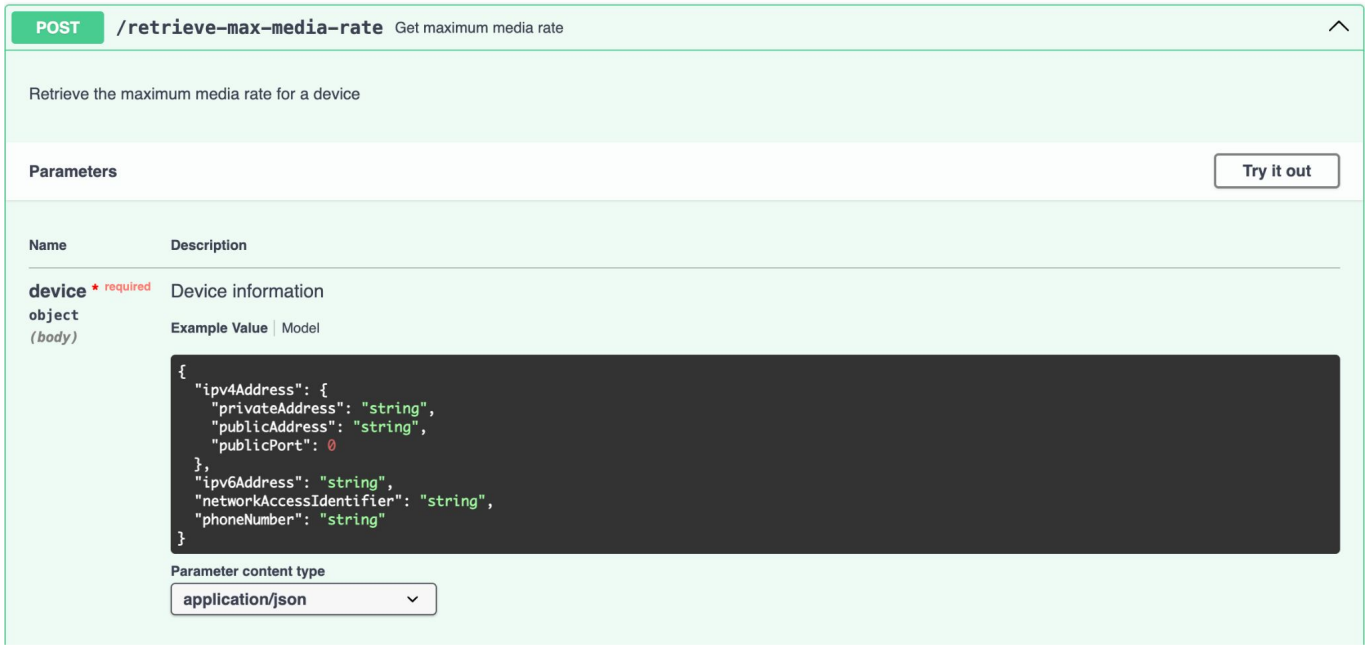
Reduced network strain: Less need for proactive video policing, leading to more efficient use of network resources. Eliminating the need for complex video policing mechanisms simplifies network administration.

API Call flow



Open API spec-Proposed

Request



Open API spec-Proposed

Response