Review of the Challenges to Remove Jitter and Packet Loss during Continuous Playback of Streamed Video Data in Video On Demand (VOD) System Receivers

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Abstract

Video on Demand (VOD) system is inherently resource intensive and demanding in respect of performance for continuous playback due to bulk size of video data, length of video session and real time continuous playback. The data stream is to be played back strictly in original sequence for longer periods in general once playback begins. Any interruption in data transfer stream,
unordered delivery of packets or loss of packets can result in jitters or breaks during video playback. In practice the ordered delivery of data packets through public domain networks is not guaranteed, which can break the sequential notion of video data. These are the main challenges for jitter and breaks free VOD services. This paper, presents an in-depth reviews of techniques for removal of jitter and to make up against packet loss. Fixed or adaptively delayed play back may be useful for removal of jitter during video playback. Techniques called forward Error Correction, Interleaving and Interpolation are used to fight against the loss of packets, which have also been examined critically. These techniques are an important part of media players (VOD receivers) designs and streaming servers.

Reference

- Paolo Bellavista, Antonio Corradi, “How to support Internet based distribution of video on demand to portable users”, proceedings of 7th IEEE International Symposium on Computers

Index Terms
Key words

VOD

packet loss
multimedia
video playback
jitter