Bufferbloat Mitigation for Real-time Video Streaming using Adaptive Controlled Delay Mechanism

Abstract

Bufferbloat is an abnormal phenomenon in current Internet experience where large buffers cause high end-to-end latency and jitter, as well as throughput degradation. The universally applied thumb rule is used to allocate buffers at the nodes, based on the assumption that large size buffers reduce packet loss. Window scaling mechanism of TCP tends to fill up these buffers causing latency in the network. CoDel has been designed to overcome bufferbloat. The drawback in CoDel is that, the uniform target values does not support real-time video streaming. Adaptive CoDel proposed in this paper tends to mitigate bufferbloat and improve the QoS parameters of real-time video stream.

References

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Index Terms

Computer Science

Communication Systems
Keywords
Bufferbloat  CoDel  Real-time Video  Adaptive CoDel