

Buffermap adaptation method for MP2P multimedia streaming protocol

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Abstract— On providing multimedia stream over a mesh-based overlay network, the starting point of buffermap is determined through negotiation with other peers. When it boots up, it does not have a starting point of its buffermap, and it can determine this value only by negotiations with other arbitrary peer. If it selects a bad start point, the peer cannot receive stream data because other peer's buffermap may not have a fragment that it needs in some time. There are some jitters in processing media for presentation and network delivery, and it accumulates over timer. This leads to the peer lag behind of actual stream. Hence, it is crucial to adjust the start point of buffermap appropriately during streaming. This paper describes how the problematic situation can be happen, and how to adapt the buffermap for stable multimedia streaming service over a mesh-based overlay network.

Keyword— buffermap, adaptation, multimedia streaming, mesh, P2P network, overlay network



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