

Packet Loss Avoidance in Content Centric Mobile Adhoc Networks

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Abstract— As a result of the fast growing mobile technologies and application types, user generated contents are dominating contents on Internet. New Internet architectures are emerging because of the lack of suitability of TCP/IP Internet architecture to serve the recent traffic types and content centric network is one of such proposed architecture. This architecture was proposed for wire based Internet and lacks features to directly apply it on wireless and mobile ad-hoc networks. In mobile ad-hoc networks, due to mobility of intermediate nodes, connection between two remote nodes fails frequently bringing packet loss problem and a need to avoid it. Packet loss causes communication delay, throughput degradation and congestion and may even make the network unusable. This paper proposes a new CCN scheme with packet loss avoidance built into it. Simulation results show that our proposed scheme performs very well in a dense network with high mobility.

Keywords— CCN; link failure; link recovery; mobile ad-hoc network; packet loss avoidance



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