End-to-End (e2e) Quality of Service (QoS) For IPv6 Video Streaming

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Abstract— With continuous progress and advances in Internet Technology (IT) devices like smart mobiles, tablets and laptops, an increasing demand for real time applications have emerged. Reliable Quality of Service (QoS) mechanism over IPv6 for video streaming is required. New advances resulted in huge real time traffic on the internet and a reliable (QoS) mechanism has become an urgent need to meet the requirements of new technologies and network complexity. Furthermore, Internet Protocol (IP) which IPv4 address space has been exhausted and IPv6 address are now widely deployed. Real time video streaming demands required increased efforts to meet the requirements of end users. A new QoS approach for IPv6 video streaming traffic using flow Label field to control network parameters has been proposed. Proposed methods have been compared with different scenarios including best effort scenario and Differentiated Service (DiffServ) QoS approach. In this paper, we present the result of best effort scenario against different quality of streamed videos.

Keywords-Flow Label, Best effort, DiffServ, OPNET, IPv6 Header.



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