

**APPLICATION LAYER QUALITY OF SERVICE DEPLOYED
ON SOFTWARE DEFINED NETWORKS**

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For the multi-media based internet today, high quality real-time content delivery has is becoming a mainstream and the demand for Quality of Service (QoS) is greater than ever and is gaining significance since it has remained quiet an issue ever since internet has grown immensely over the past few years. Internet service providers have to load-balance their network during peak hours, and there is vast network load because of high definition multi-media streaming services like Netflix and YouTube. While technology and innovation has continued to evolve, network infrastructure system has stagnated and has remained almost same ever since its inception, the network devices such as routers, switches and hubs are considered black box devices with little or no abstraction, and information on how the data is routed within its ecosystem has been always a closely protected secret only with the device manufacturer. Software-Defined Networking (SDN) is an emerging paradigm in computer networking that allows a logically centralized software program to control the behavior of an entire network. This is done by decoupling the network control logic from the fundamental physical routers and switches that forward traffic to the selected destination. One mechanism that allows the control plane to communicate with the data plane is OpenFlow. The network operators could write high-level control programs that specify the behavior of an entire network. The centralized control makes it possible to define more specific and complex tasks