Abstract

In recent years, numerous claims on non-responsiveness of architecture of current networks and Internet to users' daily demands have been raised. To deal with the problem, new architectures have been suggested. Software-defined network (SDN) introduced a new architecture for computer network in which control level and data transfer level are separated from each other. This architecture has contributed to smartness, flexibility, and controllability of computer networks. Among advantages of this architecture, one could point to easy control and isolation of different streams without being concerned with implementation and test of newly suggested protocols and architectures on real networks. In this paper, introduction of new network architecture is followed by detailing different methods for guaranteeing the quality of service (QoS) in software-defined network and elaborating the challenges ahead. In fact, the objective of present paper is to represent the effect of use of software-defined network on quality of service in different multi-media applications and based on the architecture of the networks in which control layer and directing layer are isolated. Such an architecture enables
the use of different routing algorithms for different streams. In the case of these methods, the introduced methods are applied for improving the use of video streams.

References


Index Terms

Computer Science
Networks

Keywords

Quality of Service, Multimedia, Future Internet Architecture, Software Defined Networks.