

Abstract

Real time applications such as voice over IP (VoIP) and videoconferencing require direct connectivity between sites that running over WAN on multipoint-to-multipoint topology. The aim of this final project is to compare and analyze VoIP QoS in MPLS and VPLS from jitter and packet loss. To achieve it, those networks have to be modeled as the real one.

From simulation based-on first, second, and third scenario in MPLS dan VPLS, the conclusions are: both MPLS and VPLS effective in VoIP, MPLS can grow bigger with thousand customer node with support QoS of lower point of packet loss than point of packet loss in VPLS. VPLS not good enough in VoIP because it cannot grow bigger because of its performance in packet loss.

Key words: VPLS, MPLS, QoS, VoIP.