

ABSTRACT

Bandwidth efficiency is a very important thing. As the use of applications such as audio, video on demand and video conferencing increase, the need of bandwidth also increases. To confront that matters, it needs a method to reduce the number of packets being transmitted. One of the methods is multicasting. With multicasting, packets that are destined to many hosts only need to be transmitted once. So bandwidth availability can be maintained.

In this paper, multicast protocols such as Protocol Independent Multicast (PIM), Multicast Open Shortest Path First (MOSPF), Distance Vector Multicast Routing Protocol (DVMRP) and Core-Based Tree (CBT) are compared. The comparisons are done by measuring QoS in some network topologies. This is done in order to show the performance of each protocol in different topologies. QoS parameters being measured in this multicast process are delay, throughput, jitter, added lines and packet loss. Hopefully, the best performance of multicast routing protocol can be concluded from this experiment.

keyword: Multicast, routing, PIM, MOSPF, DVMRP, CBT