Abstract

The computer networks are increasingly imposed recently, all sectors currently rely on the protocol Internet Protocol to provide users with remote access, wherever and whenever. IP is currently involved in sensitive areas such as telemedicine, remote sensing, telepresence, electronic payment and so on. IP exists in two version version 4 (IPv4) and version 6 (IPv6), the difference between these two protocols is distinguished in terms of features, operation, and performance. In this article we will measure and evaluate the performance of the two IPv4 and IPv6 protocols in the networks of communicating companies. The study will be performed by varying the routing protocols RIP, RIPnG, OSPF, OSPFv3, IS-IS and IS-IS v6. Our study will be conducted under the OPNET Modeler simulators, the traffic we will exploit for evaluation is VoIP, videoconferencing, and FTP.


Index Terms

Computer Science Networks

Keywords
IPv6, IP Next Generation, IPv4, IPng, IETF, SIP