

Abstract

Multilink Point to Point Protocol (MLPPP) is a protocol which was developed from *Point to Point Protocol* (PPP). PPP provide method for transporting *multi*-protocol datagram's over serial connection. PPP is commonly used for interconnecting *routers* or for interconnecting *Networks* to form a Wide Area *Network* (WAN). Having same function as PPP, MLPPP have better ability than PPP. MLPPP have the ability to adjust the *bandwidth* of a connection between two *Network* devices to accommodate dynamically changing *Network* loads. With MLPPP, *routers* and other access devices can combine *multiple* PPP *links* connected to various WAN services into one logical data pipe, so when a connection need some extra *bandwidth*, controlled by MLPPP, the connection could use another PPP *link* to get extra *bandwidth* as needed. By doing so, the *Network* performance will also increase.

This final task analyze the performance of wide area *Network* which using MLPPP and also the benefit from using MLPPP than PPP. Tested and compared performance parameter is delay, throughput, and packet loss. Also MLPPP and PPP behaviour when there are change in network condition, it is when broken link happen.

MLPPP usage add availability to PPP connection, but there are decrease in performance on delay, because MLPPP add more header to packet that increase packet size and packet transfer time MLPPP use round robin scheduling algorithm, so we join link with different throughput to form MLPPP, link with higher throughput will decreasing its throughput in accordance to the lower throughput.

Keywords : MLPPP, PPP, WAN