

Abstract

To anticipate the exhaustion of IPv4 addresses, IPv6 addresses is developing IPv6.Length is 128 bits, so the number of available addresses is 2^{128} (3.4×10^{38}), much more than IPv4. But overall IPv6 implementation will be realized for a long time (gradually, not directly), because the use of IPv6 Internet requires modification of the entire infrastructure. This is where technology plays a role transition. IPv4 to IPv6 transition technology broadly divided into three types, namely dual-stack, translation, and tunneling. In this final task will be used for tunneling, tunneling transition method allows the coexistence between the two cloud IP (IPv4 and IPv6).

IPv6 Transition is required for connecting IPv4 networks to IPv6 during migration.And which will be discussed in this thesis is the method of tunneling 6in4 and Teredo transition. Compared tunneling method which is better between the 6in4 and Teredo.To know do some testing in the network ftp. The parameters to be observed during the test is in throughput and latency.

In this thesis compared the performance which is better value its throughput and latency 6in4 tunneling method or the method Teredo.Compareddone by experimenting. Results of the research data it can be concluded that the value of latency for Teredo IPv6 transition methods is greater than 6in4 tunneling, while the value of throughput in both methods Teredo has a throughput value that small .

Keyword :*Tunneling, FTP, 6in4, Teredo.*