ABSTRACT

The more rapid development of internet in the world, have an impact on IP allocation provided. IPv4 is used today not able to meet the growing needs addressing. As one step to resolve the matter, is developing IPv6. IPv6 implementation process, requiring changes in the communication infrastructure, both in the terminal, the application or on the network side. Booming IPv6 unpredictable occurrence. Therefore scenario requires the implementation of IPv6, especially for telecommunications carriers.

In this final task will be implemented and analysed the transition of IPv4 to IPng/IPv6 using Dual Stack transition mechanism. This mechanism is a mechanism that has been recommended by the government of Indonesia between as the IP transition. Use of this implementation on the application end-to-end between the serverand since the spleen using QoS parameters.

From the experiment that have been emplemented, this mechanism can and successfully applied as one of the IPv4 to IPv6 transition mechanisms. Need some configuration it, especially dual IPv4 and IPv6 protocol stack and also DNS6/4 that server as domain translator.

From the result showed a fairly good performance between the two clients (users of IPv4 and IPv6 users). However, due to the implementation of IPv6 is still in testing stage then for some cases, especially relating to premises IPv6 slightly below the transmission time when compared to IPv4.

Keywords: transition, dual stack, QOS