ABSTRACT

Today's internet is on migration process to IPv6 (Internet Protocol Version Six) network. It depends on capability of countries or intitutes that can bring theirselves IPv6 ready. IPv6 have bigger addressing range capability than the previous one, IPv4, that have smaller addressing range capability. This can make internet goes crowded and fullfilled, then need a new addressing system such as IPv6.

Data exchange and data sharing are today's most popular application on computer networks. FTP (File Transfer Protocol) is used widely by internet users for data exchange. Integration of native IPv6 networks and native IPv4 networks needs translation process.

This final task is done to analyze integration of file exchange service with FTP on IPv4 network infrastructure and IPv6 network infrastructure. Network performance such as delay of translation process will be analyzed for different infrastructures.

Final result of this final task is an integration between IPv4 network with IPv6 network that can be used for file exchange between those two different network.

Keywords: IPv4, IPv6, Transition, FTP, Translation Mechanism.