ABSTRACT

Server is an important part in the a network. This is because with the existence of server then the service in the network will be going well. All these increase in telecommunication network lead a growing number of server to serve the service. One of the servers which is important in Next Generation Network (NGN) technology is a server for Electronic Number mapping (ENUM). ENUM or electronic number mapping is mechanism in mapping a telephone number with format which had been recommended by ITU-T E.164 to a DNS Uniform Resource Identifier (URI) naming system which is used globally in the internet.

In this final assignment, it has been built an implementation of ENUM network using BIND and POWERDNS as the ENUM server. It's aimed to get the right software to be an ENUM server in the future.

The result from measuring that has been done proves that POWERDNS is more suitable to be implemented as an ENUM server compared to BIND. It can be seen from Post Dial Delay (PDD), Lookup time and the queries speed. POWERDNS's values of PDD, lookup time, and the queries speed are better and performing the standards from IETF, if it's compared to BIND.

Keyword : ENUM, BIND, POWERDNS