

ABSTRACT

NGN (Next Generation Network) is a global network of future IP-based that can integrate two different networks are packet-based networks and circuits that occur between the second interconnection network. Where the client on the network package that addresses identity URI (Uniform Resource Identifier) can communicate with the client on the network circuit in accordance with the numbering number E 164. The concept of network convergence can be done if there is agreement between the two types of networks, namely by using ENUM (Electronic Number Mapping). ENUM is a technology that can perform electronic mapping device number (in this case based on the format of phone numbers in ITU-T recommendation E.164) to the DNS naming system, the Uniform Resource Identifier (URI) is used globally in the Internet. ENUM server role on NGN services due to a very great influence on the dasarnya ENUM DNS server, which serves to map IP addresses into domain names that can digested by this user in humans. Thus the very need for ENUM server capable backup to replace the main server when there is interference.

In this Final Project Server authors build ENUM active-standby system with the Master and Slave scheme. ENUM server where the master is the main server at the time of the test and slave servers act as a backup server (back up) at the time of the main server experienced malfunction (down). In this Final Project also used a DNS server forwarder that serves to forward the request enum services if the primary server is broken.

Measurements obtained from the query master servers Enum delay is 0185 ms, Enum slave servers in the building is 0184 E 207 ms, the building is a 0282 E 206 ms, and the building is 0482 F 105 ms. Value queries per second for the master server is ENUM 4698.291 qps, Enum slave servers in the building is 207 E 4935,028 qps, the building is 206 E 3230,494 qps, and the building is 105 F 1992,462 qps. These data are in the limits specified by the IETF, then summarized the development of ENUM server works well.