

Abstract

Next Generation Network (NGN) requires all components of the device to follow the development of the Internet era. Convergence between traditional telephone networks to IP-based networks, by using the E.164 numbering according to international standards of the ITU-T. Differences in the network can be mapped by the Electronic Numbering Mapping (ENUM) server. In this research is to measure the performance of QoS data plan from the calling process that has been implemented by the ENUM server such as delay, jitter, and packetloss. As well as measurements on ENUM lookup database server form control plan which is in the process of Post Dial Delay (PDD). In this study focused on the Session Initiation Protocol (SIP) is used as a VoIP server with open source software that is Trixbox and softphone X-Lite and for implementing ENUM server using BIND. QoS performance parameter values in the form of delay, jitter, and packetloss on the testing process and the implementation of ENUM server for the dial, still according to the standards set by ITU-T and the duration of the ENUM lookup database server does not take a long time

Keyword : Softphone, VoIP, ENUM, E.164, NGN