

ABSTRACT

IP Multimedia Subsystem (IMS) is an architectural concept of a new technology that appears to complement the softswitch-based NGN technology. The emergence of new technology concept encourages companies and research institutes to implement it in the form of software (OpenIMS). OpenIMS if installed on a computer can become a server with different services. In addition, with OpenIMS allows providers to provide new services without changing the configuration of transport layer or below an existing access. Of new services including emergency services. The problem that is OpenIMS can provide emergency services.

In RFC 5031 that the INVITE on the emergency call using a Uniform Resource Name (urn). Because by using the urn, allowing to define globally a service but does not indicate a single location. In this final project will be implemented Location-to-Translation Services (LOST) server on the IMS Architecture for emergency services. LOST server here serves to map the urn and location information to the PSAP URI.

Further testing on the server via some type of urn with service users and information in different locations. The result is either the server is able to route to the PSAP URI urn according to the type and location services. Performance testing was obtained at the longest delay when processing server INVITE signal that is equal to 0.051912 seconds (without traffic). While the value of post-dial delay, which is still under ITU-T standard that is equal to 0.099811 seconds to traffic 3 call / s.

Keyword:

IMS, emergency services, URN, LoST server, delay processing, and post dial delay.