

## **ABSTRACT**

Current information technology is growing by leaps and bounds. Human needs of an increasingly diverse encourage the development of information technology. Human needs for information technology is not only limited to voice only, but also include data and video. NGN (Next Generation Network) is a global network of the future that integrate all application services-based application services, especially IP (Internet Protocol) or often referred to as Ip Based application. At this time the development of services - IP-based services has been widely applied, such as VoIP, e-mail, chat, IPTV, and others. However, for now many are still separate services with other services. The problems that arise and then how to integrate the server from each of these services to complement the goals of the NGN itself.

In the final project integrated IP-based application service that is mail server and voip server. Integration in question is a performance server for a service call center and SMS center. Integrating these two different services, is expected to help contact center jobs in the service of customer complaints.

Maximum obtained from the test calls can be handled by Trixbox server is 200 calls / second, it can be seen from the throughput on the condition of background traffic is 0.1 Mbps peak obtained. System's ability to serve the voice-mail service are as follows, to a large maximum voice-mail files that can be handled by the SMTP Zimbra server is affected by the SMTP Trixbox server is 252 messages in 1 minute for the large file 1.2 MB. System's ability to serve the SMS to e-mail is not affected by the system that we created, but is influenced by communications provider that we use to send SMS.

*Kata kunci : Call Center, SMS Center, Mail Server, VoIP Server*