ABSTRACT

In the era of rapid development of information technology, voice over internet protocol (VoIP) has become a tool that is worthed by every instancy including the local police office (POLDA) of West Java. VoIP is a technology that can pass packages of voices via internet protocol. Using VoIP, users communicate through terminals such as pc or phone.

There are three VoIP protocols are commonly used ; H.323, SIP and IAX. Protocol used on VoIP application by the local police office of West Java is SIP.

Session Internet Protocol (SIP) is a new technology which is developed by the Internet Engineering Task Force (IETF). This protocol can be trusted, because it can pass the proxy/firewall of many instances. Besides, the SIP has other advantages; there is many software that supports SIP, and it can be downloaded via internet for free. Also many hardwares are available on the market for a lower price.

The parameter result received are delay = 19.99692, jitter = 3,275729, packet loss = 0 and MOS = 4.25. From this result it can be assumed that the VoIP application based on SIP on local police office of West Java has a good performance and is eligible to be used.

Keyword : VoIP, SIP, IP, Asterisk