ABSTRACT

In the office world both in an educational institution or company in general, the need for an internal telephone in the building is a vital necessity to connect and obtain information between a room with another room, for it is necessary to have a PABX. Currently, IP PBX that replaces a prime choice of traditional PABX systems are not using an IP network. There are two options in the use of IP PBX, the first is a proprietary IP PBX or IP PBX second using opensource. The advantages of open source IP PBX is on the cost side and when the need to receive multiple calls simultaneously, or the so-called hunting system features the open source IP PBX configuration to be done on its own while hunting feature proprietary IP PBX system is a feature that already exists and ready for use.

Therefore in this thesis was designed and realized for a server-based IP PBX Asterisk interconnected internally and externally to be connected with hunting system originating from the PSTN in this case is an extension of another PBX IP is regarded as a simulation of the PSTN network directly derived from Telkom. In that system operators realized there is also a table that is ready to serve incoming calls originating from outside by first connected to the interactive voice response before it is served by the operator.

From the results of tests performed, the results obtained from the one-way calls with an average delay of 65.43 ms, with an average jitter 3.693 ms, packet loss with an average of 0.021%. MOS value is obtained from a call of 4.4 So it can be said to be included in the Very Sastisfied category.

Keyword : PABX, IP PBX, Asterisk, *hunting system* dan *interective voice response*