ABSTRACT

Some years ago, employing of VoIP for the medium of communication to change the telephone cable has to be a common needed in various areas on the world. VoIP is a technology of telecomunication which able to overlook communication service in the Network IP, so it can do telecommunication between users has to connect in the network IP. The advantages of VoIP is the efficiency againts the bandwith and the cost of maintenance.

In the development this Last Project, VoIP will be built on the Operation sistem Linux with the Asterisk and Raspbx which to integrited on the Raspberry Pi. The execution will start with to installed the operation sistem RasPBX to Mini Computer is a Raspberry Pi, and then to doing configuration RasPBX on the Raspberry Pi to router for giving Wireless signal as the transmisinon medium, to connected VoIP application mobile and PC on VoIP server pass through of Raspberry Pi, and the last is testing of the QoS performance when the calling.

The result from the experience has do showed of VoIP meet the QoS standar, with the mean of Delay *is 0.04486 ms, the mean of Throughput is 16.36 KBps, packet loss is 0.889% and Jitter is 1.102 ms.*

Keyword: Asterisk, VoIP Server, RasPBX, Raspberry Pi