ABSTRACT

Online class is learning method that supporting by facilities based on the development of information technology dan communication. Online class is more effective and efficient than conventional class. Lecturer and student in the online class do not have to look direct when doing learning process but explain the lecture in front of computer from distance place using intranet/internet network, computer, earphone, webcam.

In this final project, online class based on web and video conference using voip technology. Web of online class in this final project based on Apache seb server, PHP, and phpMyAdmin. Web as an interface for online class, registration system, database, and supporting tools. VoIP used to support the Online Class process with doing an audio and video conference in a long distance communication between client. IP PBX that used for VoIP server is asterisk. Online class Web Server and VoIP server build in same PC based on Linux operating system.

Testing result using WSOP for web of online class show perfect point, and testing result using Wireshark network analyzer software for Quality of Service (QoS) server VoIP show that codec G.711 μlaw make the best video call performance, with delay 107,94 ms, jitter 8,967 ms, packet loss 0% and throughout 0,2694 Mbps.

Keywords = VoIP, online class, web