ABSTRACT

Distance learning is an educational activity where students and teachers are in different places but can communicate with each other in real time via the Internet. One of the media for distance education is the Learning Management System (LMS) and virtual classrooms using video conferencing (vicon) applications. Currently, the Vicon application can be integrated directly into the LMS, by using the BigBlueButton video conferencing application which is integrated with Moodle LMS. Currently creating LMS and virtual classrooms or vicon applications is very easy when using Microsoft Azure cloud services where the LMS is installed by default on the 'Bitnami LMS Powered by Moodle LMS' Virtual Machine available on the Azure Marketplace. The purpose of this study is to explain the ease of making Moodle LMS which is integrated with the BigBlueButton video conference application using cloud technology and to analyze the QoS of the BigBlueButton video conference feature with the TIPHON standard. The method used in this study is direct measurement using the Wireshark application when the BigBlueButton application is in use, the internet connection used comes from Hotspot Tathering from the author's mobile device. Based on the QoS parameters, the Throughput value is 585.12 Kbps, delay is 5.016 ms, jitter is 2.096 x 10-5 ms, and packet loss is 2.51%.

***Keywords** : Cloud, Moodle, QoS, TIPHON, BigBlueButton*