

ABSTRACT

Mail server is used to organize the process of sending and receiving the message. There are a lot of *mail server* that can be used in internet network. Postfix mail server is a mail server program, which the postfix is an open source and can be only operated in linux or unix operation system. However, the mail server service depends on protocol mail performance that will be used. The protocols are POP3 (*Post Office Protocol*) protocol and IMAP protocol (*Internet Message Access Protocol*). The research aimed to analyze and compare the performance of POP3 mail protocol and IMAP protocol toward postfix *mail server*. The research applied experiment method. The experiment research aimed to measure the influence of an action that was intentionally given by the researcher to the two of mail protocols. In this case, the actions, which were intentionally given by the researcher to the two of mail protocols, were designed experiment cases to find out the impact of giving the experiment cases to the performance of the two of mail protocols. The researcher made two experiment cases when for each experiment case would be conducted 10 times. Based on the average of maximum total of achievement for the two of mail protocols, the POP3 protocol got a better value. It showed that the appropriate protocol to be used in postfix *mail server* was POP3 protocol. It was based on the second result of experiment case of each QoS (*Quality of Service*) parameter, namely delay, throughput and packet loss which there were on the average limit of achievement target that had been defined.

Keywords : POP3 Protocol, IMAP Protocol, Mail Server, Postfix, Linux, QoS (Quality of Service)

