

## ABSTRACT

*The development of network technologies that lead to IP networks and the trend of telecommunications services leads to quad-play services. These services are voice service, data, video, and mobility services in one package. The quality of service must be kept when the user moves to another network. Mobile IP is used to ensure connectivity of the user to access services. Mobile IP performance can be obtained from delay, jitter, packet loss and throughput from the user view.*

*PT Telkom is a provider that has the ability to market mobile IP services. Performance analysis is performed to determine the feasibility of the implementation of mobile IP services at PT Telkom with a case study in Bandung.*

*Based on the simulation obtained the number of simultaneous users is 8 with packet loss percentage <5%. The maximum speed of movement of the user in order to achieve the target quality of service (packet loss <5%) is  $\leq 10$  m / s.*

*Keywords: Quad-play, mobile IP, delay, jitter, throughput*