# *ABSTRACT*

*Along with the development of information needs, which is not only text and image information but also involve the multimedia aspects that exist. One of the intended information is streaming video. When accessing streaming video required bandwidth is considerable and leads to big cost. The solution of the problem is by implementing a Wireless Distribution System (WDS) with a WDS Repeater/Bridge Wireless mode on an access point (AP) device to develop wireless networks without having to use the cable as Access points, but rather utilizing wireless lines as backbone.*

*This final project is implementated and analyzed, the performance and analysis of Wireless Distribution System (WDS) perform in the video streaming service using the Raspberry Pi as a server and then distributed to the client through a local Wireless network with the mode Wireless Distribution System (WDS), so the client can access streaming video without internet. In this test, using parameters calculated in the final result is packet loss, delay, and troughput.*

*From the results of implementation and analysis can be seen the value of the Service Quality (Qos) parameter. It is known that the delay scenario 1 for streaming video at a distance of 15m client router 1 gets 0.1264s delay and at a distance of 15m access point constraints 2 client 2 gets a huge delay 4,662s as well as in scenario 2 the distance 30m access point 1 client 1 gets 0.548s and 30m obstacle access points 2 clients 2 get 4,662s, throughput in scenario 1 which gets a large value at a distance of 15m client router 1 gets 1.1 Mbps and 15m distance obsolete access points 2 clients 2 gets 0.78 Mbps gets better value in scenario 2 the distance of 30m client router 1 is 0.98 Mbps and 30m access point barrier 2 client 2 is 0.45 Mbps and Package Loss in Scenario 1 and 2 gets packet loss of 0%.*



***Keywords**: WDS, Raspberry pi, Access Point, Streaming Video, QoS*