

ABSTRACT

Now Internet network technology has become a major need by users who use it. Exchange of information data on several internet networks is proposed as an alternative to Internet Protocol (IP). In recent years, researchers have discovered the future network architecture, Named Data Networking (NDN). The NDN architecture is proposed to solve the current Internet Protocol (IP) communication problems. However, implementation of NDN require changes the existing network infrastructure. Therefore, a worthy approach is used using a Software Defined Network (SDN), where the control plane can optimize routing decisions.

The result of this study measures the performance of integration NDN-SDN, NDN, and SDN by observe the packet delivery from client with packet sizes of 25, 50, and 75 packet and different prefix names. Then compare the output generated from parameters such as throughput, round trip time (RTT), and CPU usage in scenario 1 with 4 Intermediate Node and scenario 2 with 6 Intermediate Node.

Based on the test result, it was found that the more packet sent will affect the quality of parameters such as throughput and RTT. Meanwhile, at CPU usage shows that when the state active, traffic will operate all the program it is running, but when at in active state traffic will not run the program.

Keywords : *Internet Protocol (IP), Named Data Networking (NDN).*

Software Defined Network (SDN), throughput, round trip time (RTT), CPU usage