

Abstract

Load Balancing is a technique to divide the load from one server to several other servers so that connectivity traffic runs more optimally, and avoids overloading of connection lines. Load Balancing has many methods used. This study will explain how load balancing works with the round-robin method when combined with the Distributed Hash Table (DHT) method. The aim of this project is to get the analysis results from the round-robin load balancing algorithm that is implemented into a Distributed Hash Table (DHT) that has been incorporated into a Software Define Network (SDN) using a network topology and compares it with the round-robin method and hash as a comparison method using 3 QoS parameters: throughput, jitter, and latency. In this study we using the POX Controller as an SDN. The results of the study show that the combined method has similar characteristics to the comparison method used with the tested parameters and not much different from the method that is a comparison with the combined results method.

Keywords: load balancing, round-robin, distributed hash table, Software Defined Network, QoS, controller POX.