

ABSTRACT

Hardware is an important part of the system in the software-defined network. The system used has more than one core device, which will be divided into load balancing and failover. On the network, it is possible to separate the control and data fields. Based on this, it provides scalability, programmability, and centralized control. Moreover, by using this device to achieve ubiquitous connectivity, the existing concept of a software-defined network does not offer this advantage without cost. By utilizing a centralized controller and when one controller fails, service disruptions can occur. This can happen due to the failure of the communication network link and also this kind of situation is unavoidable. This study proposes a failover mechanism on the controller. The mechanism for handling link failures that occur will provide the lowest delay time efficiency.

Keywords: Software Defined Network, Failover, Controller, Down Time