Abstract

TCP which runs at the transport layer is generally used for sending data packets, but if TCP experiences congestion the resulting throughput is not optimal. In the data center, performance is needed to maintain the quality of the services provided. In this study, it discusses the performance of jellyfish topology in the data center using Multipath TCP (MPTCP). MPTCP can increase throughput and provide better performance. The parameters for comparison are the number of switches and the throughput. And the MPTCP algorithm used is LIA, OLIA, BALIA, and wVegas. The results obtained in this study show that wVegas has a good throughput value in switch scalability and host scalability. Because wVegas uses delay as a congestion signal, it is different from LIA, OLIA, and BALIA which use packet loss as a congestion signal.

Keywords: data center, jellyfish, multipath tcp, linked increase alhorithm, opportunistic linked increases algorithm, balanced linked adaptation, weighted vega