

ABSTRACT

In this thesis we present and evaluate the performance of FRRouting and BIRD Internet Routing Daemon, open-source platforms that carry routing function. The performance parameters that are being evaluated in this study include convergence time, QoS (e.g., throughput, delay, jitter, and packet loss), and routing overhead. The simulation was performed in GNS3 network emulator. From the result of the simulation, BIRD outperform FRR in terms of packet loss. For delay and jitter parameter, both router has a very low value. In this experiment FRR could achieve 0.988 second in convergence time, while BIRD can perform 7.1 seconds. There are several topology used in the simulation to find relation between convergence time and size of a network. From the simulation result, convergence time is increasing as there are more node in a topology. The study also gives suggestion about how to improve convergence time by adjusting OSPF parameters.

Keywords: Open-Source Routing Platform, FRRouting, BIRD, Network Performance