

ABSTRAC

Commonly used data communication system that implement TCP as the main protocol, depends on several factors to measured the quality of service, one of the most commonly methode to track the network quality of service is the probability of the packet-drop, which is influenced to caused the congestion process.

This final project, we discuss how the data communication works with the algorithm called *slow-start*, as we know that the *slow-start* algorithm commonly used to reduce the effect of congestion that can occurs in the data communication network . The congestion itself can occured if the buffer of the router or gateway cannot served several amount of data that come into, because it limitable size of buffer data queue at one service. The effect itself can cause the amount of data that cannot served by the router or gateway "force" to be dropped to reduce the queuing in the router's buffer. The slow-start algorithm implementation we can depend to reduce the congestion effect by reduce the forced dropped-packet into the buffer, if the incoming packet larger than the congestion window then the slow-start tell the sender to reduce the rate of data transmission, but as we know the slow-start process not that slow at all, the process itself must depend on the delay time that they used to transmiting and receive the data.

As the final word that i can say, that the implementation of slow-start algorithm can reduce the congestion effect so the TCP and the network links can be more efficient than before.