ABSTRACT

DTN is able to provide data communication in a network with intermittent connectivity, long delay and high error rate communications and emerges as a solution to challenging networks which can't be handled by TCP/IP. SCORP is a routing protocol which works by taking account of social interaction and interest on each node before replicating the message to the other nodes. SCORP is suitable to be applied in MANET.

In this final project there is a performance analysis of SCORP by using ONE Simulator with Asia-Afrika and Braga as the simulation area. The analyzed parameters are delivery probability, overhead ratio, average latency, and average energy consumption by varying the Ukuran Buffer, number of nodes, and network load and a performance testing of SCORP that use source-driven mechanism to send messages. The performance will be compared with Epidemic and Spray and Wait. From the results, SCORP has a better performance than Epidemic and Spray and Wait in delivery probability, overhead ratio, average latency, and average energy consumption. But, the performance of SCORP is not good enough than Epidemic and Spray and Wait, if it is used as a source-driven routing protocol.

Keywords : Delay Tolerant Network, Routing Protocol, Social-aware protocol, Content-based protocol, Mobile Ad Hoc Network