

Study on the Efficient Routing Algorithms in Delay-Tolerant Networks

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Abstract : In Delay Tolerant Networks (DTN), there may not exist an end-to-end path between source and destination at the time of message transmission. Employing 'Store Carry and Forward' delivery mechanism for message transmission in such networks usually incurs long message delays. In this paper, we present the modified Binary Spray and Wait (BSW) routing protocol that enhances the performance of the original one. Our proposed algorithm adjusts the number of forward messages depending on the number of neighbor nodes. By using beacon messages periodically, the number of neighbor nodes can be managed. The simulation using ONE simulator results shows that our modified version gives higher delivery ratio and less latency as compared to BSW.

Keywords : delay tolerant networks, store carry and forward, one simulator, binary spray and wait

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