On Demand N-Path Routing in Wireless Networks to Improve Throughput with Congestion Control

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Abstract

Hybrid Wireless Network is the addition of Ad Hoc Network environment with Wireless network infrastructure. This technology is developed to provide better network experience with high performance and quality. Hybrid wireless network provides better capacity and scalability. Implementing such a network is a challenging task. It needs better routing algorithm to provide flawless secured data transmission. This paper proposes, On Demand N-Path Routing, an optimized routing algorithm which will support Hybrid Wireless Network. The algorithm performs route calculation, node selection, end-to-end encryption while transmitting data packets. The proposed algorithm is tested in the simulated environment which gives better results with reliability, scalability and security.

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Index Terms

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