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.

References

Communications Letters, VOL. 1, NO. 6, DECEMBER 2012.


12. Cheng Wang, Student Member, IEEE, Xiang-Yang Li, Senior Member, IEEE, Changjun Jiang, Member, IEEE, Shaojie Tang, Student Member, IEEE, and Yunhao Liu, Senior Member, IEEE, “Multicast Throughput for Hybrid Wireless Networks under Gaussian Channel Model”, IEEE Transactions On Mobile Computing, Vol. 10, No. 6, June 2011.


15. Amlan Ganguly, Member, IEEE, Kevin Chang, Student Member, IEEE, Sujay Deb, Student Member, IEEE, Partha Pratim Pande, Member, IEEE, Benjamin Belzer, Member, IEEE, and Christof Teuscher, Member, IEEE, “Scalable Hybrid Wireless Network-on-Chip Architectures for Multicore Systems”, IEEE TRANSACTIONS ON COMPUTERS, VOL. 60, NO.
10, OCTOBER 2011.


Index Terms

Computer Science  Networks

Keywords

Wireless Networking, Multipath Routing, Node Selection, Path Calculation, Routing Strategy