Available Online at www.ijcsmc.com

International Journal of Computer Science and Mobile Computing

A Monthly Journal of Computer Science and Information Technology

ISSN 2320–088X

IJCSMC, Vol. 2, Issue. 12, December 2013, pg.220 – 223

RESEARCH ARTICLE

Enhancement of Multi-Radio Multi-Channel with TCP Tuning For Mesh Networks

J.Abirami[1], Dr.A.Kathirvel[2], T.Ragul Zenith[3]

[1]Dept of IT, Vivekanandha College of Engineering for Women, Tamilnadu, India

[2]Professor & Head / IT, Vivekanandha College of Engineering for Women, Tamilnadu, India

[3]Asst.Prof / IT, Vivekanandha College of Engineering for Women, Tamilnadu, India

[1] abiramimtech14@gmail.com; [2] kathirvel@vcew.ac.in; [3] tragulzenith@gmail.com

Abstract - Wireless mesh network is a first step towards providing cost effective and dynamic high bandwidth networks over a specific coverage area. Multi-hop bandwidth degradation is major problem. Multi-Radio Multi-Channel (MRMC) approach is used to solve bandwidth contention and radio interference. In existing researchers multi TCP connections using MRMC approach cannot resolve the multi-hop TCP throughput degradation problem it caused increase in TCP Round Trip Time (RTT) when the number of hops increases. In this paper use multiple parallel TCP connections the wireless bandwidth can be fully utilized with a sufficient number of parallel streams. The use of multiple parallel TCP connections between the transmitter and receiver that are multiple hops away can better utilize the wireless bandwidth and boost the aggregated throughput. Parallel connections between any two nodes could be a potential solution for transmitting a large amount of data at high speed from one client to one server through the wireless mesh network.

Keywords: Wireless Mesh Network, MRMC, IEEE 802.11n, Multi-hop Throughput and Bandwidth

Full Text: http://www.ijcsmc.com/docs/papers/December2013/V2I12201360.pdf