

Reliable and Congestion Control Protocols for Wireless Sensor Networks

Kirti Kharb*, Bhisham Sharma, Dr. Trilok C. Aseri

Department of Computer Science Engineering, PEC University of Technology, Chandigarh, India

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Abstract

The objective of this paper is to analyze review and different congestion control protocols that are employed at the transport layer and some of them working at the medium access control layer in wireless sensor networks. Firstly, a brief introduction is given about wireless sensor networks and how congestion occurs in such networks. Secondly, the concept of congestion is discussed. Thirdly, the reason of occurrence of congestion in wireless sensor networks is analyzed. After that, congestion control and why it is needed in the wireless sensor networks is discussed. Then, a brief review of different congestion control and reliable data transport mechanisms are discussed. Finally, a comparative analysis of different protocols is made depending on their performance on various parameters such as - traffic direction, energy conservation characteristic, efficiency etc. and the paper is concluded.

Keywords: wireless sensor networks, reliability, congestion avoidance, transport layer protocols

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* Corresponding author. E-mail address: kharb.kirti46@gmail.com

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