Abstract

The reliability of data transfer is vital for commercial and enterprise applications of Wireless Sensor Networks (WSN). Likewise, mission-oriented and critical military applications of these
networks demand dependable and timely data transport. This reliability is required for in-bound 
data, from Internet node to sensor nodes which comprises of code updates, as well as for 
out-bound data from sensor nodes to base station or gateway which comprises of important 
data reported by sensor nodes. Although TCP is a time-tested transport layer protocol of 
Internet that ensures reliability, flow control and congestion control, being a heavy protocol, it is 
considered unsuitable for resource constrained sensor networks. As a result new transport layer 
protocols have been developed for these networks. Nonetheless efforts are directed towards 
making TCP suitable for sensor networks. This paper presents a survey of transport layer 
protocols and approaches to achieve reliable data communication in general 
wired-cum-wireless networks and particularly in WSN

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A Survey of Transport Layer Protocols for Wireless Sensor Networks


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