

LEVEL-CLUSTERED TIME SYNCHRONIZATION PROTOCOL (LCTPSN) FOR WIRELESS SENSOR NETWORKS

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ABSTRACT

Wireless Sensor Networks (WSNs) have emerged as an important research area in recent years. WSN have wide variety of promising potential applications, such as monitoring of health & wellbeing of humans, keeping a close eye on our environment, measurement and control of industrial machines and also home appliances. In most of these applications, efficiency and reliable working is desired. Nodes in the WSNs have limited energy source, Low bandwidth of communication and low storage for real, time applications. These constraints necessitate the need of mechanism for increase in energy efficiency. It may consider a synchronization scheme which is very much important for improving the performance of WSN Network.

In this paper we propose an efficient protocol for Time synchronization in Wireless Sensor Network which addresses the critical parameters, like energy consumption, jitter, and dropping ratio. An attempt has been made to propose an energy efficient time synchronization protocol for wireless sensor networks.

KEYWORDS: Time Synchronization, Wireless Sensor Networks, Level Clustering