Abstract

Recently, Wireless Sensor Networks (WSN) became one of the most important areas of research in the world. The Quality of Services (QoS) is the cornerstone of WSN efficiency due to providing the network with all requirements for efficient sending and receiving of data. Because of WSN different infrastructures, there are different QoS parameters required for this environment. In this paper, a general framework to guarantee the WSN QoS is proposed. The proposed framework aims to produce a standard solution for WSN QoS problems. How to solve the problems of traditional protocols, taking into account the compatibility, which may result from a collection of individual solutions in one general framework, is the paper target. Also, the proposed framework adds new strategies like congestion prediction and network management technologies to outperform the previous solutions. Finally, our framework is simulated using network simulation package (NS2) and compared with individual solutions to make sure that it is more robust and efficient, which leads us to standardization.

References


Index Terms

Computer Science Wireless

Keywords

Wire Sensor Networks Network Management QoS Wireless Communication Network Simulation
A Novel Framework for Guaranteeing Quality of Service in Wireless Sensor Networks: Design, Simulation