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Review on Security in Bluetooth Low Energy Mesh Network in Correlation with Wireless Mesh Network Security

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Abstract: In current high-tech era, Wireless Mesh Networks (WMN) are a necessity since they offer inexpensive access to broadband services. The technologists are also conducting research to improve the security and dependability of WMN. Due to its widespread availability in devices and low power consumption, Bluetooth Low Energy (BLE) is thus gaining significant importance among academics in the field of wireless ad hoc networking. BLE began with version 4.0 and recently released version 5 with mesh support capabilities. BLE, a low power, mesh enabled technology, is currently one of the hottest study issues for academics. Many scientists are developing BLE mesh technology to make it smarter and more effective. In addition to other efficiency factors, mesh network security is a major problem, as it is for all communication networks. In light of the aforementioned, this study offers a thorough analysis of a number of works pertaining to the security in WMN and BLE mesh networks as well as the research on the BLE security protocols. Additionally, this study has covered the advantages and disadvantages of the already proposed mesh security techniques after conducting extensive research on relevant studies. Additionally, this investigation has evolved some remedies as to how to minimize the BLE mesh network security flaws after extracting the pertinent information from the current research on WMN and BLE mesh security.

Keywords: Bluetooth Low Energy, Security, Wireless.

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