Abstract

The main objective of the paper is to present different types of Security attacks, their effects and defense mechanisms in Wireless Sensor Network which is vulnerable to security attacks and threats due to its characteristics and limitations. Security attacks are identified and classified from different perspectives e.g. based on network layer in which the attack occurs, specifically network layer wise security features and the network security basics, based on attacker location, based on transmission of information, based on different protocol stack layers etc. and the different security measures that can be applied to defend against different attacks. This survey paper focuses on various aspects of different security attacks, their effects and defense mechanisms corresponding to each attack etc. So this paper helps researchers to have a very strong idea about the security issues, existing attacks and they can also use the ideas and concepts to build more secure wireless sensor network system in future. A direction can be obtained to develop new security mechanisms to protect new possible attacks along with existing ones.
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Index Terms

Computer Science Wireless

Keywords
Wireless Sensors Network, security, structured, unstructured, CIA, active attack, passive attack, protocol stack.