An Energy Efficient and Secure Cooperative Bait Detection and Defense Approach in MANET's

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Abstract

Because of the confinements of wired system in crisis circumstances like natural calamities, scope for wireless technology is expanded. Mobile Adhoc Networks technology provides more room for research. Due to the MANET characteristics, such as dynamic topology and infrastructure less, it can be stationed whenever and wherever required. Hence it can be used in many applications. In MANET, to establish the communication among the nodes, nodes should coadjuvant to each other. Nodes may disrupt complete routing process in the presence of malignant nodes and this leads to serious security threat. In this context thwarting or detecting malignant nodes launching grayhole or collaborative blackhole attack is a challenge. This paper attempts to solve this issue by designing energy efficient and secured dynamic source routing mechanism, which is also cited as cooperative bait detection and defense scheme (CBDDS), which integrates the advantages of proactive and reactive defense architectures. Reverse tracing technique is used to achieve the stated goal. Design is simulated in the presence of malignant node attacks, the CBDDS outflanks as far as packet delivery ratio, end to end delay, throughput and routing overhead which are picked as execution measurements over the DSR
and 2ACK directing convention picked as benchmarks.

References


Index Terms

Computer Science Wireless
Keywords