RESEARCH ARTICLE

Special Scheme of Hidden Data Procession for Several Applications in Wireless Sensor Networks

Janarish Saju C[1], Sharon Nisha M[2]

[1]PG Scholar, Department of CSE, Francis Xavier Engineering College, Tirunelveli, India
[2]Associate Professor, Department of CSE, Francis Xavier Engineering College, Tirunelveli, India

[1] janarishsaju@gmail.com

Abstract-- In wireless sensor networks hidden data procession is the concept of collecting, summarizing and combining sensor node's data in order to reduce the amount of data transmission in the networks. In previous studies we have found that homomorphic encryption algorithm have been applied to hide data during aggregation from sensor nodes. However the principle involved in this algorithm does not satisfy several applications in sensor environment, and second compromising in case of sensor node attack cannot be prevented and then finally the number of messages aggregated could not be detected and whether it may be a duplicate copy, therefore a special scheme "Hidden Data Procession" has been introduced which is an extended form of CRT(Chinese Redundancy Theorem) algorithm such that the security schemes are applied using "Key Distribution" technique, since it has three methodology to satisfy the above mentioned problem. Initially it was designed mainly for various application environment and second it prevents compromising node attack and finally a special method of counting capability is applied here, to prevent unauthorized data sensed, Here all the functions are implemented in the form of database as a service model and the queries are aggregated in the form of encrypted manner separately, which proves security in hidden data procession.

Keywords—Hidden data procession, Chinese Redundancy Theorem (CRT), key distribution techniques and wireless sensor networks

Full Text: http://www.ijcsmc.com/docs/papers/March2014/V3I3201462.pdf