Energy and Security Enhancement in Wireless Sensor Networks Using Sleep Awake Concept and AES

Praghash.K

PG Scholar, M.E Communication Systems, Francis Xavier Engineering College, Tirunelveli

prakashcospra@gmail.com

Abstract - Unattended Wireless Sensor Networks (UWSNs) are defined by fixed or irregular intervals between sink visits and long periods of disconnected operations. Unattended Wireless Sensor Networks are more capable of providing computation, communication and power capabilities than peer to peer networks and ad hoc networks. UWSNs are mostly used for environment monitoring applications. An UWSN have thousands of sensors. Until their energy is depleted, these sensor nodes provide services throughout their whole lifetime. The existing WSN trust management schemes are not applicable to UWSNs when there is an absence of an online trusted third party implies that. To provide efficient and robust trust data storage and trust generation this method proposes a trust management scheme for UWSNs. To identify storage nodes and to significantly decrease storage cost, this method employs a geographic hash table for trust data storage. For mitigating trust fluctuations caused by environmental factors this method uses subjective logic based consensus techniques. It exploits a set of trust similarity functions to sustain trust pollution attacks and to detect trust outliers.

Keyword Terms: Unattended wireless sensor network (UWSN), distributed trust management, subjective logic