SECURED POWER AWARE AND ENERGY EFFICIENT ROUTING PROTOCOL (SPAEERP) FOR WIRELESS SENSOR NETWORKS

R. PREMA[1] & R. RANGARAJAN[2]

[1]Assistant Professor, Department of Electronics, Karpagam University, Coimbatore, India

[2]Principal, Indus College of Engineering, Indus Valley, Alandurai, Coimbatore, India

ABSTRACT

Several wireless sensor network applications have to to decide the inherent discrepancy between energy efficient communication, power aware routing and the requirement to attain preferred quality of service (QoS) such as packet delivery ratio, delay and to reduce the power and energy consumption of wireless sensor nodes. In addition to that the protocols which are developed aims in providing better QoS with compromising security aspect. For addressing this challenge, we propose the Secured Power Aware and Energy Efficient Routing Protocol (SPAEERP), which attains application-specified communication delays at low energy cost by dynamically adapting transmission power and routing decisions along with incorporating a novel cryptosystem. Through extensive simulation in NS2 the results prove that the proposed SPAEERP attains better QoS and reduced power and energy consumption. Cryptool is used to test the novel proposed cryptosystem.

KEYWORDS: Sensor Networks, Secured Power Aware Routing, Energy Efficient Routing, Novel Cryptosystem