

KEY MANAGEMENT FRAMEWORK FOR WIRELESS NETWORK IN MULTIPLE GROUPS: SCOPE AND REQUIREMENTS

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ABSTRACT

Security is one of the important challenges in the field of Wireless Sensor Network (WSN). But nowadays, majority of the security protocols involve massive iterations and complex steps of encryptions thereby giving up to degrade the quality of service. Many WSN applications are based on secure group communication. In this paper, here, we have proposed a method for secure group key management framework with simultaneous multiple groups. The scheme uses a key based on managing the groups and we show that membership change events can be handled with reduced memory and communication cost. It also offer the scope and requirements to the messages communicated within and among the groups.

KEYWORDS: Group Key, Key Management, Sensing Node, Secure Group Communication, Key Tree