Abstract

Wireless Sensor Networks (WSN) is becoming the heart of many applications. Data integrity and security is a major issue as the wireless sensor nodes are exposed to harsh and hostile environment. This paper highlights the merits and demerits of different key management schemes under the broader classification of Public Key Infrastructure (PKI), Identity Based Encryption (IBE) and Certificateless Signcryption. These schemes will provide authentication and thereby secure the communication between the nodes considering the constraint environment of the wireless sensor network. Selection of these key management schemes depends upon the application specifications, functionality and computational complexity.

References

2. A. Saxena and Z. Saquib, “PKC based approach for securing SCADA communications,”


Index Terms

Computer Science

Information Sciences

Keywords

WSN, key management schemes, PKI, IBE, Certificateless Signcryption, security, data integrity