Abstract

The distributed systems like Body Sensor Networks (BSNs) where biosensor nodes are distributed in different positions to collect health data from the human body and deliver the information to a remote medical center. As per the medical data regulations, security of BSNs is very important. The operational resources are very restricted of the biosensor nodes which are located in BSNs and traditional security technologies are not directly applicable to BSNs. Time synchronization and low-energy communication are two challenging problems for BSNs because of the characteristics of biosensors. A fuzzy commitment technology with weak time synchronization mechanism for keys negotiation is developed, with a multihop route key
management scheme proposed for efficient energy consumption management, which includes an energy-based multihop-route-choice method. The Security analysis and performance evaluation is provided to validate the proposed scheme.

References

- W. D. Yu and M. A. Chekhanovskiy, "An Electronic Health Record Content

Index Terms

Computer Science Networks

Keywords

Body Sensor Network E-health Fuzzy Commitment Security