Abstract

Designing an accurate and efficient trust model in WSN is nowadays a research challenge. Trust in wireless sensor networks is an important issue and it solves the problem of access control, privacy, secure routing scheme and reliable communication. The notion of trust can be defined as an aggregation of consensus given a set of past interactions. Aggregating data is a way of compressing the transmitted packet, in a sense that the packet is comprised of only necessary information. This paper presents total Trust calculation in WSN nodes. We calculate the total trust by direct trust using probabilistic approach and indirect trust using Dempster-Shafer theory (combination of evidence). Here we also find out aggregation value of a node using Poisson distribution and also compare between PDR value and average cumulative Poisson distribution. Results of various simulation experiments show that the proposed system can be highly effective for aggregation value of a node than to aggregate of node using coding by ordering technique.

References

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Index Terms

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