Optimized Solution to Geographic Routing Protocol for Wireless Sensor Networks

Abstract

Geographic routing is mostly used in wireless sensor networks. In this paper, we use geographic routing algorithm in which we can use different levels of mobility by changing its factors depending on the network in which it is running. Routing decisions are dependent on directions and geographical positions of the nodes. One of the most effective geographic routing protocol is GPSR (Greedy perimeter stateless Routing). There are still some problems for this type of protocol like large routing protocol overhead and less reliability for long link. We propose a novel geographic routing protocol, Modified RGRP (Reactive Geographic Routing Protocol), which consists of reactive routing mechanism and geographic routing. Basically
Modified reactive routing mechanism is used to reduce the packets for routing discovery and end-to-end delay. Furthermore, geographic routing is used to find the optimal path between different numbers of nodes. Finally, we make experiments and comparison between modified RGRP and GPSR and simulation results shows the performance of our protocol.

References


Index Terms

Computer Science

Emerging Trends in Technology
Keywords
Challenges; Layers; Next Generation Network; Public Switched Telephone Network; Quality Of Service; Voip