Abstract

Cooperation is always required in every field of communication nowadays because neither a single layer, nor a single protocol is able to perform well in a network. In this work, cooperation has been performed using Medium Access Layer (MAC) using the concept of Rely Node. Although it has been claimed previously that cooperative scheme always promises a higher throughput and lower delay performances still here, a medium access control scheme known as C-MAC (Customize-Medium Access Control) has been proposed, where the neighbours, i.e. the relay node is selected not only assuming higher data rate, but also based on its reliability factor, power constraints, throughput, packet forwarding ratio, delay, which leads to motivate for better decision to deciding whom to co-operate with. The overall system has become reliable with an increased lifetime of the network.

References

1. Xiaoyan Wang, Student Member, IEEE, Jie Li, Senior Member, IEEE, and Feilong Tang,
“Network Coding Aware Cooperative MAC Protocol for Wireless Ad Hoc Networks” IEEE transactions on parallel and distributed systems, vol. 25, no. 1, JANUARY 2014


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