Abstract

The Selfish Aware Reactive Queue Scheduler Mechanism (SARQSM) requires a high degree of interaction between the packet differentiator, cache manager and the scheduler queue which forms the integral component of all mobile nodes participating in an ad hoc environment. This reactive queue scheduling scheme performs better when deployed in a scenario where non-co-operating i.e. selfish nodes are present as the intermediate routers of information in the network. However when SARQSM is implemented in the MANET environment, it provides a reactive and lightweight solution with respect to memory and battery life. To the best our knowledge, a mechanism for packet scheduling based on context like SARQSM is not available in the existing literature. The performance of SARQSM is studied using ns-2 simulator by varying the number of selfish nodes and mobile nodes with respect to the evaluation parameters namely Packet Delivery Ratio, Control Overhead, Total Overhead, Throughput and Packet Latency.

References

- Charles E. Perkins, Elizabeth M. Royer, and Samir Das. Ad Hoc On Demand Distance
Selfish Aware Context based Reactive Queue Scheduling Mechanism for MANETs

Vector (AODV) Routing. IETF Internet draft, Mobile Ad-hoc Network Working Group, IETF, January 2002
- A. C’ardenas, S. Radosavac, and J. S. Baras. Detection and prevention of MAC

Index Terms

Computer Science Mobile Networks

Keywords

Selfish Behavior SARQSM Context awareness Queue Scheduler