Abstract

Mobile ad-hoc networks (MANETs) are the wireless ad-hoc networks which enclose sovereign group of wireless mobile nodes. The communication is relayed via routes which are discovered using various routing protocols. Diverse routing protocols have been proposed so far in MANETs. Likewise, swarm intelligence (SI) based ant colony optimization (ACO) technique have various routing protocols which can also solve the routing problems in MANETs. ACO uses the chemical substance called Pheromone whose value is stored in pheromone table to find shortest path between source and destination. However our exigent task is to select optimal routing protocol for changeable network scenarios. This paper stated the functioning of existing ACO based ad-hoc routing protocols as well as ad-hoc routing protocols for MANETs and the comparison tables with summery of every protocol is shown. Moreover this review will help researchers in having glimpse of the existing protocols and thus can select optimal routing protocol which responds quickly on change of network topology.

References

Ant Colony based Mobile Ad Hoc Networks Routing Protocols: A Review

- M. Joa-Ng & I. -T. Lu, (1999) "A peer-to-peer zone-based two-level link state routing for mobile ad hoc networks", IEEE Journal on Selected Areas in Communications,
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