Abstract

A mobile adhoc network (MANET) is a collection of moving nodes in which nodes communicate without the use of any fixed infrastructure or any centralized domain. In such case a mobile
host can behave both as a host and a router for forwarding data packets to other mobile nodes in the network. As there is no fixed infrastructure therefore MANETs are considered to be vulnerable. Large overheads are required to maintain the routes regularly. Reactive protocols send control packets only during the communication. Dynamic Mobile Ad hoc Network On demand (DYMO) routing is one of reactive protocol which is proposed for the use by moving nodes in mobile ad hoc networks. It can easily adapt to the changing topology of network and can find routes between end nodes. This paper proposes the enhancement to the DYMO routing with the help of ant colony optimization (ACO). The enhanced version of the protocol is compared with the other protocols of its category on the basis of various performance parameters. The new protocol performs better than other protocols of their category.

References

bio-inspired algorithm for MANETs. In Telecommunications (ICT), IEEE 17th International Conference on (pp. 748-754). IEEE.

Index Terms

Computer Science

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Keywords

Manet  Tora  Aodv  Dymo  A-dymo  Aco