Abstract

MANETs do not have any fixed infrastructure and consist of wireless mobile nodes that perform various data communication tasks. Mobile ad hoc networks (MANETs) are collection of distributed nodes which communicate using multi-hop wireless links with frequent node mobility. The frequent mobility of nodes leads network partition and futile communication. So, there need an interconnection technique that should guarantee network connectivity, efficient routing and maintain network performance in MANET. Clustering has become an important approach to manage MANETs. This paper proposed Weighted Cluster Based Distributed Spanning Tree (WCBDST) routing technique to form better MANETs interconnections. WCBDST is an interconnection technique in which nodes of MANETs are made to form a forest of spanning tree with root node as cluster head in a distributed fashion which improved routing, network connectivity and maintains network performances.
Weighted Cluster based Distributed Spanning Tree Routing Protocol for Mobile Ad-hoc Networks


Index Terms

Computer Science Wireless

Keywords

MANET WCBDST DST Cluster Head Mobile Node NS2