

Abstract

As mobile adhoc networks operate with nodes carrying small amount of energy, reducing energy consumption is a major issue in adhoc networks. The paper discusses a protocol along with its implementation which incorporates Artificial intelligence search techniques, namely A* search and Dijkstra's algorithm to reduce the distance traversed by both the data and the control information. The transmission path is determined by the means of A* search, which gives the shortest path possible. This greatly reduces the distance traversed. This paper also focuses on the performance of this protocol compared with swarm intelligence which is another artificial intelligence protocol implemented by MANET (mobile adhoc network). A collection of proposed transmission protocols' characteristics has been presented in this paper. An extensive empirical study has been carried out to validate the protocol's performance.