

CONTROL OVERHEAD ENERGY EFFICIENT CLUSTER BASED ROUTING ALGORITHM IN MANET

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ABSTRACT

Clustering in MANET is a key technique for extending the lifetime of a network by reducing energy consumption. This also increase network's capacity, reduces the routing overhead and make it more scalable when nodes are in large number and highly mobile. In a cluster, clusterhead store and manage routing information related to its cluster member. Because of frequently changes in clusterheads leads to loss of routing information stored that affect the protocol and makes cluster structure unstable. In MANET nodes have limited battery resources so it is necessary that protocol must minimize the energy cost of a node at the time of cluster formation. Here we propose a new clustering algorithm name "control overhead & energy efficient clustering" algorithm. This algorithm focuses on cluster formation & its maintenance. It keep cluster head alive by choosing another clusterhead before it dead by predefined threshold value of energy. When two cluster head across each present cluster head will drop its position only when its energy value cross the threshold value that we have defined earlier. By this cluster structure can be more stable to prevent loss of routing information which gives better performance of the network.

KEYWORDS: MANET, Clustering, CBRP, Cluster Head, Node Energy