A Mobile Ad-hoc NETwork (MANET) is a collection of wireless mobile nodes forming a self-configuring network without using any established infrastructure. The nodes are battery operated and therefore energy is a scarce resource in MANET. Many routing algorithms are proposed in literature and evaluated under different scenarios. The Performance of MANETs not only depends upon the routing mechanism but also on mobility model chosen. Mobility model is used to represent the mobility of individual node and it plays a crucial role when evaluating the performance of routing protocols. The energy being limited is crucial for MANET operations. Although both mobility and energy issues have been addressed so many times but mobility based energy consumption studies are not performed that much. The aim of this research work is to study the impact of mobility model on the energy consumption in MANET routing protocols. The energy consumption under different mobility models is evaluated through simulation using NS2. The well known AODV protocol is taken as the candidate protocol for performing experiments under different scenarios.
References


Index Terms

Computer Science Networks
Keywords

Mobile Ad hoc Networks, Mobility Models, AODV, RWP, RPGM, MH, GM