Abstract

A mobile ad hoc network is a collection of autonomous mobile nodes that communicate with each other over wireless links. Such networks does play important role in civilian and military settings, being useful for providing communication support where no fixed infrastructure exists or the deployment of a fixed infrastructure is possible. It is a crucial part in the performance evaluation of MANET to select suitable mobility model and routing protocols. Therefore, a number of routing protocols as well as mobility models have been proposed for ad hoc wireless networks based on different scenarios. In this paper, we study and compare the performance of the two reactive routing protocols AODV and DSR with reference to varying Network Size. For experimental purposes, we have considered increasing network size from 100 to 150 nodes and illustrate the performance of the routing protocol across Packet Delivery Ratio parameter. Our simulation result shows that both AODV & DSR is performing equally good until the network
size cross a certain limit.

Reference

- Charles E. Perkins, Elizabeth M. Royer, “Ad hoc On Demand Distance Vector Routing Protocol”
- Stuart Kurkowski, Tracy Camp, Michael Colagrosso, “MANET Simulation Studies: The Incredibles”, Mobile Computing and Communications Review, Volume 1, Number 2, Page No.01
- Petteri Kuosmanen, “Classification of Ad Hoc Routing Protocols”.
- Neeti Soni, “Exploiting the need of Comparative study of routing protocols and Misbehaving node in wireless network”, Published in International Journal of Advanced Engineering & Application, June 2010 Issue
Performance Evaluation of AODV and DSR with Reference to Network Size

  http://www.w3.antd.nist.gov/~subbarao/MANET/manet.html
- Rainer Baumann, AODV, Presentation at ETH Zürich, April 2002
  http://w3.antd.nist.gov/pubs99.shtml
- Trace graph website http://www.geocities.com/tracegraph

Index Terms

Computer Science

Wireless

Key words

AODV

DSR

RANDOM WAYPOINT

PACKET

DELIVERY

RATIO

OVERHEAD