A mobile adhoc network is a collection of wireless mobile nodes dynamically forming a network topology without the use of existing network infrastructure or centralised administration. Routing is a significant issue and challenge in MANET. Routing is a task of directing data packets from a source node to a destination node. Many routing protocols has been proposed like DSDV, OLSR, AODV, DSR, ZRP, and TORA so far to improve the routing performance and reliability in MANET. This paper presents a comparative performance analysis of Proactive, Reactive, and Hybrid protocol based on performance metrics like Packet Delivery Fraction (PDF), average end-to-end delay, normalised routing load and throughput by varying network size.

References

- C. Perkins, E. Royer, S. Das and K. Marina, "Performance comparison of two
on-demand routing protocols for ad hoc networks; in IEEE Personal
- Charles E. Perkins, Elizabeth M. Royer, Samir R. Das, Performance comparison
of two on-demand Routing Protocols for Ad-hoc Networks; IEEE Personal
- T. Clausen, P. Jacquet, Optimized Link State Routing Protocol (OLSR);
- David B. Johnson, David A. Maltz, Yih-Chun Hu, The Dynamic Source Routing
Protocol for Mobile AdHoc Networks (DSR); draft-ietfmanet-dsr-10.txt, july 2004.
- H. Ehsan and Z. A. Uzmi (2004), Performance Comparison of Ad HocWireless
Network Routing Protocols; IEEE 8th International Multitopic Conference, Proceedings of
- Z. J. Hass and M. R. Pearlman, Zone Routing Protocol (ZRP); Internet
- Elizabeth, M. Royer and Santa Barbara Chai-Keong Toh, A Review of Current
Routing Protocols for Ad Hoc Mobile Wireless Networks; IEEE Personal Communication,
April 1999.
- Zygmunt J. Haas, Marc R. Pearlman,Prince Samar, The Intrazone Routing
- Zygmunt J. Haas, Marc R. Pearlman,Prince Samar, The Interzone Routing
Protocol (IERP) for Ad Hoc Networks; draft-ietf-manet-zone-iarp-02.txt, July 2002.
- C. Perkins, E. B. Royer, S. Das, Ad hoc On-Demand Distance Vector (AODV)
Routing - Internet Draft; RFC 3561, IETF Network Working Group, July 2003.
comparison of Multi-hop wireless ad-hoc networking routing protocols; in the proceedings
of the 4th International Conference on Mobile Computing and Networking (ACM MOBILE
- R. Misra, C. R. Manda, Performance Comparison of AODV/DSR On-Demand
Routing Protocols for Ad Hoc Networks in Constrained Situation; IEEE ICPWC 2005.

Index Terms

Computer Science
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Keywords
MANET DSDV OLSR AODV DSR ZRP and TORA