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MOBILE AD-HOC NETWORK (MANET) ROUTING PROTOCOLS: A COMPARATIVE ANALYSIS

Ms Anuska Sharma*

*SOEIT, Sanskriti University,
Mathura, Uttar Pradesh, INDIA
Email id: anushka@sanskriti.edu.in

ABSTRACT

Routing in a Mobile Ad-hoc Network (MANET) is a dynamic and difficult problem that has gotten a lot of attention from academics all over the world. To address this issue, a variety of routing classes have been developed, and the number continues to grow exponentially day by day. It's difficult to predict which protocols or routing classes would perform well in a variety of network situations, such as network volume and topology. We provide an overview of a vast number of current routing classes in this paper, with an emphasis on their uniqueness and usefulness. In addition, the judgment is based on the routing capability, and data is utilized to construct routing decisions. There is also a discussion of all of the routing protocols or classes. Furthermore, this research will aid academics in compiling a list of current classes and recommending which protocols would perform better in certain network situations.

KEYWORDS: *Ad-hoc Network, Delay, MANET, Mobile Ad-hoc Network, Routing protocol.*

REFERENCES

1. S. Mirza and S. Z. Bakshi, “Introduction to MANET Routing,” *Int. Res. J. Eng. Technol.*, 2018.
2. P. Yang, Z. Li, P. Yang, and Y. Dong, “Information-centric mobile ad hoc networks and content routing: A survey,” *Ad Hoc Networks*, 2017, doi: 10.1016/j.adhoc.2016.04.005.
3. L. Raja and C. S. Santhosh Baboo, “An Overview of MANET: Applications, Attacks and Challenges,” *Int. J. Comput. Sci. Mob. Comput.*, 2014.
4. M. Kumar and R. Mishra, “An Overview of MANET : History , Challenges and Applications,” *Indian J. Comput. Sci. Eng.*, 2012.

5. A. Maghsoudlou, M. St-Hilaire, and T. Kunz, "A Survey on Geographic Routing Protocols for Mobile Ad hoc Networks," *Csit.Carleton.Ca*, 2011.

6. S. K. Arora, M. Y. Mantoo, M. Chishti, and N. Chaudhary, "Performance measurement in MANET," 2014, doi: 10.1109/CONFLUENCE.2014.6949297.

7. J. Khan, Z. Bojkovic, S. I. Hayder, G. A. Mallah, A. Haseeb, and F. Atta, "Simulation analysis of static and dynamic intermediate nodes and performance comparison of MANETS routing protocols," 2013, doi: 10.1007/978-3-642-33018-6_13.

8. A. M. Sllame, "Evaluating the Impact of Routing on QoS of VoIP over MANET Wireless Networks," *OALib*, 2017, doi: 10.4236/oalib.1103361.

9. S. S. Jadhav, A. V. Kulkarni, and R. Menon, "Mobile Ad-Hoc Network (MANET) for disaster management," 2014, doi: 10.1109/WOCN.2014.6923074.

10. N. Aggarwal, T. S. Chohan, K. Singh, R. Vohra, and S. Bahel, "Relative analysis of AODV & DSDV routing protocols for MANET based on NS2," 2016, doi: 10.1109/ICEEOT.2016.7755355.