Comparative Analysis of DSR, GRP and TORA under IPv6 Environment

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Abstract

Mobile Ad Hoc Network is a dynamic network which formed by collection of wireless nodes without any centralized support. Nodes are mobile in mobile ad hoc network and free to move anywhere in network. Due to the mobility of nodes it is difficult to route data between nodes. Thus it is challenging to select an appropriate routing protocol, which route data more efficiently. Each routing protocol has its own architecture and working. It is obligatory to analyze the behavior different routing protocols under different environments. IPv6 is a version of internet protocol and got importance because it has some additional features and more secure over IPv4. In this paper three routing protocols of mobile ad hoc network namely DSR, GRP and TORA are tested under IPv6 environment. Performance of these routing protocols is evaluated by using OPNET Modeler 14.5 as simulation tool on the basis of different performance metrics-End-To-End Delay, Network Load and Throughput. On the basis of simulation results it concluded that GRP performs better which stated that it is suitable for efficient routing.

References

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Index Terms

Computer Science
Networks

Keywords

MANET DSR GRP TORA OPNET