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### **RESEARCH ARTICLE**

# Performance Analysis of Topology based Routing Protocols in VANET

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*Abstract— Vehicular Ad Hoc Network is an emerging field in wireless technology. Data Dissemination in VANET is complicated due to high mobility and continuous change in the topology of the network. In this study we have analyzed the performance of topology based routing protocols with two different traffic scenarios in VANET. In order to analyze the performance of these protocols, we considered some of the QOS parameters like Average Throughput, End-to-End Delay, Packet Delivery Ratio and Average Jitter. This paper considered the different topology based routing protocols including OLSR, IARP, AODV, DYMO and ZRP. Here OLSR, IARP are proactive protocols, AODV, DYMO are reactive protocols, and ZRP is a hybrid protocol. The performance of these protocols has been analyzed and presented using QualNet Simulator 5.0.2.*

*Keywords — VANET; Protocols; Throughput; End-to-End delay; Packet Delivery Ratio and Jitter*

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