Impact of Hello Interval on Performance of AODV Protocol

Abstract

The multi-hop ad hoc networks are self organizing networks with dynamic topology. The reactive and proactive protocols are designed to handle these dynamically changing networks. Ad Hoc On-Demand Distance Vector (AODV) Routing Protocol is one such Reactive protocol that has been widely adopted in MANETs. In this protocol, routes are maintained as and when required, i.e. they operate ‘On Demand’. AODV relies on ‘Hello’ messages to maintain local link connectivity. The hello messages are sent periodically, the period of which is defined by ‘AODV hello interval. In this paper, we investigate the performance of AODV protocol by varying the hello interval. The performance is analyzed in terms of Quality of Service parameters such as throughput, End-to-end Delay and PDR. Our experimental results show that the performance of AODV is improved when hello interval is increased.

References

- C. E. Perkins, P. Bhagwat, “Highly Dynamic Destination-sequenced Distance Vector Routing Protocol (DSDV)”


- User Manual QualNet Network Simulator, Version 5.0.2

Index Terms

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