AH-AODV: Adaptive Hello Messaging based AODV Routing Protocol

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Authors:
Priyanka Thakkar, Prasanna Shete

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Abstract

Ad hoc On-demand Distance Vector routing protocol (AODV) is a reactive routing protocol used in MANETs that makes use of Hello Messages for local Link connectivity. Every node in a network broadcasts hello messages to all its neighbours at a default hello interval of 1 second. However, this continuous broadcast leads to unnecessary energy consumption and energy utilization. This paper suggests an Adaptive Hello messaging based approach that modifies the Hello message broadcast mechanism of AODV. This approach makes the hello interval adaptive by making it directly proportional to event interval thereby suppressing unnecessary hello messages and breakage of links to the destination without adversely affecting the network performance in terms of throughput, end-to-end delay, PDR and jitter.

References

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Index Terms

Computer Science  Wireless

Keywords

MANET, AODV, Hello messages, Hello Interval.