Routing With Load Balancing In Wireless Mesh Networks

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ABSTRACT
The next generation wireless networks experienced a great development with emergence of wireless mesh networks (WMNs). This type of wireless network can be seen as a realistic solution that provides wireless broadband access. The limited available bandwidth makes capacity analysis of the network very essential.

In this paper, AODV routing protocol is modified to combine the route discovery process with a load balancing technique. The modified AODV selects a route to the destination based on the current load of the intermediate nodes and selects a gateway from the available mesh network gateways based on its current load, the simulations show that this load balancing technique will improve the performance of wireless mesh networks.