

ABSTRACT

This work proposes a new metric, AP (Alternative Path), to be used in the calculation of routes in wireless mesh network routing protocols. This new metric takes into account the interference caused by neighbor nodes when choosing a route for a destination. The performance of the AP metric is evaluated and compared to the ETX (Expected Transmission Count) and Hop count metrics. Simulations show that AP can provide superior performance to the network when compared with the other two metrics. The AP metric shows a better performance in networks with a wider variety of alternative paths.

Keywords: Mesh networks. Routing metrics. Routing protocols.