Abstract

Wireless Mesh Networks (WMN) is a new exciting technology that is expected to overcome the limitations and to improve the performance of various wireless networks such as adhoc networks, WLANS, WPANS, and WMANs. Heterogeneous Mesh networks running on different technologies with different channels, which is commonly known as multi radio network will be dominant in the next-generation wireless networks with the integration of various wireless access networks. In such a network, obtaining routes that elongates the QoS and extends the route lifetime without compromising on performance issues plays a significant role. There is a need to enhance the performance in WMN during dynamic link failures. This paper presents a self reconfiguration wireless mesh network that dynamically searches for the best available path among the available multiple paths to the internet. The best path will be selected based on the fuzzy rule set. The ARS with fuzzy logic results in improved throughput and latency.

References


**Index Terms**

Computer Science  
Wireless

**Keywords**

Wireless mesh networks  
Self Reconfiguration  
Multiradio wireless  
IEEE 802.11  
Fuzzy logic