Abstract

Fuzzy Cost Based Power Aware QoS Routing (FCPAQR) protocol proposed to select an optimal path by considering multiple independent QoS metrics. Fuzzy inference rule which is used to calculate the QoS based fuzzy cost of each link to forward the data packets effectively and efficiently. Fuzzy cost is calculated based on various QoS Constraints. QoS constraints can be classified as Time Constraint (Delay and Jitter), Space Constraint (System Buffer), Frequency Constraint (System Bandwidth) Reliability Constraint (Error rate) [9]. Link Expiry Time(LET) and Energy Level are also additionally taken into account. Considering multiple QoS Constraints provide better result than taking single constraint into account.

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Fuzzy Cost based Power Aware QoS Routing Protocol with Mobility Prediction in Mobile Ad Hoc Networks

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**Index Terms**

Computer Science                    Mobile Networks

**Keywords**

Routing  Fuzzy logic  QoS metrics