

# QoS-based Gateway Selection in MANET with Internet Connectivity

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**Abstract**—This paper proposes a QoS-based gateway selection mechanism to select an appropriate gateway based on three QoS metrics: traffic load of gateway, path quality from MANET node to the gateway and hop count to the gateway for integrating MANET and the Internet. The Simple Additive Weighting method is used to combine these three QoS metrics to outrank the optimum gateway. Gateway with the smallest weight will be selected as a gateway. Simulation results show that the proposed scheme can improve packet delivery ratio and end to end delay.

**Keyword**—gateway selection, MANET, multiple metrics, QoS



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