

# A Review of Gateway Load Balancing Methods in Connecting MANET into Internet

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**Abstract**—Interconnection of wired Internet and Mobile Ad hoc Network (MANET), called Integrated Internet-MANET can expand the network coverages and services. In this type of networks, the gateway acts as a bridge between MANET and wired Internet. As all data packets must pass through gateway, which is likely to be congested due to uneven traffic distribution. Thus, gateway load balancing become one of the most important issues in MANET. When the gateway is transmitting a large number of packets, load Balancing is the process of improving the performance of a network through a distribution of load among different gateways. If a gateway is heavily loaded without any load balancing capability, it degrades the performance by causing congestion, delay and resource loss in network. Recently, the key issue of gateway load balancing has been addressed by researchers in various ways, but now there aren't systematic analysis and comparison among different strategies. This paper provides the complete survey on load balancing solutions and proposes a gateway load balancing strategy comparison framework.

**Keyword**—MANET, Integrated Internet-MANET, Gateway Load Balancing, Strategy Comparison, Dynamic Gateway



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