Abstract

The communication range of devices in a wireless ad hoc network is inherently limited, but it can be enhanced by interconnecting it to a wired network like the internet, thus forming a hybrid wireless network. This interconnection to improve scalability has been achieved by using gateways, which brings the biggest overhead in WANET accessing Internet. So a mobile node in WANET has to find a route to a gateway first to communicate with the Internet host. It requires an efficient gateway discovery mechanism. The discovery and selection of Internet gateway are one of the key challenges to provide inter-connectivity. The gateway discovery mechanisms called proactive, reactive and hybrid are developed to enable mobile nodes to register with internet gateways. But the performance of the network largely depends on the gateway discovery method used and it can be analyzed using various performance metrics such as packet delay, throughput, routing overhead, Bandwidth efficiency etc. This paper focuses on various issues for WANET-Internet integration and their proposed technical solutions by various researchers for different Internet gateway discovery mechanisms to improve the performance.
References

- B. Xie, A. Kumar, "Integrated connectivity framework for Internet and Ad hoc Networks," First International Conference on Mobile Ad hoc and Sensor Systems, October 2004

Index Terms

Computer Science
Information Sciences
Keywords

Gateway discovery mechanism  Internet Gateway  routing  WANET