Abstract

In a Mobile Ad-hoc Network, the wireless nodes usually self-configure to exchange information without the help of any centralized infrastructure or administrator. There is high mobility and rapid deployment of the mobile nodes. Hence, there is need for multi-hop transmission where nodes can forward other nodes information. A Cross-layer design allows interaction between the layers above or below it. The strict layered architecture may not be the best model for wireless network. It is difficult to optimize the network performance according to different situation without interaction among the different layers. In dynamic network, there is a need for different layers to cooperate closely to meet QoS requirements of the mobile application. This goal can be achieved when the routing layer share the link quality information, channel bandwidth information of the MAC layer. For making decision, the same information may be
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used by different layers like the link and channel state, topology information and location for the nodes are used by the routing and application layers to compute routes. In this paper, the benefits of cross-layer feedback on mobile nodes and a representative survey are discussed.

References

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Index Terms

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Cross-layer feedback  MAC layer  channel bandwidth information