A State-of-The-Art of Routing Protocols for Mobile Ad-Hoc Networks (MANET)

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Abstract

Mobile Ad Hoc network (MANET) is a collection of two or more devices, nodes or terminals with wireless communication and networking ability that can communicate with each other without the assistance of any centralized administrator, centralized control or established infrastructure. It’s called infrastructureless. A network can be formed dynamically by the wireless nodes to exchange information without using any fixed existing network infrastructure. Each node plays a role of router in the MANET as it must forward the traffic to other nodes. In this paper, discuss in details the main characteristics, applications, advantages, disadvantages and challenges of Mobile Ad Hoc Networks. Several routing protocols have recently been proposed for Mobile Ad Hoc Networks. In order to facilitate communication within the network, a routing protocol is used to discover route between nodes. On other hand, also this paper provides a survey of the type of routing protocols. These protocols can be classified into three main categories: proactive(Table-Driven), Reactive (On-Demand), and Hybrid Routing Protocols.

References


Index Terms

Computer Science
Networks

Keywords

Ad-hoc network (MANET), Proactive, Reactive, Hybrid, Routing Protocols.