Mobile ad hoc wireless network

Mobile Ad Hoc Wireless Network (MANET) Protocols, Performance and Scope in the near Future A brief of the study Table of Content:

Introduction: In this section we will describe MANET, the " mobile ad hoc network". It is an autonomous system of mobile routers (and associated hosts) connected by wireless and links thus forming an arbitrary graph. The routers may organize themselves randomly and the resultant topology depends on these movements. These networks can work in an individual fashion as well connected with other networks. There's lot more to describe

Objective and Scope: While Mobile ad-hoc Networking (MANET) research has received a considerable attention in recent years but it is yet to become a trendy technology. In this paper while studying the single tier and the homogeneous MANETs we will try to figure out the implications of multi-tier and heterogeneous MANETs.

Historical Background: In this section we will study stages through which communication has passed, in terms of technology as well as the societal trends.

Literature Review

1. Comparison with other types of networks: In this section en effort will be made to compare MANETs with other similar networks like;

GPRS: General Packet Radio Service, a standard for wireless communications, supports a wide range of bandwidths, particularly suited for sending and receiving small bursts of data like e-mail.

GSM: Global System for Mobile Communications, one of the leading digital cellular systems. GSM uses narrowband TDMA, allows eight simultaneous calls on the same RF.

CDMA: Code-Division Multiple Access, a digital cellular technology that uses

spread-spectrum techniques, does not assign a specific frequency to each user instead, every channel uses the full available spectrum.

Vehicular Ad-hoc networks (VANETs): Communications between vehicles, vehicles nodes can move with high speed and still communicate quickly and reliably.

Bluetooth: A two way short-range radio technology for simplifying communications among Internet devices and between devices and the Internet.

Other forms of Wireless Technologies e. g. Radio, Satellite communication etc.

An effort will be made to evaluate the pros and cons of opting for one technology over another. In addition an effort will be made to study the protocols, types & structure of MANETs and differences amongst these. For example, one big difference between single-tier and Multi-tier MANET environments is that the multi-tier MANET naturally creates " coverage asymmetry" due to the much larger coverage area by airborne nodes compared to ground nodes. Consequently, the number of " neighbors" an airborne node sees can be potentially several orders of magnitude larger than that of a ground node.

2. Types of Routings:

3. Compatibility issues with more than one MANETs:

Methodology and Conceptual Framework: This section describes the conceptual framework chosen for this study. You should justify your choice (with reference to the problem) and show how you will operationalise the framework.

Findings & Analysis: This section contains;

The content & context in question

The process of implementation

The discussion of findings.

Conclusion (and Future Prospects):