www.ijresm.com | ISSN (Online): 2581-5792

# Cluster based Mobile Ad hoc Networks

#### G. Arun Prasath<sup>1</sup>, R. Maruthi<sup>2</sup>

<sup>1</sup>M.Phil. Scholar, Dept. of Computer Science, Ponnaiyah Ramajayam Inst. of Science & Tech., Thanjavur, India <sup>2</sup>Asst. Professor, Dept. of Computer Science, Ponnaiyah Ramajayam Inst. of Science & Tech., Thanjavur, India

Abstract: Mobile ad hoc networks (MANETs) are increasingly heavy network loads considered for MANETs are increasing as applications evolve. This, in turn, will increase the importance of information measure potency whereas maintaining tight desires on energy consumption delay and jitter. The channel access protocols have been enhancement for highly loaded MANETs under uniform load distributions.

#### Keywords: MANETs, Bandwidth.

#### 1. Introduction

Mobile computing is that the discipline for making AN data networking platform. The freedom from these constraints permits its users to access and method desired data from anyplace within the house. They can't affect the information management capability of the mobile platform. A user will still access and manipulate desired

information whereas traveling on plane, in car, on ship, etc. Thus, the discipline creates AN illusion that the specified information and decent process power square measure accessible on the spot. Herein, we discuss about the cluster based ad hoc networks.

#### A. Different types of devices used for the mobile computing

- Personal digital assistant/enterprise digital assistant
- Smart phones
- Tablet computers
- Net books
- Ultra-mobile PCs
- Wearable computers
- Palmtops/pocket computers

### B. Objective of the study



Fig. 1. Structure of mobile computing

Within these markets, a new wave of geo-social applications is fully exploiting GPS location services to Promote the surface to the entire world. Regrettably, this new functionality comes with significantly increased risks to personal privacy. Geo-

social applications operate on fine-grain, time-stamped location information.

#### C. System Specification

The purpose of system demand specification is to supply the specification analysis of the task and additionally to establish complete data concerning the need, behavior and other constraints such as functional performance and so on. The goal of system demand specification is to utterly specify the technical necessities for the product in a concise and unambiguous manner.

#### D. Existing System

MOBILE ad hoc networks (MANETs) have been an important class of networks to provide communication support in much operation.

Eg: battle-field and tactical missions, search and rescue operations, and disaster relief operations.

The number of users of MANET's has continuously increased and the applications supported by these networks have become increasingly resource intensive. This, in turn, has magnified the importance of information measure potency in MANETs. It is pivotal for the medium access control (MAC) protocol of a MANET not solely to adapt to the dynamic atmosphere however additionally to with efficiency manage information measure utilization.

## E. System architecture



Fig. 2. Unified Modeling Language

UML stands for Unified Modeling Language. UML may be a standardized general modeling language within the field of object-oriented software engineering. The standard is managed, and was created by, the article Management cluster. The goal is for UML to become a typical language for making models of directed laptop software system. In its current type UML is comprised of 2 major components: A Meta-model and a notation.

# International Journal of Research in Engineering, Science and Management Volume-2, Issue-9, September-2019

www.ijresm.com | ISSN (Online): 2581-5792

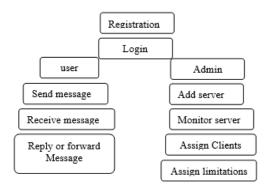


Fig. 3. Procedure

### 2. Conclusion

In this paper, we studied the problem of non-uniform load

distribution in mobile ad hoc networks. We planned a light weight dynamic channel allocation formula and a cooperative load reconciliation formula. The dynamic channel allocation works through carrier sensing and doesn't increase the overhead. It has been shown to be terribly resistive in increasing the service levels similarly because the turnout within the system with token effect on energy consumption and packet delay variation.

#### References

[1] A. Ephremides and T. V. Truong, "Scheduling broadcasts in multihop radio networks," in *IEEE Transactions on Communications*, vol. 38, no. 4, pp. 456-460, April 1990.