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PROPOSED SURVEY ON QUALITY OF SERVICE BASED RESOURCES OVER MANET

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ABSTRACT

We are aware of energy consumption.we need to see how each node can switch its state from power mode to active modes and vice versa. Adhoc network enforces certain constraints on the communicating nodes, which widely incorporates the node mobility which results in a constantly changing topology of the network, as it is MANET network in limited bandwith, limited processing power due to its size and cost constraints. In this paper we will proposed a new solution which perform communication with resource management and effective resources availability for Adhoc networks connected on the idea of Wi-Fi hotspot.

Keywords: Flow Chart, Flexibility, MANET, QOS, Scatternet

I. INTRODUCTION

1.1 Overview

As we have seen that there are numerous number of challenges with service provider over network but we find that the biggest challenge is the congestion in the traditional network. However, there are many challenges over manet and mobile networks above those in traditional networks. Due to this reason, a set of QoS techniques are required to use for manet networks than for wired networks. Thre are some additional challenges, as well as several techniques for overcoming them, are explained.

when a victim node tries to find out a central or immediate neighbour, before sending its data, the victim node will try to find the energy level of each neighbour and energy needed for each transmission, based on these standards, the victim node will choose the neighbour for transmission. Hence this proposal would be great helpful to MANETs.

1.2 Objective

As we are using Wi-Fi hot spot but before explaining that we will get lightens some of the features of Bluetooth. As it is well known that Bluetooth was emerged as a dominant level for less-power, low-range, wireless communications. Bluetooth 1.1 Core Specification includes a number of mechanisms that can influence the QoS by the application of Bluetooth. The specification 1.2 give more possibilities and also attempts to simplify some bit of the L2CAP QoS section as some new traits are added in to it. This is observed truly that the parameters influencing the application of quality of service do not contained at single location in Bluetooth.

We reviewed many papers which presents the same approach which we want to do in MANET such as formatting the Bluetooth network in scatternet and such we are doing it inMANET. We can classifies these approaches as light scatternet-route approach and the traditional big scatternet approach. While in the case of the big scatternet approach, the scatternet formation is different from the routing function as it is executed in the data link layer. We require a routing protocol to develop a multi hop path between sources to destination in a scatternet . we require the end to end route structure and the on demand development process of the scatternet routes to encourage the integration of the scatternet development and the scatternet routing.

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When we merge these two functions, they allow us to link their control packets and we easily get free from unnecessary traffic. This is mainly useful to power restraint MANET enabled devices like Bluetooth [1]. This concept will be used inMANET via Wi-Fi hot spot.

The problem of distributed scatternet formation rises from a conference scene of an adhoc network formation. As we take example that assume large number of members in chamber who want to build an adhoc network by using their own devices which are having bluetooth. Every member pushes start button and hold back for the device to display on the screen a network connection constructed message. When this message flashes, the user will effectively interchange information with other member present in that room. T. Salonidis et al. have presented the Distributed topology construction protocol [5].

The description of application contains the components of an effective connection in the formation of protocol. Now we are going to explain some of the features of DTCP.

The formation of the network connection must be accomplished in dispense manner. In the process every device initiates functioning non-simultaneously of their own and originally it does not know anything related to the number of nodes.

The protocol should give guarantee to a connected MANET after its completion. "Connected" means that there should be at last one route in the network between any of the two nodes.

The detain in the network set-up must be less so that it is acceptable by the user. These features must be fulfilled and the distributed MANET development of design basics, simple and rapidly protocol:

- One bridge node link(connect) only two manet
- If we are having fixed no. of bridge nodes, we can then design it in a restraint of less no. of MANETs.
- The MANET must be entirely linked
- Two manets include one bridge node only

II. DESIGN AND IMPLEMENTATION

For designing firstly we are having one adhoc network. After thethering all the mobile devices are connected with each other via Wi-Fi hot spot. All the devices which are connected via hotspot must possess same SSID and different MAC. The whole process is done at foreground not at the background which permit it to consumes less energy.

In the entire process, mobile phone which we have is acting as a client in which socket programming is performed for fetching the file. It sends the request to the master for sending that file but if the power back up of the master is not satisfactory or sufficient then the client's request is broadcasted to the other nodes that are present in that adhoc network. Now the node which is having sufficient power back up will act as a master and sends the file to the client.

So, it passivate the low energy node and activate the one having high energy node. We apply a simple security algorithm on this network. It will becomes only secure but not highly secured. So that, whatever message or file we send over a network do not get lost or accessed by any unwanted user user.

Now, in the figure 3.3 we are explaining how the whole process is going on, which are connected in an adhoc network and which are working as a master or clients. Each node is having its own battery power which is shown in the figure. We are having five nodes A, B, C, D and E. Node E is acting as a client and requesting for a file from the Master. Suppose Node D is a Master, but having low energy power. So, Node D broadcast that

request to the all other nodes which are present in that Adhoc network and now the other nodes will serve the client, so that file do not get lost and received by the client for sure.

Now the one which is having high Energy Power will act as a Master and fulfill the client's request. So, the new Master is N

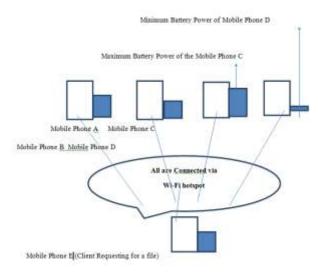


Figure 3.4: Implementation of The Project

Some objectives or design goals which we kept in our mind while designing the system:

- Greater flexibility
- Scalable to wide range of business models.
- Increased revenue potential.

III. FLOW CHART

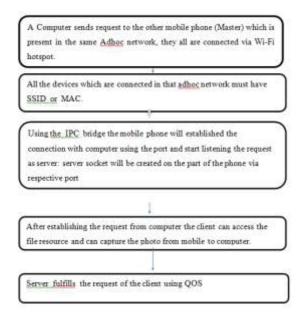


Figure 3.5: Flow diagram

IV. CONCLUSION

This paper entitles to fulfil the requirement of service based resource'quality and it also works on the implementation to decrease the consumption of power.

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REFERENCES

- [1] J. Haartsen and S. Mattisson, "Bluetooth—A New Low-Power Radio Interface Providing Short-range Connectivity," Proceedings of the IEEE, vol. 88, no. 10, Oct. 2000.
- [2] C. Law, A. K. Mehta, and K.-Y. Siu. "Performance of a New Bluetooth Scatternet Formation Protocol". In ACM Symposium on Mobile Ad Hoc Networking and Computing, Long Beach, CA, October 2001.
- [3] Z.Wang, R. Thomas, and Z. Haas. "Bluenet a New Scatternet Formation Scheme." In Hawaii International Conference on System Science (HICSS-35), 2002.
- [4] D. B. Johnson and D. A. Maltz. Mobile Computing, chapter 5, pages 153–181. Kluwer Academic Publishers, 1996. Dynamic Source Routing in Ad Hoc Manet Network.
- [5] T. Salonidis, P. Ehagwar, L. Tassiulas, and R. LaMaire, "Distributed Topology Construction of Bluetooth Personal Area Networks," in Proc. IEEE INFCOM, 2001. Z.Wang, R. Thomas, and Z. Haas. "Bluenet - a New Scatternet Formation Scheme." In Hawaii International Conference on System Science (HICSS-35), 2002.
- [6] D. B. Johnson and D. A. Maltz. Mobile Computing, chapter 5, pages 153–181. Kluwer Academic Publishers, 1996. Dynamic Source Routing in Ad Hoc Manet Network.
- [7] T. Salonidis, P. Ehagwar, L. Tassiulas, and R. LaMaire, "Distributed Topology Construction of Bluetooth Personal Area Networks," in Proc. IEEE INFCOM, 2001.
- [8] Godfrey Tan and John Guttag, "An Efficient Scatternet Formation Algorithm for Dynamic Environments", IASTED International Conference on Communications and Computer Networks, 2002, November, Cambridge, MA.
- [9] Singh S, Woo M, Raghavendra C. "Power-Aware Routing in Mobile Ad Hoc Networks." Proceedings of Int'l Conf. on Mobile Computing and Networking (MobiCom'98) 1998.
- [10] Chang J-H, Tassiulas L. "Energy Conserving Routing in Manet Ad-hoc Networks." Proceedings of the Conf. on Computer Communications (IEEE Infocom 2000) 2000; 22-31.
- [11] W.-P. Chen and J. Hou, "Provisioning of Temporal Qos in Bluetooth Networks," in Proc. IEEE INFCOM, Int'l. Workshop on Mobile and Manet Communication Networks, 2002, 389-393.
- [12] M. van der Zee and G. Heijenk, "Quality of Service in Bluetooth Networking," 10/0362-FCP NB 102 88 Uen 03/01/2001.
- [13] Yong Liu and Myung J.Lee, "A Bluetooth Scatternet-Route Structure for Multihop Ad Hoc Networks," in IEEE Journal on Selected Areas in Communications, Vol.21, No. 2, February, 2003.
- [14] Pravin Bhagwat, Adrian Segall, "A Routing Vector Method (RVM) for routing in Bluetooth scatternets," IBM, Thomas J. Watson Research Center.
- [15] G. Kuijpers and S. Gameiro, "Bluetooth PAN Profile: Dynamic Master Configuration," IEEE INFCOM 2002.