Go, Halt, Wait, Gain and Proceed Concept for Enhancing the Capacity of the Wireless MANET

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Abstract— **The Remarkable issues in the MANET from last few years as well as current trends in wireless Ad Hoc networks caused by the various issues for enhancing the efficiency of the system and at the other end security challenges bouncing back the overall performance of the Ad hoc networks In this paper we have tried to convey the some of the existing issues as well challenges for enhancing the capacity and throughput for the MANET and also problems caused due to implementing the module by considering the comparative study with various existing algorithms and also by introducing the simple concept of "Go, Halt, Wait, Gain and Proceed".**

Index Terms— **Remarkable, Trend, Bouncing Back, Halt, Gain**

I. INTRODUCTION

In the earlier research towards achieving secure wireless transmissions in MANET many researchers introduced the various methodologies, concepts and also proposed various algorithms as well as conclude the concepts for working of Ad-Hoc Networks but here we are introducing the a protocol known as Go, Halt, Wait, Gain and Proceed (GHWPP) Routing Protocol which introduces the concept for transmission of the data packets in RTS/CTS packets inside the MANET.

Where a node inside the MANET wishing to send data initiates the process by sending a Request to Send (RTS). And the destination node replies with a clear to send frame (CTS). Suppose any other node want to make the transmission to the same node will refer the transmission time through broadcasted message and halt its transmission and wait to the certain amount of time to get the medium free.

In the above concept of the MANET we are proposing the new Concept where the Node instead of forwarding the packet inside the network it is going to Obey Go, Halt,Wait, Gain and Proceed Concept where the concept proposes movement inside a network by a frame to the destination but instead of the transmission of RTS/CTS frames here the sender of the node ones start the transmission known as Going Phase and then it will transmit the frames for certain amount of time known as HALT Mode which will stops its transmission of the frames for certain movement of the time and here halt time depends upon the length of the message to be transmitted that is total size of the frame to be

transmitted inside the network and its size is varying from application to application.

The Bellow Figure1.(a) sows the working of the current system and the second figure 1.(b) shows the working scenario of the proposed GHWPP
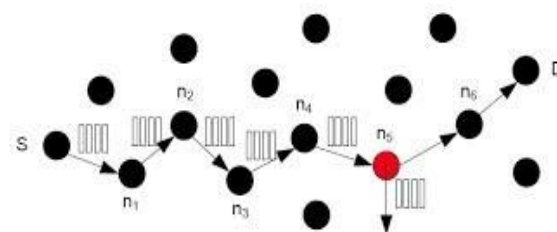

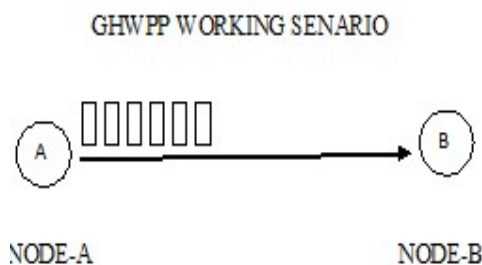Figure 1(a) Working Scenario of Mobile Ad-Hoc Network

Figure 1(b) Working Scenario of GHWPP

But Security attack on the MANET Based upon the dynamic infrastructure which introduces new security threats [1]. Attacks against specific targets (Nodes) namely when frames are going to reside in a node during their Halt Time is and ones the halt time is completed then packets are going to be enter in to the gain phase where the length of the transmission message is going to be considered and based upon its size the transmission time for the message is to be considered and is allocated and ones the gain phase is completed then message is allowed to transmit inside the network known as proceed phase and further bellow concept describes enhancing the throughput and capacity.

II.THROUGHPUT, CAPACITY AND ERROR MINIMIZING

Now a day's inside the MANET most of the dimensional parameters of the network in enhancing the transmission capacity is the "throughput of the network" which gives the fraction of the channel capacity used for useful transmission and next one is minimization of the Error which will leads to reduce the delay at every node of the network inside mobile ad-hoc networks when the number of nodes are reduced inside the network alternatively which will reduces the delay of the network and is small and throughput will increases.

Inside the MANET it's become difficult task to identify the nodes with malicious behaviors and that are hard to detect maliciousness of the node and due to the Global contribution robust secure multichannel routing protocol algorithm it's become easy to identify the nodes and also the approaches of the time based mechanism which further make's the concept more secure and by considering the parameters like availability, integrity, confidentiality, delay, stability, power consumption, throughput, and robustness of the algorithm which will further adds a credential point to make this protocol more differ from the existing protocol technologies.

Even though by referring comparative table of the various protocols given in the previous report the algorithm stood unique among the existing protocols in the Mobile ad-hoc networks the it also fulfill the various issues such as multiple routes support, Qos Support, Periodic Broadcasting as well as the error minimizing capacity makes the algorithm not only in enhancing the capacity of the MANET but it also Brings the remarkable changes to the network to cope up with other networks like AOVD, DSR, and TODA.

III. IMPACT OF CHANGE

In this scenario the Go, Halt, Wait Gain and Proceed Protocol brings the plenty of changes to the existing network as well as technology in various manner and the criteria's to be considered such as by enhancing the throughput, Minimizing the errors, increasing the capacity of the network as well as it also ensures the robustness security.

IV .SIMULATING MODEL

The Go, Halt, Wait Gain and Proceed Protocol simulating results are observed on NS-2 Simulator where throughput is the one of the major parameter of the network and which will gives the fraction of the channel capacity used for useful transmission selects a destination at the beginning of the simulation, The maximum number of packets made, by using each protocol in a finite simulation time is analyzed which shows that how our newly proposed protocol is differ from the existing protocols in the mobile ad-hoc network and comparative table is given bellow in Table 1.(a).

	Various Different Protocols of Mobile Ad-hoc Networks			
Parameters	AODV	DSR	TORA	GHWPP
QoS Support	No	No	No	Yes
Periodic Broadcast	Yes	No	No	Yes
Security	No	No	No	Yes
Unidirectional link support	No	Yes	No	Yes
Loop free	Yes	Yes	Yes	Yes

Table 1(a) showing the comparative study of Various Different Protocols of Mobile Ad-hoc Networks.

V.FUTURE IMPLIMENTATION

The implementations and deployment of such a protocol that is "Go, Halt, Wait Gain and Proceed Protocol in MANET" will brings remarkable changes for enhancing the throughput as well capacity of the network, and further which also ensures the robustness and security of the protocol and usage of length and time approach will cope with the existing challenges faced by the mobile ad-hoc network and also proposed concept shows that how to make usage of the new approaches to the existing network.

CONCLUSION

From the previous reports concern here I am trying to conclude that "Go, Halt, Wait Gain and Proceed Protocol in MANET" is the one of the protocol which will brings remarkable changes to the existing trends and technologies in the mobile network which can be further used to carry out the various research activity in enhancing the power transmission, throughput and also reduce the delay in routing, and by minimizing the number of errors in the network as well as the approach towards the proposed concept will carry out further studies related to the that changes in the network generations and how come the above protocol will work with upcoming changes in the generations of the network, Is there any possibilities of any drastic changes are there in power transmission and what was enhancement the throughput and in future what kind of the security challenges are there in the network.

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