Multiple routes routing in computer networks remote distance

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***Abstract*— A method for increasing the efficiency of routing based on a system of agents. The analysis of the variation of the distribution network environment first and second order network topology and the location of the agents. It is shown that with a change in the topology of the density distribution varies in a nonlinear law.**

***Index Terms*—Computer Network, Efficiency of routing base.**

I. INTRODUCTION

Article searching and dealing with the security and guidance to computer networks and expresses networks and in accordance with all quality standards and offer essay the best way to ensure appropriate guidance of the data during the course of the road to another and move messages evenly and the possibility to download all the links equally and paths for trade in one direction abbreviated to transfer data and messages to the best way is the simplest way to transfer and guidance but do not take consideration of the cases Tarsi Maua leading to load more when multiple routing different routing protocols in one direction either multimodal transport in several ways, which tracks direct transport to limit the cost, but increases the expenses unlike single transport In data traffic there are two controls so The first type is unilateral singular moves the data unilaterally, but faces a problem if there's a growing communication path time data transfer, especially in the transfer of multimedia data such as audio, image and video then be needed to encode video and special Alsotefi this case monophonic no substantial risk of loss and delay data packets and then the quality is in the path of Telecom Alia using caching And high reliability In this case must secure protocols for the analysis and guidance in all cases individual tracks and multiple paths so as to ensure the authenticity of routing in mobile networks and ensure the confidentiality of information can be moved in different ways to ensure quality Search terms: multi-router, router in one direction, Insurance Directive presence transfer data

II. APPROCH

In our research and our work, we analyzed and compared to secure PROTOCOLS routing in mobile networks and Adana comparison after analysis of the two methods of guidance as shown " table 1 "

Benefits	Short comings
reduction of volume calculations by use of identification codes message with a symmetric key; - Guarantee the validity of routing information;	source and destination must have a common key; - Missing data encryption; - Delays in delivery packets to the application level due the need to open key;;
control packets sent data; - Nodes can not them selves change their priority;	Large storage data; - Not available ability to re-inclusion in the network isolated nodes
Information is sent on a regular basis	The information is sent only when changes occur
A router sends information about the next hop using the Distributed Bellman-Ford algorithm on the basis of the valuation of the way	The router first builds a description of the internetwork topology, and then can use any routing algorithm to determine information about the next hop

" table 1 " : analysis of the two methods of guidance

Identify the problem and to increase the chances of nappy security during the transfer of data and information in the mobile network. To increase security, and the transfer of information in Wireless networks to form a group of separate tracks. We propose in this research separate tracks So we proposed multiple tracks of directing because the traditional means of directing do not meet the quality of service requirements and do not provide sufficient speed to change tracks on the Web

III. THE SOLUTION OF THE PROBLEM

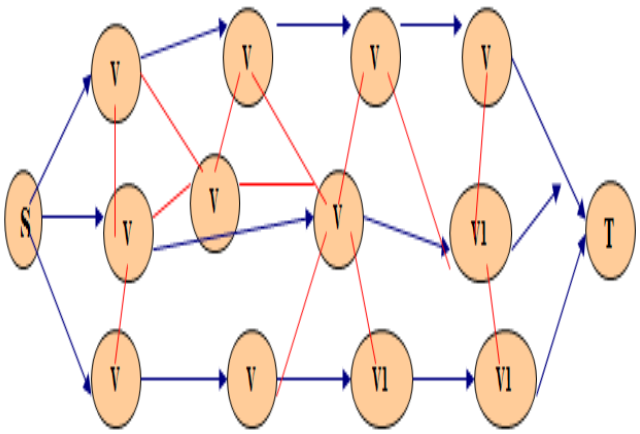
To solve the problem, consider the example of a graph consisting of 9 nodes (Fig. 1). As the shortest path algorithm using Dijkstra's algorithm. In [8], the example of the algorithm Dijkstra, which solves the problem of the shortest paths from one node to the weighted directed graph G = (V, E) with the initial vertex s, in which the weight of the edges nonnegative ((u, v) ≥ 0 for all (u, v) E).

Suppose that iq - the probability that a node intercepted. Then the probability that the path L1, l, is compromised, is

$$p = 1 - (1 - q1) \times (1 \times (K - q2) \times 1 - ql).$$

For example, consider a wireless network consisting of nodes and links, connecting them provided in the form of a graph G = (V, E), (Fig. 1), where V = {vi | i N) = 1 ... The set of vertices, E = {Ej | j = 1 ... M} - set of connections between the nodes. Consider path LS, T between the vertices S and T, which includes a set of vertices {S, V1, V3, V5, T}.

In this case:
Since we are considering the safety message delivery, it is assumed that source and destination is 0 sdq = q =. Chance.



"Fig 1:. Count one wireless network

Probability of intercept messages is:

$$p_{msg}^{m}(n) = \prod_{I=1} p_i$$

where I probability of intercept the message. The more parts p I , the lower the probability of intercept communications and better protection. Thus, the goal of the algorithm is to find ways to find as many ways that at the same time will be the most secure.
For example, consider a method for finding the optimal set of paths in the block diagram
(Fig. 2)
In [9] the solutions to the problem of safe one-way based routing and multipath routing. It is assumed that the multipath routing is the optimal way security of transmitted data .

In [10] a method for the separation of a secret message to pieces. He divides the message to N sections called lobes (share or shadow). In this case, the presence of any number of parts is less than T, it is impossible to get any information about the secret message. At the same time by using an appropriate algorithm can recover the message from any number equal to or greater than T.

When choosing the optimal set of routes to take into account several criteria: to satisfy the requirements for latency and network load evenly. There are two ways to select the optimal set of paths: the optimal allocation and hard.

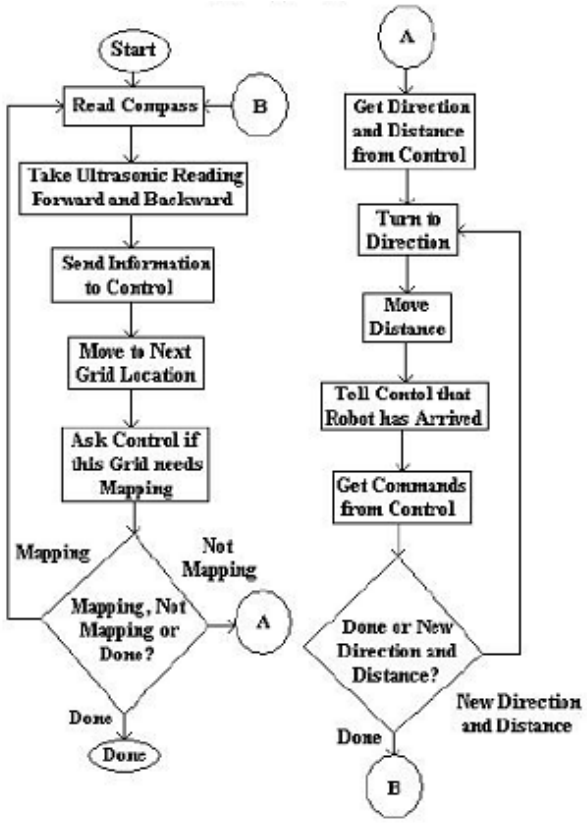


Fig (2): A block diagram of the algorithm for finding a set of paths

Upon starting the demo, the robot will perform a Built-In Self-Test to ensure that the components are functioning as expected. See figure 5 in the Testing Strategy section for details of the BIST. The robot will then wait for instruction from the User Interface. The User Interface will send the command to be a Mapper along with the first command to start. This is because theres no possible location for the user to command the robot to go until at least one mapping scan has completed.
Once the robot receives a start command, it will first take a compass reading, perform a scan. A scan consists of taking a measurement from each ultrasonic sensor, moving the sensors by 10 degrees, in opposite directions from one another, taking another measurement, moving 10 degrees, etc., until each sensor has completed a 180 degree arc. The sensors should be facing opposite directions at all times. The compass and ultrasonic sensor data is sent to the user interface as one packet. If a stop command was issued, this is where it would stop.
Once a scan completes, the robot will move forward by two grid boxes. If a stop command was issued, this is where it would stop. The robot will then ask if mapping has been preformed from this location already. If not, a new scan will commence. If so, the robot will move on two more grid boxes. If a wall is encountered such that the robot cannot move forward two boxes, it will turn 90 degrees and try again; continuing this process until an opening is discovered or a stop command is received.
If at any time the user clicks on a location on the map, the robot will proceed until reaching a stop point, then follow the same instructions it would if acting as a controlled robot

(described later in this section) until that location is reached, then it will rotate to the orientation designated by the user and continue the mapping procedure

As a result, we can conclude that the optimal distribution of the security below, however, satisfy a given level of QoS. In contrast to the optimal distribution is not completely rigid provides QoS, but provides the highest level of security of transmitted messages.

If all of the parts of the secret message, a check and assembly into one original secret message. When a component shortage n, resubmitted a request for retransmission of the missing part of a different route, where a delivery time of minimum

In Fig. 4. through the process of distribution of hard

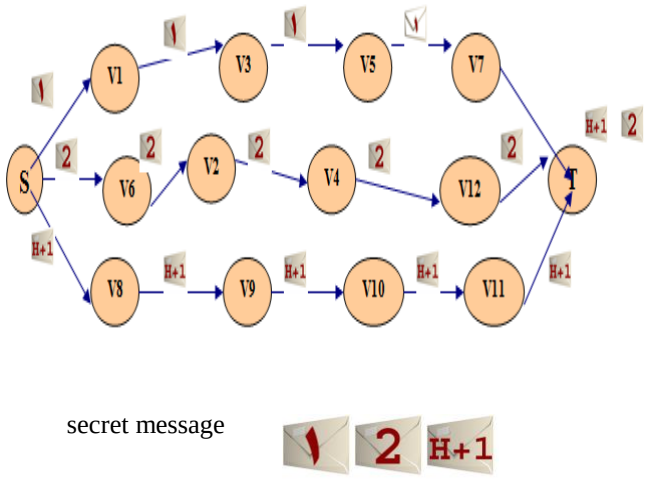


Fig. 3. Rigid distribution

IV. CONCLUSION

1 - The traffic problem has been resolved through the optimal loading and routing through roaming networks

2 - the proposed method will work on the basis of secure multipath routing to create a modified route that will provide the most secure transmission of messages and evenly load all the channels of communication

3 - Here the problem has been resolved mobile phone using a projection algorithm and take advantage of them.

4 - Here the problem has been resolved to reduce the costs of mobile phone

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