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Immensely Discriminate Routing in Wireless Networks

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Wireless networks are predictable to grant essential Internet access multimedia traffic service also increasingly such networks have been emerged in real life. However, the application scenarios is indeterminate as well as largely scalable routing is very difficult. Thus require efficient routing schemes in wireless network. In this paper, we propose Immensely Discriminate Routing protocol is used for multihop routing in wireless network. Here, node distance, node link, node trust and node quality of service is evaluated the next hop. This parameters are determined an efficient path in the wireless network.

***Keywords**: Distance, quality of service, wireless network, trust, link quality*

1. Materials and Methods

In wireless network, video traffic has become a well-liked subject with the huge use of smart phones. Handling best quality of transferred video from the user perception is important. The quality of the video is affected either by the alteration or deformation due to channel induced errors and interference losses, route inaccessibility owing to mobility of nodes, untrustworthiness of links and lack of security. To overcome these problems, we propose proficiently choose an instant next hop for routing information in the wireless network. The wireless link represents the connectivity between the nodes. Transmit the hello messages is one of the techniques for know the condition of the links ([8] and [9]). The other methods for receiving link dynamics can be established in [10], [11] and [12]. This method is useful for find the quality of the link before data is transmitted to a node to avoid link failures.

Trust is a parameter for find the node is legitimate or illegitimate in the network that helps in route selection. Many methods of trust present in the literature – both centralized and decentralized trust mechanisms. A technique particularly designed for ad hoc networks is established]. A survey for trust method is presented. These are classified the nodes depend on the trust. Quality of Service is representing the successful transmission data from source to destination in wireless network. Some of the techniques existing have been reasonably successful in improving the network performance. A survey of all the QoS based routing protocols have explained the importance of QoS. The numerous routing methods were proposed that explained multiple radio parameters. In this paper also described in, Media Access Delay and Throughput Analysis of Voice Codec with Silence Suppression on Wireless Ad Hoc Network [14]. Hash based Technique to Identify the Selfish Node in Mobile Ad-hoc Network [15]. Cross-Layer Design Approach for Power Control in Mobile Ad Hoc Networks [16].

2. Immensely Discriminate Routing in Wireless Networks

To reach the highest effectiveness, we propose the Immensely Discriminate Routing protocol for improve the multi-hop routing. In this scheme, the next hop node selection based on node link, Distance and quality of Service parameters. The above parameters are determined the next hop selection is evaluated by matrix.

$$NH = \begin{bmatrix} NL_j & ND_j \\ NT_j & QoS_j \end{bmatrix} \quad (1)$$

Where,

NL_j →Node Link
ND_j →Node Distance

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NT_j →Node Trust
QoS_j →Node quality of Service

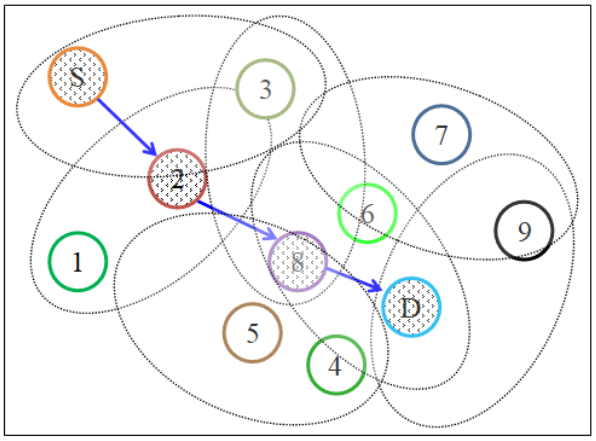

Figure 1. Illustration of Wireless Network

The Immensely Discriminate Routing protocol applies three stages of routing such as the source node is stage 1, its instant adjacent node is stage 2 as well as the stage 3 contains the adjacent of adjacent is illustrate in Figure 1. In Wireless Network, the distance is an important factor for finding the route. The link information are dynamically received from the Medium Access Control. The trust measurement is used to find out the node is legitimate. Quality of service represents the presentation of a node in a network.

3. Conclusion

In this paper, we proposed Immensely Discriminate Routing protocol is used for multi-hop routing in wireless network. The node distance, link, trust and node quality of service is evaluated to fining the next hop. This parameters are determined an efficient path in the wireless network. This parameters are provide efficiency path and reached better throughput in wireless network.

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