

# Cross-layered Exploit Intensification Architecture for Manet's to Share resources Effectively to Nodes.

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## Abstract:

The architecture of Internet is based on TCP/IP, but it is not sufficient to check the dynamics of MANETS. Among of various architecture, cross-layered architecture is one of the most famous, to enhance the performance of Cross-layered Exploit Intensification Architecture [CL-EIA] is the proposed architecture. In this CL-EIA one more hardware layer is added to all layers to exchange the parameters and to enhances the performance of protocol based on the information availability at the layers decisions will be consideration. Based on the decisions made, resources will be shared to all users according to their requirements effectively with less Packet size and Buffer size.

Keywords: MANETS, Network protocols, TCP/IP, Adhoc networks

## 1. Introduction:

Manet building, without a particular type of wireless network infrastructure, the network connection or a mobile support ad hoc collection by the state shown in fig1. Behavior of wireless network applications, research and coercion Emergency Rescue interest, data collection in a hostile country, topography, communications, multi-hop, and limited resources (bandwidth, CPU, battery, etc.) and limit [1]. Wind is developing the technology for oil and gas and Manet. In fact, the territorial sea, it is very difficult to produce a range of pure oil expression. Here's how to get the equipment in these areas. That application network. In some cases, the workers trying circumstances, thus, very difficult without tools, such as the network communications products need (Manet) [2]. Manet has proposed a better situation, because every aspect verbally. all temporary, low computing power and system monitoring. once again Manet topology, and return to the group and these things. Not many routing protocols can be used here. Countries moving the main challenges in the transition to service initiative, exchange, energy, etc., the speed of the temporary network and device for reading when to be quiet. The mobility is one of the greatest disasters in landfill models in the first [3], a large-scale model. moving the best in the mold at a constant speed, is random (0, v max) at the maximum speed Vmax selected Taurus. When a node stops, stops at the usual time, then she decided to solve. [4] The average speed is determined by the speed of the system, based on the book and road traffic demand. A traffic route when the traffic load on the power to greatly influence the level of consumption of the delay in the delivery of packages, throughput, etc. work of the network routing protocol development can effectively apply the changes. Strong network concerned by the growth of the entire network. And the change is a big problem. Consumption and growth in traffic growth, flexibility, mobility. move Manet requires rigid layer.

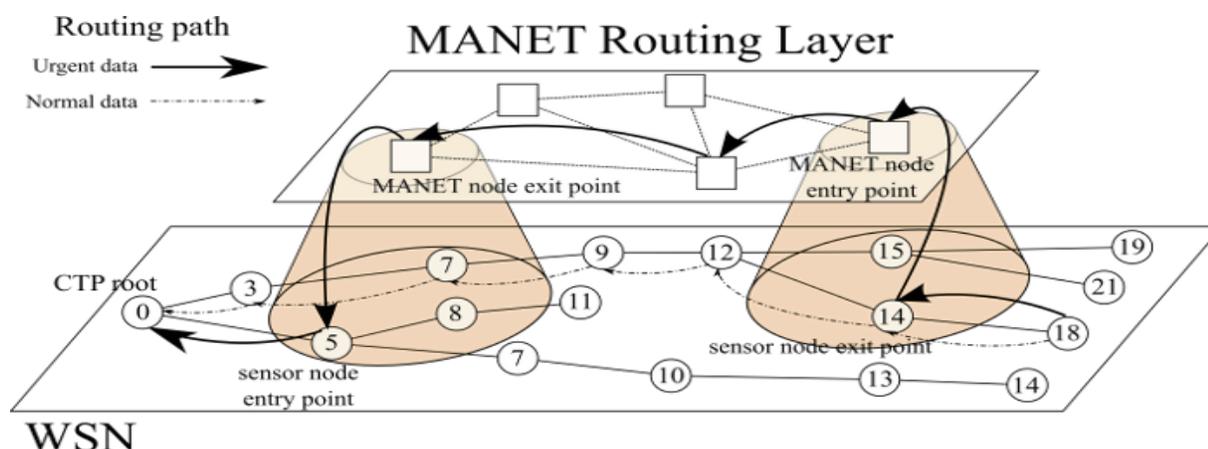


Fig.1: MANET Architecture

## 2. Cross-layered approach

The Internet is based on IP architecture TCP / and success around the world. TCP / IP before traditional relationship, which is characterized by high bandwidth, low delay and low loss probability (reliability), static routing and movement. [5] However, wireless connections, and the limited resources of time to change the channel and radio frequencies that is not enough, the speed stage, and the supply [6, 7, 8]. TCP / IP hierarchical model of the lower level to communicate with each other. And the design is not flat enough to make the connection between the artificial tissues. Instead, the tail transmission / IP protocol TCP very artificial tissue. Cross-fold design of the traditional network layer, each layer of the protocol stack, and the exchange of independent data, but the lower layer. Surgical levels of [9] series data exchange protocol, which corresponds to the optimum performance of each adjustment layer shown in fig 2. The break between the lines of information to improve the network. As a result of Protocol communication protocol commonly used [10].

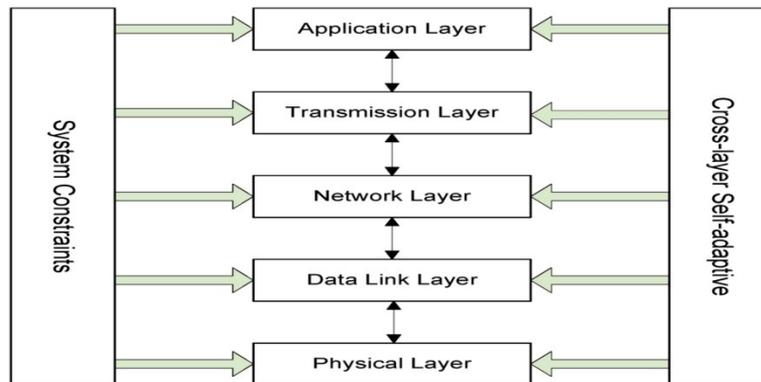


Fig.2: Cross layered Approach

The physical layer to the MAC layer and the layer opposite sites from accessing your wireless network. The tariff plans data function and decisions run the MAC layer and routing of physical release. Storage and distribution wire channel MAC layer, which determines the bandwidth of the transmitter and delay. If the bandwidth and the delayed impact on the decision to send the routing layer to choose a plan. Posted packets of the routing protocol to choose the network layer. logic level routing decisions MAC layer, and change the physical layer of the same variables in [11]. Therefore, all the layers relations and a wide range of individual songs. After the development potential of the promising layers, but the negative effects of the drawing. CLA in different countries to use the network, and can be very QoS device and information on a wide range of products and processes in the system required to provide form.

## 3. Related Architecture analysis

Many cross-layer design proposals in the text. The mapping of the various inter-layer architectures in [10] Cross-layer avalanche of wireless network design methods work. Many researchers have studied the effect on network performance and a better definition of the cross-layer design what it means, he said, some tips on cross-layer design. Some stocks and protocol layers and mobile ad hoc networks at the proposal. He also works on the implementation inter-layer interface. Now is the time most of the programs and global vision. In this article, we take a step in this direction is the physical layer to explore the between-go zone, The status of the sector. We want to develop a cross-cross-layer layer forms of literary examples, discuss recommendations and to order the first to stab interface It can be done. then described some of the challenges and opportunities for the development of cross-layer. The designers will show the place cross-layer design. In [11] The dynamic nature of ad hoc networks, the system provides an easy task. ads hoc mobile networks suffer from performance problems because of exposure, interference and medium probably unreliable. A bit unstable it can not be a limiting factor in the production of devices such as PDAs, mobile phones and sensors. Such cross-layer architecture promising new approach to change can alter the behavior of the protocol network conditions. This article shows crosstalk, cross-layer architecture The overall objective of the work in the local transport. Crosstalk in cross-layer architecture are other equations. It provides the final evaluation of the quality of available data structures and efficiency of implementation of the global strategy. In [12] Recently, interest in order to improve the performance of wireless networks has been increased in external law authorized trust intersection. However, the design of such a cross-track contrary to sound principles and long-term architectural objectives and the many negative consequences. This encourages us to go back and

look at the problem overall design and architecture of the boundary layer effects. They argue that the result of a good architectural design with growth and life, and doing some historical examples. While the media is fundamentally different thread, and you have never dreamed of a form of cooperation that have shown that the architecture of the traditional network layers and, in fact, a rational decision to work without wires. But the temptation, and integration optimized multilayer survey also ignore all the problems. We have shown that interactions between the layers of unwanted adverse effects on education. The example of an inter-rail loosely based on the last item. We tried to establish a general limit. Indeed, the uncontrolled development of the boundary layer results in spaghetti, impede innovation and hard to maintain. Important when the wireless network could be on the verge of huge growth, architectural perspectives is important. They claim to be careful at first, the development of cross-layer.

In [13] Researchers in Mobile Ad hoc Networks (Manet) is facing a serious challenge: by features, better performance when connecting to the new Technology, the rest of the Internet. IETF working group proposed last question to resolve Manet on the development of the Internet Manet. The international success of the Internet, particularly the layered architecture corresponding to higher Manet solutions use. layers, however hard Just answer the environment Manet flexible power and optimal operation. How, then, developers must cultivate the various layers of cooperative layers where pure? On the other hand, to resolve dependencies and ensure the strict level of application compatibility. Against the complete formation layer showing the other end.

In [16] The mobile system is typically multimedia data have important benefits for the long-term calculation. But if the system to meet the dynamic requirements of multimedia intensive applications, computer and bandwidth limits. At the same time, integrating energy can affect media, the bandwidth of the data network and optimize the use of existing resources. Some researchers combine hardware, network to work with the operating system and applications to ensure potatoes and maintain energy. Where is a list of the advantages of these cases, however, have a different system and application levels to manage their relationship with each other. the declaration describes a framework, called through such cooperation together, new hierarchical approach to a global media and level of application and integration in wireless running on the system. Grace obtain an interoperability obvious advantages to maintain the separation layers

Database can see the controversial law. [6] The new storage database provides advantages / cost of materials for all levels. In this architecture, all the parameters in the database stored in layers, and each layer is able to communicate more and in each case. But the layers must not pass at the database level. If all serious shops. I came from the new material limits the hardware operating system and other factors, the boundary layer is not present in layers of clothing. Thus, the proposed cross-layer architecture.

#### **4. Cross layered Exploit Intensification Architecture:**

features of CL-EIA are described below.

- New construction should be according to the traditional architecture. The new architecture using cross-layer architecture is not the traditional architecture, if desired.
- Avoiding of unnecessary interface
- Packet size should not increase.
- There should be no increase in buffer size
- Sharing of resources should be done efficiently to all users.

At the same time the optimization of the tracks on the creation of simple cross-layer. This can lead to uncontrolled development of cross spaghetti. [13] Therefore, the reliable support Cross layered Exploit Intensification Architecture[CL-EIA]. With this architecture, it is expected to apply the base layer, the system hardware to be added to the stack of traditional protocols. The device does not respond to the battery on the node speed, in general, operating parameters, etc. no power other laws in different layers. paper mills are not parameters of four laws. The parameters can all tracks can identify and make decisions, such as the routing protocol with the network layer on the basis of available data, laws and different decisions on that basis. For many vertical layers to improve the protocol. Each layer is to exchange information and to communicate between them and the decisions, as shown in Figure 1. Large necessary because it is in [10], the new parts are used [12] This architecture. But that number could change all behavioral choices. The architecture is the same as TCP / IP, the difference is that the songs are in business to decide, and the number of the TCP protocol stack / IP called hardware. CL beans architecture is very simple and it is not good. A game was introduced, and the law can not be exchanged for each protocol in the decision. With the construction, it is necessary to improve network performance shown in fig 3. The aim is to counter-most layer layered architecture maintain the strength and improving the performance and the adaptation [10, 13].

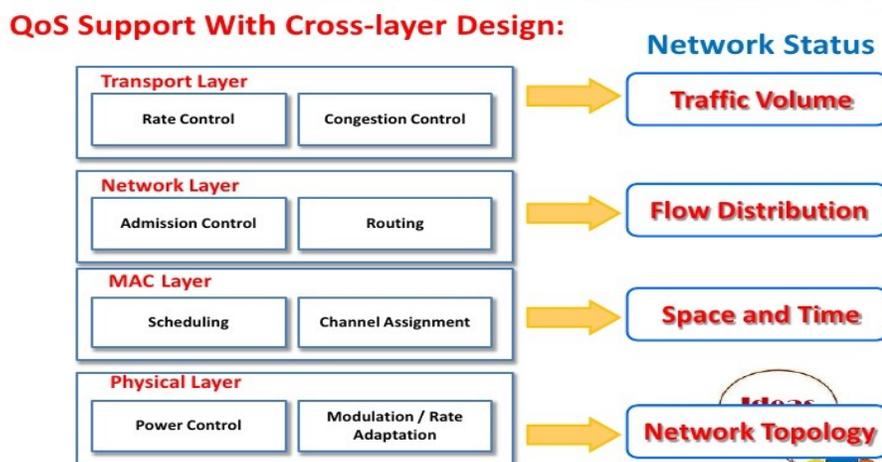


Fig.3: Cross-layered Exploit Intensification Architecture

## 5 Conclusion:

Wireless ad hoc wireless network is an important factor for the development of Internet applications, services and the ad hoc network without using release. To cope with the dynamics of ad-hoc networks, the architecture of cross-layer Cross layered Exploit Intensification Architecture. New here is the ability to increase the efficiency of the process. This architecture reduces energy consumption, crack, and delays. In the future, we expect some improvements to the architecture.

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