

# Warehouse Monitoring System Using Network Security

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**Abstract-** Real time parameter monitoring for the products in the warehouse is an extremely necessary task but there are many challenges due to great quantities and the movement of products. In case of being a company, product status monitoring is always being a difficult task that is a vital part of a network admin. Constantly striving to maintain smooth operation of their networks by Network admins. If a network were to be down even for a small period of time, orders or delivery within a business time would decline, and it will lead to loss of reputation for the company. So that it needs an approach of network monitoring and its security. A warehouse monitoring system monitors an internal network to identify slow or failing system products. It can find, report and resolve problems. Whether it is small or large enterprise, by monitoring continuously there is an improvement in performance. Monitoring reports categorizes to different levels of audiences including the network admin as well as to management. Therefore, a monitoring system should be neither too complex to understand and nor it lack basic reporting and drill down functionalities. The continuously growing online shopping is increased. It is an approach that generates performance models for delivery scheduling environments in a warehouse.

**Keywords-** DSDV- Destination Sequenced Distance vector, SWCA- Secure Weighted Clustering Algorithm.

## I. INTRODUCTION

### 1.1 WIRELESS SENSOR NETWORK

A WSN (Wireless Sensor Network) consists of a large number of sensors, each of which are physically small devices, and are equipped with the capability of sensing the physical environment, data processing, and communicating wirelessly with other sensors. The each sensor in a WSN has certain constraints with respect to its energy source, power, memory, and computational capabilities

### 1.2 UNIQUE CHARACTERISTICS OF SENSOR NETWORKS

The number of the nodes in a sensor network is larger than that in a typical wireless ad hoc network. It can differ by several orders of magnitude. Sensors are low-cost devices according to energy source, power, computation capabilities and memory. Sensors are usually densely deployed.

### 1.3 APPLICATIONS OF WIRELESS SENSOR NETWORKS

Development of WSNs was primarily motivated by their need for military surveillance. With the availability of low cost sensors, these networks are no longer limited to military applications but are used in a wide array of applications including habitat monitoring, industrial process monitoring, traffic control, etc.

## II. LITERATURE REVIEW

### 2.1 Double Guard: Detecting Intrusions in Multitier Web Applications

AngelosStavrou and Meixing Leplanned to present Double Guard, an IDS system that models the network behavior of user sessions across both the back-end and front-end web server.

By monitoring both subsequent database requests and web, it is easy to find out attacks that independent IDS would not easy to identify. By using dynamic and static web applications then collected and processed real-world traffic over a 15-day period of system deployment. Finally, using Double Guard, able to expose a wide range of attacks with 100 % accuracy while maintaining 0 % not true non negative es for static web services and 0.6 percent not true non negative for dynamic web services.

### 2.2 Search Trajectories Package Recommendation Using User Transactional Behaviour

SreeVignesh K andRukumaniKhandhan Cdescribes an expanded enthusiasm for recommender frameworks. There still stay various roads to investigate, In spite of huge advancement during this field. The issue has worries to

consider from a few points of view, similar to the different sorts of variable highlights, imperatives between design alternatives, and fulfilling the needs gave by the customer. In their methodology, they utilize worldly rationale layouts to evoke value-based necessities from customers that the designed help must cling to. For formalizing imperatives over design, include models are utilized. The Binary Decision Diagram (BDD) investigation is then went to confirm that the picked configurable highlights don't disregard any limitations. At long last, model checking is applied to confirm the designed assistance against the value-based necessity set. They show the achievability of our methodology with a few approval situations and execution evaluations. They first dissect the qualities of the current Transaction Behavior Verification bundle proposal and build up a visitor region season point (TBPS) model. This TBPS model can speak to Transaction Behavior Verification bundle recommendation and visitors by various subject appropriations, where the point extraction is molded on both the vacationers and the inherent highlights (i.e., areas, travel periods) of the scenes.

### 2.3 Video Transmission Enhancement in Presence of Misbehaving Nodes in MANETS

**TarekSheltamiet.al** describes an Mobile Ad-hoc NETWORKS (MANET) are infrastructureless networks where self-configuring mobile nodes are connected by wireless links. The nodes rely on each other to store and forward packets due to decentralized operation. All nodes are working within a cooperative and friendly network context by MANET protocols. In the system, to find the effect of packet dropping attacks on video transmission over MANETs. To the best of the knowledge, it is the first attempt to study multimedia over such environments

**AACK Description** To assume bidirectional communication in every link between a pair of nodes. It means that, if a node N2 receives a packet from node N1, N1 can also receive a packet from N2. It is used to allow the acknowledgment to travel in the opposite direction in the scheme. The misbehaving nodes that to assume in the study are just dropping the data packets while forwarding the control packets

### III. A PROPOSED SYSTEM

In this Secure Weighted Clustering (SWCA) algorithm, energy efficiency is distributed and network performance is improved by selecting cluster heads on the basis of the residual energy of existing cluster heads . Nearest hop distance of the node. It maximizes the lifespan of sensor nodes. It is also one better method to preferable to

distribute the energy throughout the wireless sensor network in order to maximize overall network performance.

DSDV is adapted from the conventional RIP to ad hoc networks routing. It adds or plus a current attribute, sequence number, to each route table entry of the conventional RIP Packet Routing and Routing Table Management. Each mobile destination and a sequence number is generated by the destination node. In each node of the ad hoc network will update the routing table with some advertisement periodically otherwise when significant new information is available to maintain the consistency of the routing table will dynamically changing topology for the ad hoc network. Periodically or immediately if the network topology changes is found, then each mobile node advertises routing information using broadcasting or multicasting a routing table update packet. The update packet will start out with a metric of one to direct connected nodes.

### ADVANTAGES OF PROPOSED SYSTEM

- By using fixed infrastructure network setups will done.
- Ideal for the non-reachable places such as mountains ,across the sea, rural areas and deep forests.
- When additional workstation is required there is Flexible if there is ad hoc situation.
- Implementation cost is cheap for WSN network management .

### IV. CONCLUSION AND FUTURE ENHANCEMENT

- The main challenge is to how to subtract the interference replies from a large number of ordinary tags. To address this problem,
- First propose a Basic Key tag Tracking (B-KT) protocol, which advantage is that the reader only needs observe the expected singleton slots instead of the whole long time frame.
- To save time, SWCA skips the expected empty/collision slots. Based on SWCA, we exploit the sampling idea and early termination tactic to further propose the SWCA-based Key tag Tracking (SWCA-KT) protocol, which possesses better time-efficiency and scalability.
- It also theoretically investigates parameter settings to the guarantee of the estimation accuracy arbitrarily set by the users.
- Our first objective is to reduce energy consumption in all levels. As a result of this work plan, we plan to exploit the

concept of redundancy to enhance results that is related to energy conservation.

- Another interesting work that remains to do is to provide in-network processing by aggregating correlated data in the routing protocol and reduces the amount of data that are transported in the network.

## V. RESULT AND DISCUSSION

The Secure Weighted Clustering (SWCA) algorithm, energy efficiency is distributed and network performance is improved. The life span of sensor node is maximized. It adds the new attribute to each route table. Source and destination is mentioned and marked. The newly created attribute is tracked from the source to destination place. The energy level of the nodes is shown in the energy details and cluster info box. In the energy details box the energy levels is displayed for separate nodes. In a cluster info box the cluster id, node name and cluster head is displayed. The path for the source to destination is displayed in message box. The graph will show clear output.

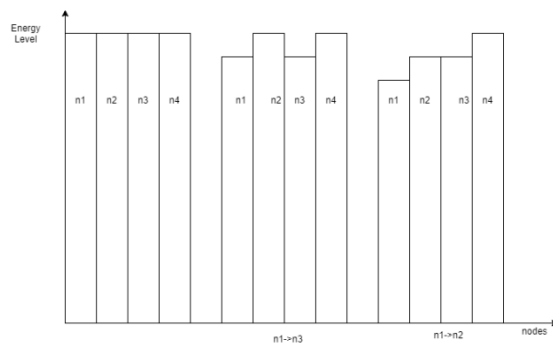


Figure 5.1(Energy level of nodes)

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