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TRUST SYSTEM AND ENERGY EFFICIENT OPTIMIZATION USING WATCH DOG TECHNIQUES

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ABSTRACT

Watchdog technique is a fundamental building block to many trust systems that are designed for securing wireless sensor networks (WSNs). Unfortunately, this kind of technique consumes much energy and hence largely limits the lifespan of WSN. Although the state-of-the-art studies have realized the importance of trust systems' efficiency in WSNs and proposed several preliminary solutions, they have overlooked to optimize the watchdog technique, which is perhaps among the top energy-consuming units. We optimize watchdog techniques in two levels. First, we optimize watchdog locations by considering the fact: although sensor nodes which are located more closely may consume less energy to monitor each other due to shorter communication distance, these nodes are more likely of being compromised together and launch collaborative attacks.

Keywods:- Watchdog, energy consuming ,Homomorphic Hash Function.

I.   INTRODUCTION

Cloud computing is a type of Internet-based computing that provides shared computer processing resources and data to computers and other devices on demand. It is a model for enabling ubiquitous, on-demand access to a shared pool of configurable computing resources (e.g., computer networks, servers, storage, applications and services), which can be rapidly provisioned and released with minimal management effort. Cloud computing and storage solutions provide users and enterprises with various capabilities .we propose it is common for a cloud service provider to have multiple data centre. Centres each have hundreds of thousands of servers. Those data centres are geographically distributed for reliability as well as performance improvement.

II.   DRAW BACK OF EXISTING SYSTEM

➢ WSN may lack a wide variety of business traffic to build up all kinds of trust
➢ Watchdog technique has been proved as a very effective approach to build up WSNTS's foundations, it introduces a large amount of additional energy consumptions which Conflict the energy efficient design principle of WSN.

III.   ADVANTAGE OF PROPOSED SYSTEM

A functional requirement defines a function of a software-system or its component. A function is described as a set of inputs, the behaviour, and outputs. The proposed system is achieved by HOMOMORPHIC HASH FUNCTION. Using the algorithm like the Homomorphic hash function to secure efficiently all the contents that are used in the application. The algorithm we propose matches the intuition of distributing more traffic into data centres with lower electricity price and charging when electricity price is low while discharging when electricity price is high. Moreover, it is easy to implement online and can give analytic bound on the performance. With the increase of battery capacity, our algorithm can get arbitrarily close to the optimal value.

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IV. SYSTEM DESIGN
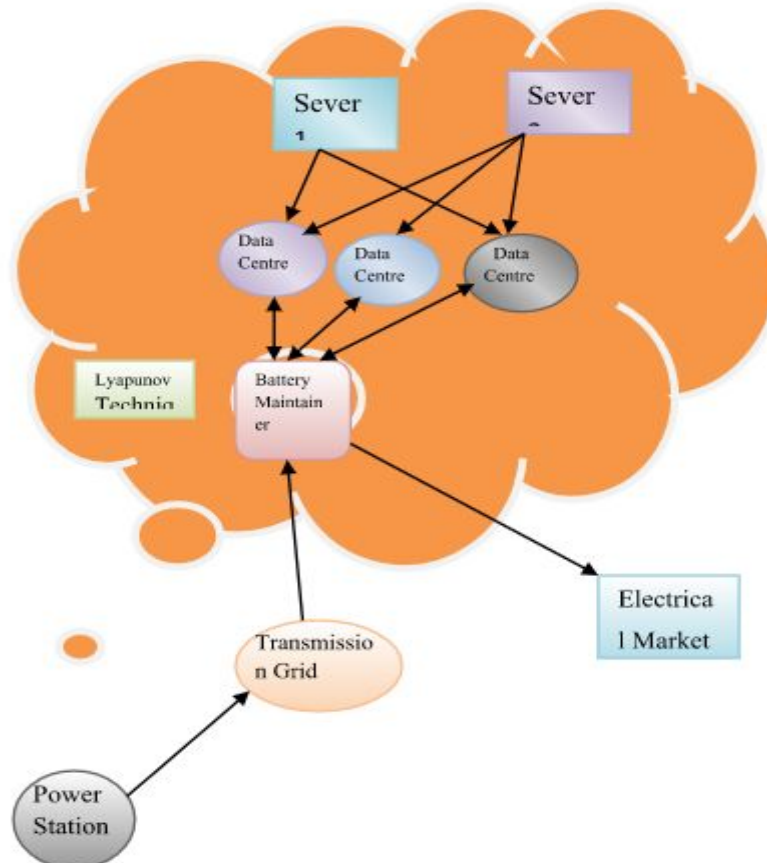
V. PROCEDURE

NODE CREATION
Input: create node and set name, Ip, port for that node.
Output   : Nodes are created and displayed.
THE WORKLOAD MODEL
Input: the data is given by customer requests arrive at each front-end   proxy server.
Output   : it passes to the data base.
 THE BATTERY MODEL
Input   : to store the energy.
Output   : if the power has down it give back up.
THE QOS MODEL
Input   : To sense the no of user in cloud server.
Output: To improve the performance, speed etc..,
POWER CONSUMPTION MODEL
Input: calculate the total energy
Output: Remove the unwanted energy and redirect to power consumption.

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VI. PERFORMANCE ANALYSIS

Intermediate nodes are computing or networking is a distributed application that partitions watchdog's task between source and target nodes. These nodes are connected and communicate by using IP address and host name. Often Inheritor nodes operate over a network on separate functionalities. A server machine is a high performance host that is running one or more tasks which share its resources with nodes. This technique is used to create shortest path between intermediate nodes to target node. Using Watchdog Location Optimization techniques to identify the nodes location. Using DBP algorithm to find the minimum location distance of the target node. Based on Neighbouring Multi hop Routing algorithm to design the routing between nodes. This algorithm is used to calculate the routing path. All the active nodes in WSN, Once the correct destination router is found, an end-to-end peer connection (TCP or IP) is established to carry end-system. This connection remains active as long as the file requested transferred and it is dynamically shut down when not in use. Watchdog Optimization algorithm is presented by considering a new approach. It can be used to solve several optimal problems. It is aimed to minimize the length of the tour and find the target path. Algorithm is highly flexible and can be effectively used to find shortest path by considering very few control parameters as compared with the other heuristic algorithms. This study thus shed light a promising research direction on the design of energy-efficient WSNTS by optimizing the collection procedure of first-hand experiences. Future concerns are to identify which type of attacker and to block the attacker using algorithm. And also to estimate the attacking models parameter.

VII. CONCLUSION

 Swing's high level of flexibility is reflected in its inherent ability to override the native host operating system (OS)'s GUI controls for displaying itself. Swing "paints" its controls0

. using the Java 2D APIs, rather than calling a native user interface toolkit. The Java thread scheduler is very simple. All threads have a priority value which can be changed dynamically by calls to the threads set Priority () method .Implementing the above concepts in our project to do the efficient work among the Server.

VIII.   FUTURE ENHANCEMENT

We propose to enhance the system performance through malicious node detection, where the Hostile behaviour is identified and the malicious sensors are discarded from the final decision making. Furthermore, we propose an adaptive fusion procedure, where the fusion parameters are tuned based on the attack behaviour and the percentage of the malicious sensors. Cloud collaboration is a newly emerging way of sharing and co-authoring computer files through the use of cloud computing whereby documents are uploaded to a central "cloud" for storage, where they can then be accessed by others. New cloud collaboration technologies have allowed users to upload, comment and collaborate on documents and even amend the document itself, evolving the document within the cloud. Businesses in the last few years have increasingly been switching to use of cloud collaboration.

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