SUSTAINING SECURED ORGANISATION BY USING REMOTE PC MONITORING SYSTEM

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Abstract—**We usually come across areas where an admin or department / company head needs to monitor user work. This monitoring helps the authority to know about any mal activity or any activity not supposed to be done in office premises is done by the employee. Remote pc monitoring needs a working internet connection that too having a high bandwidth. Well such system when monitoring on a large number of PC's proves to have a quite reasonable load on the network. Since the system works by sending constant image screenshots of computer screen to intended authority these constant image transfers from a number of computers proves to be quite an unethical practice. So we propose an On Demand Remote PC monitoring system that monitors a PC on authority demand. The system is designed to get a screenshot of a PC's as and when requested by admin. Whenever the server sends a monitoring request the client pc screen is captured and transferred to server PC as a screenshot. This allows the screenshots to be viewed from anywhere irrespective of the server application installation. Our system thus accomplishes the on demand pc monitoring functionality yet has almost no load on the usable internet bandwidth.**

Index Terms— **sensor networks, remote monitor**

I. INTRODUCTION

In those time periods monitoring concept has been a significant challenge to any organization because monitoring is a concept where in those days was not achievable because of cost and other primary factors. In our system we propose a monitoring concept in such a way that any organization can adopt.

Generally we may come across many MNC's where the data present inside a particular specific organization data's are not highly secured and there are many possibilities of leakage of important data's to outsources or competitive organizations so it is in much demand to protect our private data's. So we may use the concept of remote monitoring.Remote monitoring is a concept where all the systems are monitored by using a single system. In that system for each specific time period of about 10 seconds or 20 seconds screen shots of all the systems will be sent to the server so that the process will be much easier so that the mal functional activities will be reduced rapidly and if any happens we can take intermediate actions.

Organizations would be very interested in knowing about these server failures immediately and take corrective action before the user starts complaining. In case of server failure the present situation about the organization through email and text message to phone.

In our system the primary factors such as cost will not have much impact over the organizations profit or the investment.

II. RELATED WORKS

The papers which have been published earlier deals with the monitoring through internet or monitoring the pc's by logging onto antivirus software.There are lots of applications based on ZigBee technology, in several fields they started using ZigBee Alliance. Some applications based on ZigBee module. There are certain studies which based on IDC, and later on find out some deficiencies via analysis and comparison.

Later on they introduced remote care health systems. This idea is to monitor the status of patients efficiently. In the home appliance industry, there already exist some innovative ideas. Later on novel based on universal remote control based on ZigBee, called Z-URC was published and they renovated a new

method in URC field. There is also another notable work is power and current controlling for home electric outlets proposed .In addition to that home appliances ,ZigBee technology has broadly perspective in industry field. Later on a forward remote monitoring system of pumping unit based on ZigBee wireless mesh network.

Though the zigbee technology, IDC,Z-URC have provided certain improvements but yet there are certain areas in which they lag particularly they required login and then only we can able to monitor the systems of the organizations.

In our system we deals to monitor the entire organizations without requiring certain login we just require the trustable monitoring employee

The points in the above mentioned theories are still useful in our system but the only thing is that we just need to modify to ensure that high security is provided by monitoring the systems in the organizations.

III.   System Function

The system manages the client systems to be monitored to achieve the goal of management unmanned. This system allows you to view and record desktop activities of PC's connected to your network. You will be able to monitor what is happening on user's PC's and record screenshots of all their actions. IT will record screenshots of PC's via your network at selected time intervals and let you review them anytime later. It provide screenshots as unchallengable proof for your employee investigations.

It will display all the screens of all computers in your network. In just one click by the authorized person, to solve any computer problem remotely.
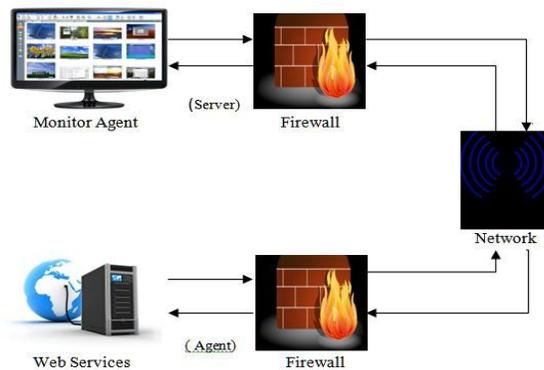

Fig.1. System Function

The system login and the process of the both user and admin is shown in the overall diagram. When the admin logged in he can checks the employee details, view screenshots, take backup of old files and stops suspicious users. He has the rights to delete the old screenshots from the database when it is not required.

In this system the user employee will work as per the schedule given to them as soon as they login to their systems they will just perform their designated tasks but the monitoring agent will recive the screenshots of the entire organizations and in case if there is any inappropriate actions then the monitoring gent will halt the works and do the necessary actions.

Screenshot

• Capture the screenshot of user desktop and transfer it to server.
• Server takes the screenshots and stores the screenshots in separate directory automatically.
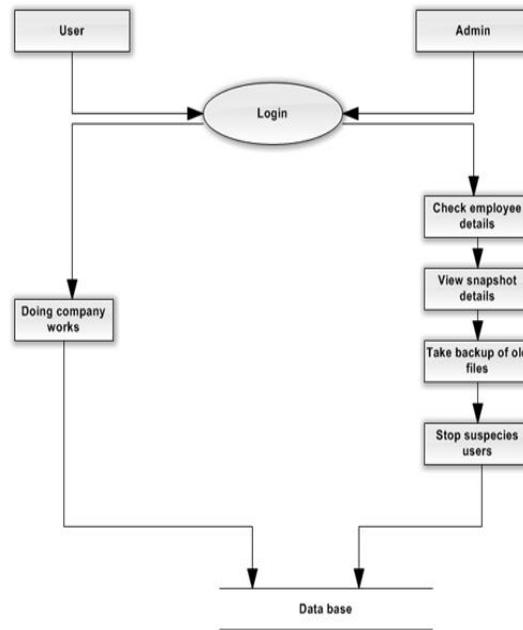
Fig.2 Overall Diagram of System Function

System Design

Inour system we may adopt many working users, but to control the entire working users activity we use just a single monitoring PC so that we may not need multiple monitoring persons using in the system.

The wireless remote monitoring system has more and more application, a remote monitoring system based on SMS of GSM is presented. Based on the total design of the system, the hardware and software of the system is designed. In this system, GSM network is a medium for transmitting the remote signal. The system includes two parts which are the monitoring center and the remote monitoring station. The monitoring center consists of a computer and a TC35 communication module of GSM. The computer and TC35 are connected by RS232. The remote monitoring station includes a TC35 communication module of GSM, a MSP430F149 MCU, a display unit, various sensors, data gathering and processing unit. The software of the monitoring center and the remote monitoring station is designed by using VB. The result of demonstration shows that the system can monitor and control the remote communication between the monitoring center and the remote monitoring station, and the remote monitoring function is realized.
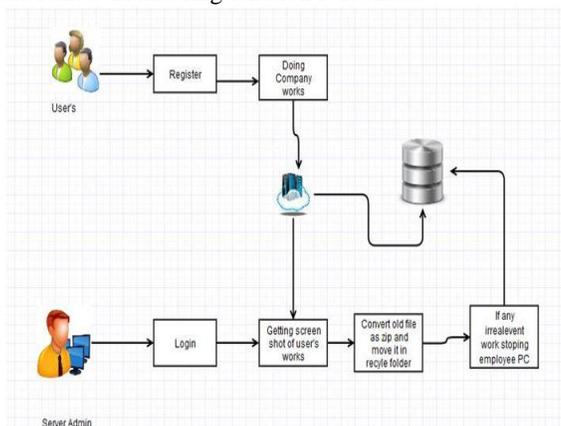

Fig.3. Functional Block Diagram

RMON (Remote Network Monitoring) provides standard information that a network administrator can use to monitor, analyze, and troubleshoot a group of distributed local area networks (LANs) and interconnecting T-1/E-1 that any network and T-2/E-3 lines from a central site. RMON specifically defines the information monitoring system will be able to provide. It's specified as part of the Management Information Base (MIB) in Request for Comments 1757 as an extension of the Simple Network Management Protocol (SNMP). The

latest level is RMON Version 2 (sometimes referred to as "RMON 2" or "RMON2").The system uses 32-bit RISC processor Samsung S3C2440 with various features and peripherals. It's based on ARM 920T core and supports embedded Linux, WinCE, Vx Works and other embedded operating system. All the properties meet the requirements of the remote monitoring system. This allows administrators to analyse traffic by protocol.
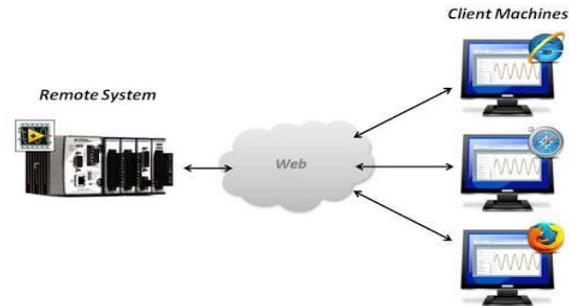

Fig.4 Remote System

Comparison Between Existing and Proposal System:

   In the existing system we can clearly see that the security is high but the other factors such as adaptability efficiency cost and other secondary factors are relatively high so that it is difficult to adapt for those who are initially starting the organizations
   In our proposed system it is clearly visible that the primary factor security is high and other secondary factors such as adaptability cost and efficiency are relatively less when compared to the existing system so that the initially starting up organizations can easily afford this system

   Now let us see the comparison between the esisting and proposal system in the schematic manner
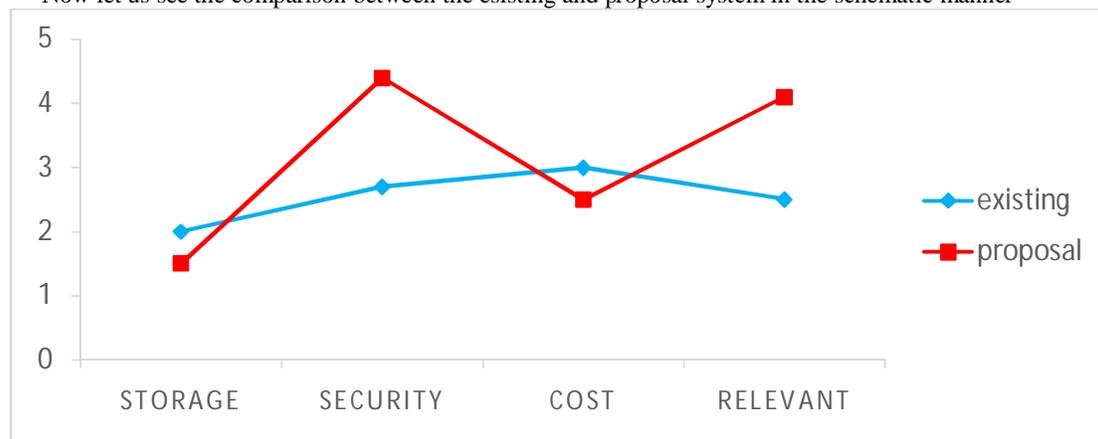
Fig.4. comparison between existing and proposal system

IV. Conclusion

   In this paper, we proposed a novel scheme to monitor, control and manage the Client Systems, and then we describe the software and hardware design of our intelligent remote monitoring system based on the ZigBee wireless sensor network.
   The functions which the system implements include data collection, analysis, management, storage, automatic alarm, display and control.
   The owner of the organization will not have any clue what is going on in their organization, so we also propose the installation of owners mobile number in to our system since if there is any misuse or any alert coming from the monitoring system. It also sends the alert SMS to the owners mobile , so that the owner can be aware of what is going on in the entire organization.

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