

# A New Technique for Secured Authentication with Pc Control through SMS

<sup>[1]</sup> Birundha.K, <sup>[2]</sup> Harini.S, <sup>[3]</sup> Hemalatha.G, <sup>[4]</sup> Kalaiselvi. P, <sup>[5]</sup> A.V.Santhosh Babu  
<sup>[1][2][3][4]</sup> B.TECH Student, <sup>[5]</sup> Assistant Professor

<sup>[1][2][3][4][5]</sup> Information Technology, Sengunthar College of Engineering, Tiruchengode, Tamilnadu, India.

**Abstract** – Short message service (SMS) is a technology that can use mobile devices to send and receive text message, with wide coverage area, high popularity, high reliability, low expenditure, easy development and other characteristics. Using GSM modem or short message platform of network, short messages can be send and receive between the computer and the mobile terminal. PC can be secured by using GSM without internet. Any user trying to misbehave in the system, then the application will send alert message to the administrator’s mobile, then the administrator can shut down the system from any remote location through his mobile by sending a SMS.

**Keywords:** SMS service, GSM, text message, Computer, Mobile.

## 1. INTRODUCTION

In the current economic situation corporations as well as small companies are looking at various ways to cut down costs. One of the main ways to achieve this in developed countries is to outsource the work to developing countries. This outsourcing can be software development, R&D, Business Process Outsourcing or Knowledge Process Outsourcing. In similar lines, executives are trying to outsource the activities of the personal assistants to developed countries. These activities involve scheduling appointments, managing calendars, filtering emails and making travel arrangements. All these tasks can be performed by anyone without being in the same office of the executive with the technological advanced made today. But there is no appropriate system to streamline the processes involved and allow seamless between the executive and the assistant even though they are on two different continents.

## II. PROBLEM STATEMENT

### A. Existing System

The system will work normally when the authorized person enter the correct username and password. The system will send an alert message through internet when an unauthorized person trying to login into the system without knowing the username and password.

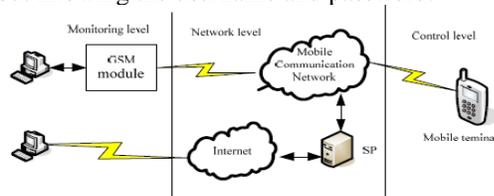


Figure 1. Structure of remote computer supervisory control system

### B. Drawbacks of Existing system

Internet can be disconnected at any point of time.

In most of the system certain features such as date ,time, etc., need to be reset for connecting to the internet .It requires high network speed and we have to spend high cost for internet .Hacking can be done easily by using internet where the server is used for storing the username, password and other details.

### C. Proposed System

The system implies the way of securing the PC by using microcontroller kit instead of using internet. The microcontroller will read the inbox message Which then covert it into serial output. This serial output is fed into the listener using USB for shutting down the PC. PC OFF command will be written using HI TECH-C coding in the microcontroller. Microcontroller will check for the PC OFF command given by the user and in build for the purpose of shutting down PC. When both the command match PC get shutdown.

## III. FUNCTIONAL MODULES

### A. Login module

The login form module presents site visitors with a form with user name and password fields. If the user enters a valid username and password combination they will be granted access to additional resources on your PC.

### B. Authentication module

Administrator can authenticate some folder using this module through folder lock or folder hide option. At the time of folder watching if any user is trying to change some modification (Rename / Delete / Create somefile or folder) administrator system send SMS to administrator mobile. Administrator after getting alert message authenticates the particular folder using folder lock or

folder hide process. Administrator once folder lock through SMS, server send password to administrator's mobile for folder unlocks. Administrator once hides the folder through SMS, not visible for particular folder.

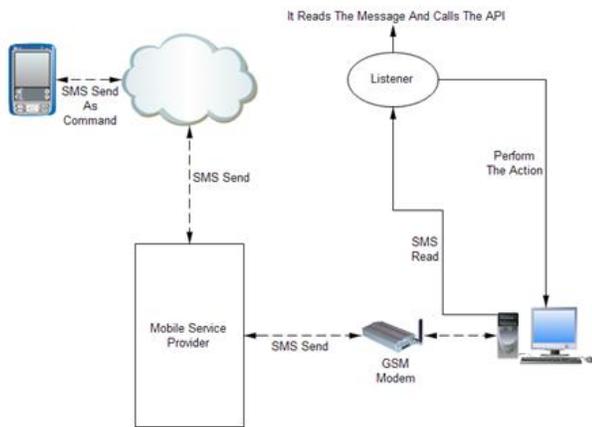
**C. Retrieving the message module**

This module is used to receive the message from administrator using GSM modem and this type of hardware device is controlled by using device driver. After getting the administrator's message, server first check received format is correct or not. If the format is correct then server check administrator what type of action requested. After identifying the action type server system send request to administrator's system and take reply as per the given action. After getting the reply from administrator's system server send SMS to administrator mobile.

**IV. SYSTEM DESIGN**

**A. Architecture**

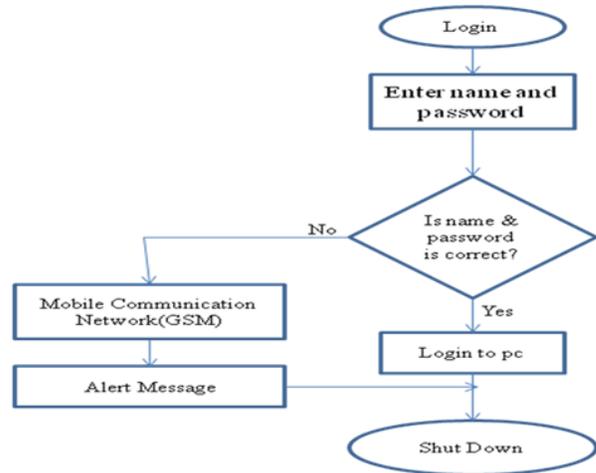
This architecture of this system is based upon the SMS technology.



It uses GSM modem and mobile phone for sending and receiving messages between two terminals. Microcontroller in the GSM Modem will be responsible for securing the PC.

**B. Flowchart**

This shows step by step representation of securing the PC.



The user will login into the PC by entering the username and password. If the username and password is valid then access is provided else GSM modem will send an alert message to the mobile without internet .By seeing this alert message the user can send reply message for shutting down PC.

**V. SYSTEM FUNCTION**

*The basic function of system includes:*

- 1) Real-time monitoring: make real-time monitoring towards the operating process of status information of the controlled computers, save journal files or data base to the monitoring information, form short message and save it to the transmit queue according to the preset threshold of the monitoring object.
- 2) Short message sending and receiving: send the information content of the message queue to the monitors' mobile phones or terminal through short message service center; receive the message from the message service center and save it into the received message queue in order.
- 3) Short message command management: the monitor can set corresponding different monitoring function of the short message sentence according to own habit.
- 4) Remote control: make real-time monitoring towards he received message queue, when discovering new message, start corresponding process to finish remote control through message command analysis and recognition, and form the performance result into short message and save it into message sending queue.
- 5) Data maintenance: check previous monitoring journal information through the controlled computer, set or revise threshold information, etc.

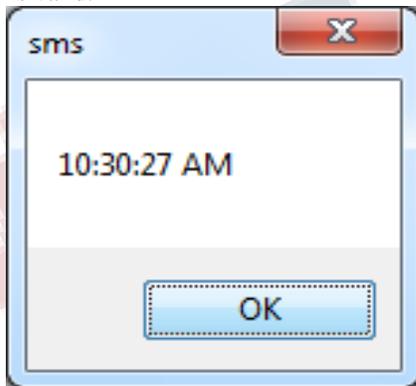
**VI. RESULT AND DISCUSSION**



This is the welcome page of PC having all the feature options for login to the PC.



PC login will be securely process when the username and password is valid.



When the user securely login into the PC the time on which the person enter into the system will send as message. If the password is invalid an alert message will send to the administrator mobile and by replying to that alert message the PC get shutdown.

**VII. CONCLUSION**

We had focused on introducing a secure, accessible, and remotely controlled solution for automation of computer operations and security using the SMS-based system. The system is extensible and many computer operations can be automated by writing batch scripts and scheduling them to be executed upon receiving particular SMS instructions. As GSM technology has proved to be

capable solutions for remote control, security and its cost effective when compare with other alternatives.

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