

Remote Monitoring, Controlling and Lost Hardware Detecting through GSM

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Abstract—

The project aims to develop various network utilities which are required to effectively monitor, control via GSM and to provide security to a LAN network.

It aims to develop an integrated software solution that allows a network administrator to monitor, control his LAN also by providing Security to the Hardware resources which is the essential property of any Network lab, In a concern, computers are grouped together to form a network to manage and control activities of network which very panic task for administrator to release some sort of pressure we have integrated three modules into one.

This project is to provide the maximum control over the client's pc, security to the hardware resources about the network to the administrator, maximum control via GSM Modem on the his mobile phone when admin is away from Network lab

Keywords— LAN, Hardware, GSM, Modem, Security

I. INTRODUCTION

System monitoring, controlling and lost hardware detection via GSM is an application that contains several integrated tools which work together at the same time. It monitors remote desktops over the network. It provides security to computer hardware resources which are connected in LAN. It controls and monitors computer system from remote places through mobile. It consists of three modules, a remote monitoring system, detection of unwanted activity and LAN controlling via SMS:

In remote monitoring system module desktop replicating software captures the image on the computer screen by intercepting signals that are being transmitted to the computer's video card. These images are then streamed across the network to the system administrator. Multi-Screen Cross Platform Remote System monitoring is provided. Monitoring of multiple clients' simultaneously on server screen is possible. It allows server to see live screens of remote computers. In detection of unwanted activity module, unwanted activity in the network can be controlled or captured. If any user in the client try to steal some connected hardware resources it can be detected by the server. In this module, we make the directory of all the hardware parts connected to each client pc and scan in time interval if any hardware is missing it can be detected by server. In LAN controlling via SMS module, administrator can control the whole network by using the mobile phone from any location which is connected to the server.

II. LITERATURE SURVEY

Simple options are there in now a day's operating systems it to execute applications at the remote end. The basic services used by these operating systems today promote executions of the applications at the remote end with just restricted access. Some of the utilities for Remote Access are available in an Operating System, but with Limited access and services.

Available Utilities

1. Remote Desktop Connection

In Remote Desktop Connection usually two PC's are connected in the LAN. In These utility both System can be a Server as per the requirements two PC's are connected with each other either by their IP address or by PC Name. When the connection is established the client PC screen get Log Off.

2. TelNet Service

TelNet is a program. It stands for terminal emulation program through which we can manage remote networking device.

Example:

Router, Wireless Access Point (WAP), Server, Switches & Firewalls.

Port Number of TelNet is 23.

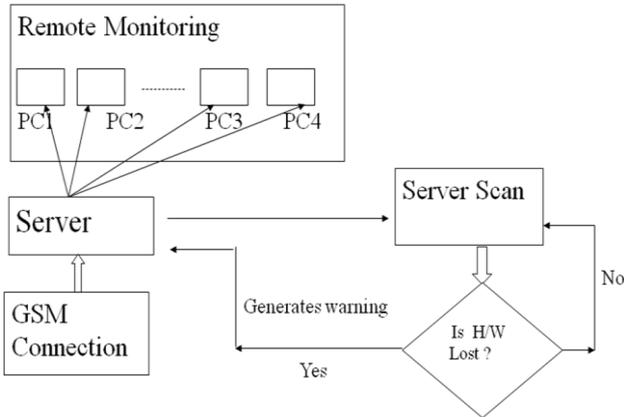
3. Team Viewer (Internet Connection Required):

Team Viewer will allow you to manage Remote System but not for the transferring of any Data or File.

Existing System is having the following limitations:

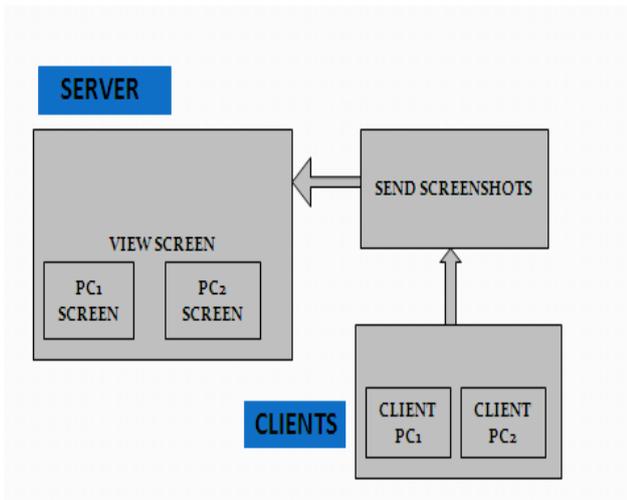
- Administrator is not having full control.
- There is no provision to reboot or shutdown through mobile.
- Supports only one remote command on the remote machine at the same time.
- It cannot capture the remote systems Desktop.
- No device to detect lost hardware resources except camera.

III. SYSTEM ARCHITECTURE



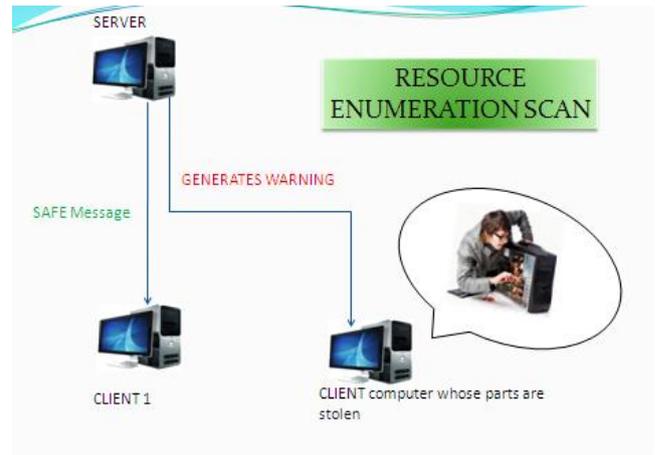
This paper basically focuses on providing Facilities to the administrator by monitoring, controlling via GSM following modules have been incorporated within this utility:

1) Remote Monitoring :



In this module, desktop replicating software captures the image on the computer screen by intercepting signals that are being transmitted to the computer's video card. These images are then streamed across the network to the system administrator. Multi-Screen Cross Platform Remote System monitoring is provided.

2) Detecting Unwanted Activity :



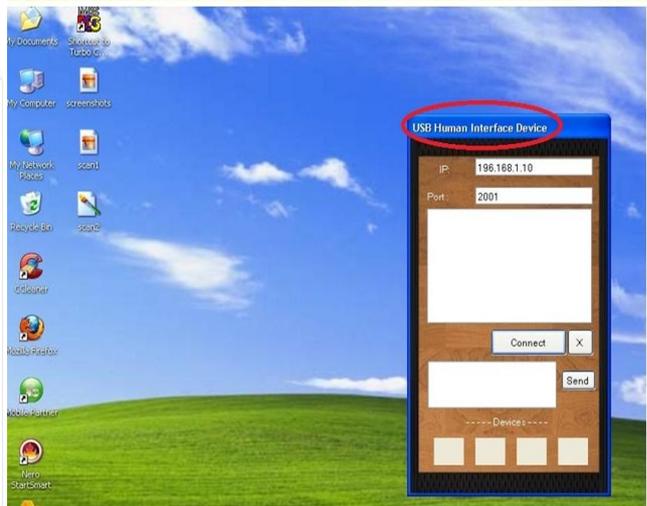
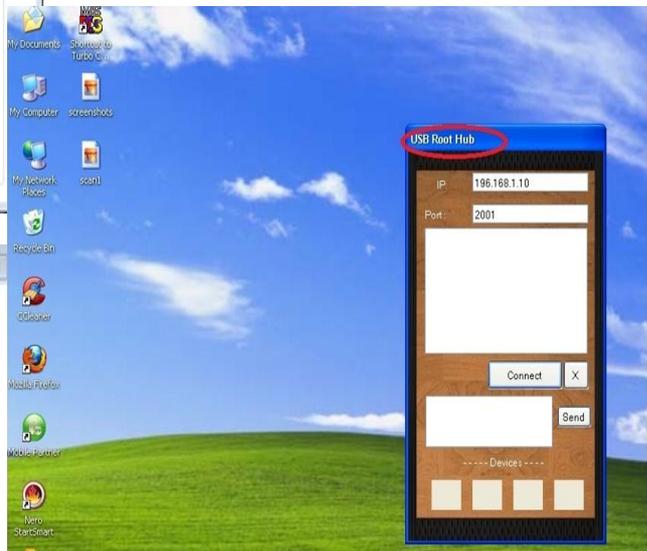
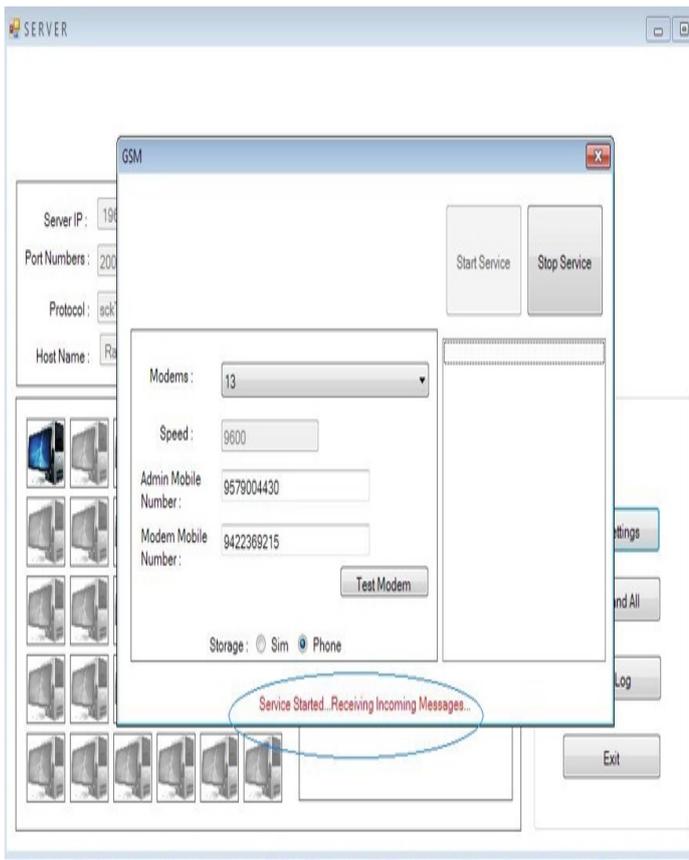
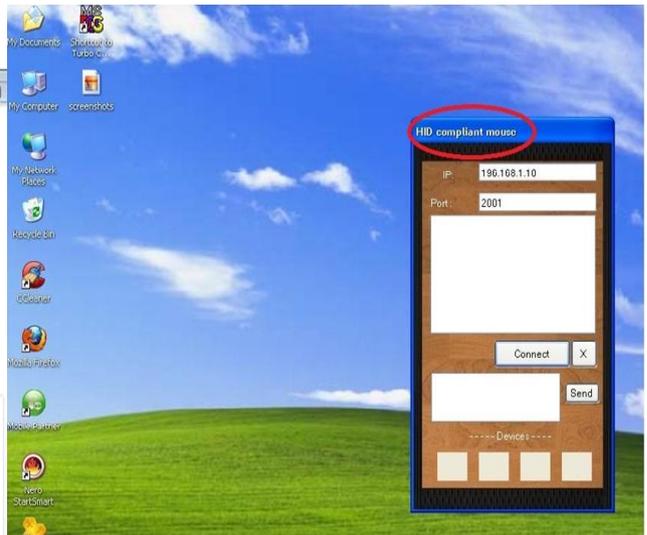
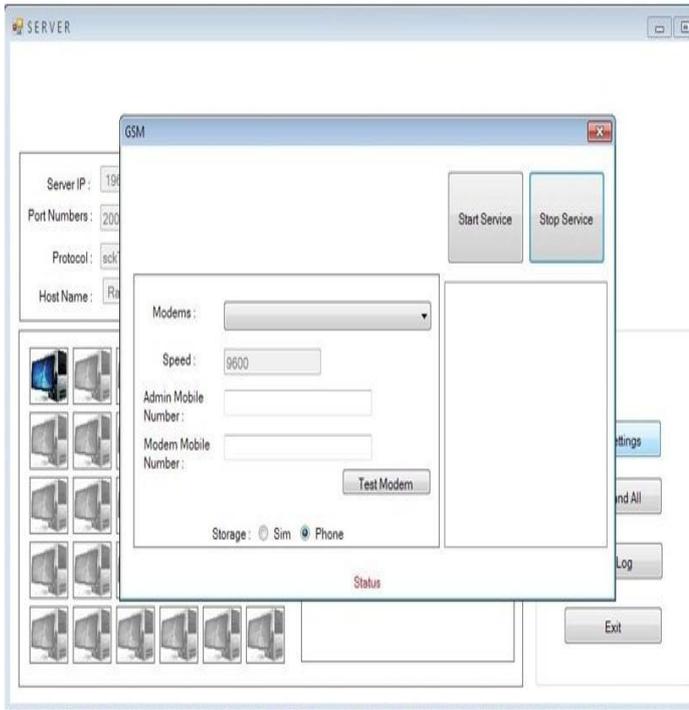
In this module, unwanted activity in the network can be controlled or captured. If any user in the client try to steal some connected hardware resources it can be detected by the server. In this module, we make the directory of all the hardware parts connected to each client pc and scan in time interval if any hardware is missing it can be detected by server.

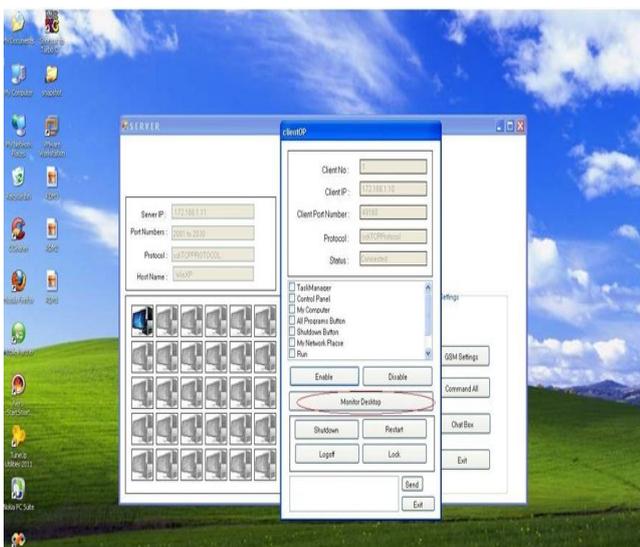
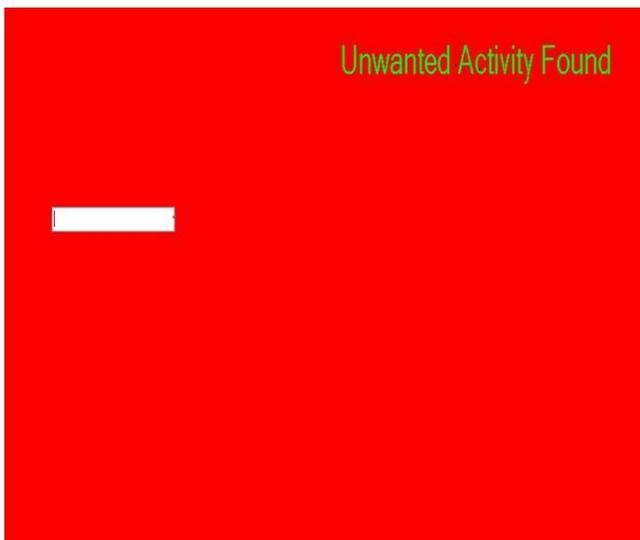
3) LAN Controlling Via SMS (GSM) :

In last module, administrator can control the whole network by using the mobile. phone from any location which is connected to the server.



IV. SNAPSHOT OF OUTPUTS





V. APPLICATIONS

A. LAN monitoring at college level

It can be used for monitoring, to detect hardware enumeration in client PC's.

B. In Organization, Offices, Banking Sector

Any Organizations where security of computer assets is prior such as Research Centers where large numbers of computer is attached in network, hardware resource is main property of such a research centers. It can be used where security plays an essential factor.

C. Internet cafe or cyber café

In the internet café or cyber café where users always attempts to do some unwanted activities such removing hardware resource ,visiting restricted sites, changing system settings

VI. CONCLUSION

Resource Enumeration Provides Security to Devices

- GSM module provides the facility of controlling the Client PC in the LAN through mobile.
- It includes the facilities through mobile like:
 - Shutdown, lock, Restart and logoff
 - Enabling and disabling services of operating system such as Task manager, Control panel, My computer.
 - Disabling shut down button from start menu

VII. FUTURE SCOPE

A. LAN monitoring, hardware detection and controlling via GSM can be extended onto the more than one network so that Administrator can cover large network

B.LAN monitoring, hardware detection and controlling via GSM can allot hardware resources to the client PCs such as Printer, Scanner machine via its mobile phone through SMS to the server, when Administrator is not present in network lab.

VIII. REFERENCES

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