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LAN Monitoring and Administration using Android Phone

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ABSTRACT- This paper demonstrates the process to provide maximum details about the computer in network to the administrator on their cell phone, so that he can view and monitor all the machines in the network. In concern, grouped together to form network. To manage and control the activities of our network while in office is an easy task. But, while you are away from office, how do you go about with normal monitoring and controlling of network? Instead of depending on any third party information, you can always have your mobile phone/cell phone serve the purpose. Just load the project in your mobile/cell phone, login to our application anytime and see who is busy with what in the office. There are several functions provided which will help for some specific important services.

Index Term: Android, GPRS, VNC, Wi-Fi.

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1 INTRODUCTION

In the era of internet and Mobile phones, initially mobiles were merely used for calling or messaging. Now-a-days, the scenario has changed. In today's world, more focus is given on the availability of the internet and thus using different applications present in the android market. Our project focuses on providing the user with the ability to keep a constant watch on the computers that he has registered using the smart phone. With the help of the project, the user can use various facilities which includes configuration of the applications which the user wishes to restrict or when such applications are opened, using the hand held device the user can terminate these applications. Also file transfer can take place between the Phone and the computer also between the computers registered on the phone.[1-3] Checking of removable media's can also be done with this system. The application will work only if the android phone is above version 2.3 and the server has to be Windows server 2003 or above. The basic idea behind our project is to provide the user with an Android application that helps him to monitor the computers while he is away from his desk. Administrator is provided with various GUI screens in android to monitor local area machine through server machine from remote place.[4-5]

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2 RELATED WORK

Presently in the android market we have applications which can access the PC using the phone as if we were actually using the PC. Some examples include, Team Viewer, Log Mein etc. While going through all the similar applications, we realized that no application in the current market could provide the user to monitor the computers that are connected to it. The work done previously include an application called A Framework for Wireless LAN Monitoring and Its Applications VNC user can access and manipulate the remote computer through a VNC viewer.[6[

3 EXISTING SYSTEM

GSM based monitoring for LAN

In this system it control and monitor the LAN network from our email i.e. internet, from anywhere irrespective of distance. Say, you have a LAN setup at your office. Sitting at home you want to learn the LAN status. You can do so by your cell phone and executing the same. In this system Administrator sends his request through SMS using his phone via GSM modem to the server. Server then recognizes the client machine which administrator is supposed to monitor and extract data from locally cached data buffer where latest 15 sec data of every machine is updated or stored and sends this info to the administrator as response. Server sends command to the clients like start process, shutdown process, kill Process, create, delete, send task list, and compile code.[7] Through the GSM service provider the communication is done with the GSM modem which communicates with the server and the server communicates with the client. All clients are

controlled and monitored by administrator via a series of sms.[8]

Proposed System

The main purpose of the system is to obtain maximum information about the network to admin on the Android Phone, whenever the admin is not present in the server room
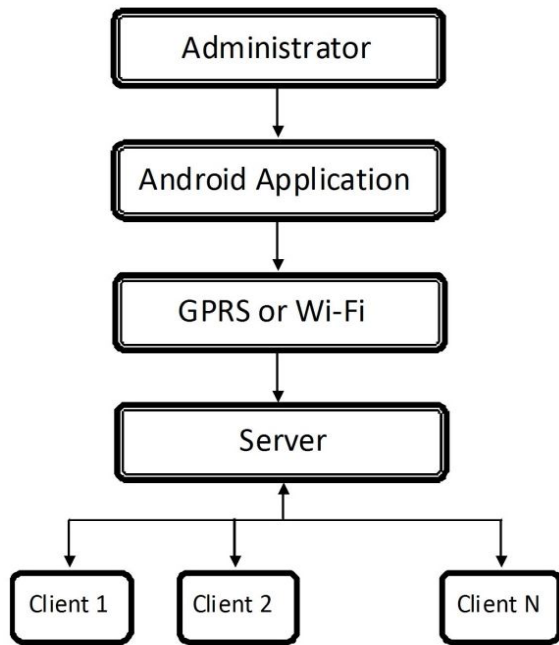

Fig. 1Block Diagram for Android Based System.

The application to be developed is proposed to work over all android phones which are above version 2.3.The system working is divided in two parts: client side and server side. Common server will be there in between android mobile and all clients. Common server & all clients will have their specific port numbers. In case we have to put the system on internet instead of wi-fi then we have to use static IP .Then common server will have static IP. Administrator is provided with various GUI screens in android to monitor local area machine through server machine from remote place. System will need a laptop/pc as a common server, some laptops/pc's as common client and an android mobile phone with .apk file of our project installed in it. This application will be compatible with android 2.3.3 version onwards.
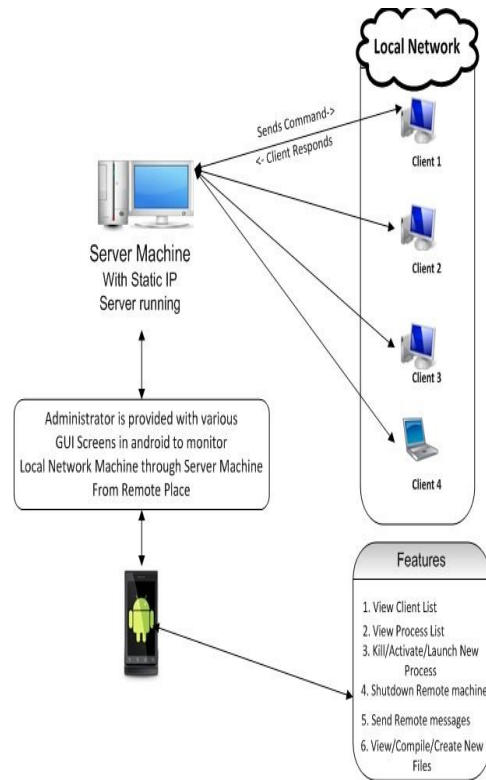

Fig. 2 System Architecture

System Objectives:

Features controlled from cell phone:
1. PC List: Get in your cell phone, the list of entire client's in LAN. Keep pinging every time to check the latest status of the PC's. Anytime, the PC goes offline, its name is removed from the list.
2. Activate Process: Activate different processes ineither the server machine or any of the client's.
3. Kill Process: Kill the desired processes in eitherthe server or clients.
4. Read: You can read the drives, folders, files of any of the client machines/ the server machine from cell.
5. Open File: A small text file residing in any of the client or the server machine can be opened in your cell phone.
6. Broadcast messages: Broadcast messages to clients, Server from cell.
7. Chatting: You can establish half-duplex chat between clients, server and cell phone.
8. Shutdown: Shut Down the client machines from mobile

4 CONCLUSION

Android market being the most widely used market for all types of applications, we have focused to develop an application using android. Thus concluding from the previously developed applications, we can say that, these applications did not provide the user to remotely monitor his computer. Keeping this in mind we decided to develop 'LAN monitoring using android mobile'. Using our application, the user just needs to register all the computers which he need to keep an eye on. When some of the applications which are kept in the black list are opened then the computers will send a notification to the android user and the user can thus terminate this restricted application. This application contributes for IT Administrators to remotely control any computer present in the network, allowing them to remotely troubleshoot and solve problems faster. It can help the colleges to monitor the labs, to restrict the use of forbidden sites or applications.

5 ACKNOWLEDGMENT

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