Remote Desktop Monitoring and Controlling

Abhishek Kumar Gupta¹, Sagar Goswami², Ankur Nasa³, Dr SC Gupta⁴

¹,²,³ Final Year Student, Computer Science & Engineering, PIET, Haryana, India
⁴ Chairman CSE, IT Department, Computer Science & Engineering, PIET, Haryana, India

Abstract - In today’s era, every organization whether it’s a company or a college wants to have look on activities performed by employees/students on their respective computers. To solve this problem, Remote Desktop Monitoring and Controlling comes into picture. It allows to continuously monitor and control each and every action being taken by anyone on a desktop. Through this, an administrator or a faculty can see concerned client’s activities. In addition of monitoring, he/she can even control their client’s desktop to help them in resolving any issue or problem by having access of their hardware’s control on Keyboard, Mouse etc.

Key Words: Server, Client, Remote, Monitoring, LAN, WAN

1. INTRODUCTION

1.1 Background

Initially, we are presented with desktop applications which provide only one to one communication between server and client which means a server can monitor only one desktop screen. In these applications, if you want to have one to many connections between server and client, these applications don’t provide such communication simultaneously. It means you can monitor only one desktop screen at a time. At the same time, they don’t provide functionalities of monitoring and controlling on remote desktops.

1.2 Aim & Objective

The project aim is to develop such a application which allow to interact the multiple clients with server at the same by connection via LAN or WAN. It is not limited to only monitoring the remote desktop. It also provides the advantage of controlling the multiple clients by server simultaneously. Administrator can watch all client’s screen on a single server screen.

2. LITERATURE SURVEY

2.1 Related Work

The system provides monitoring of client’s screen but uses embedded sensors for providing the functionality of monitoring[1]. But, in Remote Desktop Monitoring and Controlling we are not using any type of sensors and it is purely based on the concept of socket programming, Robot Classes etc.

This system runs on a Java RMI mechanism in order to monitor the LAN network which pings continuously to get list of running process on Remote Desktop[2]. But Remote Desktop Monitoring and Controlling will live monitor and control the remote desktop, so it becomes easy to detect the client’s activities without actually getting present physically near to client.

2.2 Problem Statement

How to remotely monitor around 6 systems simultaneously. The intent is to split the screen into 1/6th and monitor all systems at the same time. Services are available to remotely monitor multiple desktops. It is Overlapping. Our aim is to fixed location for each monitor whenever it is opened. These remote desktop should not be overlapped with each other. User has to view simultaneously all the monitors.

3. PROPOSED SYSTEM

The project “Remote Desktop Monitoring and Controlling” is based on the client server architecture in which we have implemented socket programming where one PC or LAN or WAN will behave as a server. With the help of this server, Admin/Teacher can have continuous look on activities of each client on desktop or PC while any online test ongoing.

Fig 1. This figure shows the connectivity of six clients to a server at a time through LAN.
4. WORKING METHODOLOGY

First of all in Remote Desktop Monitoring and Controlling System clients login to the system and connect to server machine. When clients logon to the system his desktop will be displayed to server machine without knowing him. Server can communicate and control with client as well as perform remote operations like restart, shutdown etc

Remote Monitoring

Monitor each and every Clients/Students system from the Server/Teacher machine, Teacher can easily judge that if there is anything illegal or out of the range activities of Student's privilege are running on the student's desktop Then Teacher will send warning message to student.

Remote Copy and Paste

Copy and Paste information between local computer and a remote computer.

5. MODULE IMPLEMENTATIONS

5.1 Client Module:-

The module used by client to connect with the server. It asks for Partner Id (Server's IP) and Port Number on which application is running.

5.2 Server Module:-

The module where screen of connected clients will be displayed to the administrator. This module also provides server's IP and Port Number over which application is running.

Here administrator can watch as well as control six client's desktop simultaneously.

Above figure showcases server's module after 2 clients get connected to server.

6. CONCLUSION

This paper explains concept of Remote Desktop Monitoring and Controlling which is helpful for monitoring multiple computer's screen remotely. This system monitors the client machines connected to server machine. It also performs remote operations to control client’s machine.

7. REFERENCES
