

Virtual Desktop System

Vinayak Tilekar¹, Nishant Ahire², Yash Dolas³, Sukanty Chakma⁴, Prof. M.U. Sanap⁵

Student, Information Technology, Pimpri Chinchwad Polytechnic, pune, India¹⁻⁴

Lecturer, Information Technology, Pimpri Chinchwad Polytechnic, pune, India⁵

Abstract: Today the world is rapidly changing the statement “We are in the world” to “world is in our hand”. Today is the World of technology. Information technology is the technology used to store, manipulate, distribute or create information. All these activities are handled by the System Administrator. In the previous system they can store the Activity of the one system and monitor on one machine so the proposed of previous system we can develop a Virtual Desktop system. A System Administrator is a person who manages a computer network. He maintains and manages all the machines in the network, usually a LAN or Local Area Network. The machines may be server machine or client terminals. The System Administrator deals with various operations while monitoring/network. He has to physically as well as logically keep a check on all the machines in a network. So, the job of administrator increases. They should know all the details of the client. Our system, Virtual Desktop helps the System for Administrator to monitoring the network and the clients in it. The Virtual Desktop is a fast, easy and efficient way for Administrator check and Monitor the clients Machine.

Keywords: LAN, Wifi, Remote retrieval.

I. INTRODUCTION

The project aim is to secure the network or a LAN by implementing such a software which is enable to carry out operations which are capable to monitor whole of the network, sitting on one chair by viewing remote desktop, passing messages to remote system and is also able to shut down the system by performing remote aborting operations. This software is purely developed in JAVA.

This project is to provide the maximum details about the network to the administrator on their screen without knowing them their users. The administrator can view the static image of client’s desktop and then the admin could send warning message to the user to stop that operation immediately. Even than if client do not stop then administrator has the facility to abort the system remotely or restart the system whatever necessary he thinks.

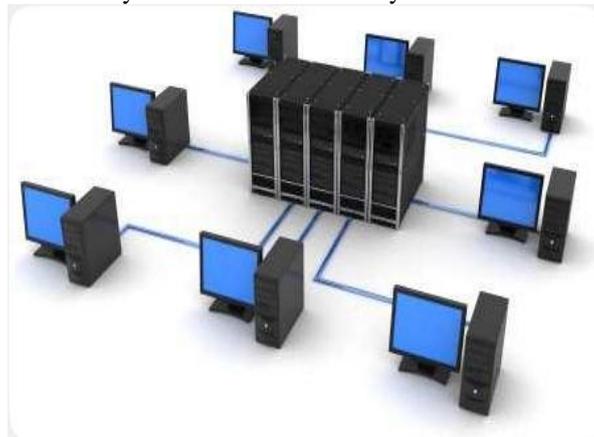


Fig.1. Introduction of LAN

II. LITERATURE SURVEY RELATED WORK

➤ Existing System

LastActivityView is a tool for Windows operating system that collects information from various sources on a running system, and displays a log of actions made by the user and events occurred on this computer. The activity displayed by LastActivityView includes: Running .exe file, opening open/save dialog-box, Opening file/folder from Explorer or other software, software installation, system shutdown/start, application or system crash, network connection/disconnection and more. This utility works on any version of Windows, starting from Windows 2000 and up

to Windows 10. Both 32-bit and 64-bit systems are supported. This tool gathers information from various sources, including the Registry, the events log of Windows, the Prefetch folder of Windows. The accuracy and the availability of the information displayed by LastActivityView might be different from one system to another. For example, if the user or a software makes changes in the Registry, the action time displayed by LastActivityView might be wrong, because it's based on the modified time of some Registry keys. Also, for every type of action/event, there is some limitation according to the way that the information is saved in the system. For example, the 'Select file in open/save dialog-box' action is limited for one action of every file extension, so if the user opened 2 .doc files with the open/save dialog-box, only the last one will be displayed. LastActivityView doesn't require any installation process or additional dll files. In order to start using it, simply run the executable file LastActivityView. Exe After you run LastActivityView, it scans your computer and displays all actions and events found on your system.

III. PROPOSED WORK / SYSTEM

Previous system that was used to collect information from various sources on a running system, and displays a log of actions made by the user and events occurred on this computer. This system was designed for the standalone computer system. So, to overcome this drawback, we designed the system that will work for LAN (Local Area Network) also for wireless network and it will monitor the whole network. In our system, Server gets the IP addresses of all the client's connected to the LAN. There is one more advantage of using this system is that suppose you are using wireless network like Wi-Fi then also you can get the IP addresses of client's and keep pinging every time to check the latest status of the LAN. There is client server architecture between clients and server but to get the static image of client's without knowing them, this is not satisfactory. We need another client application which runs on client's machine and one server application which runs on server machine. Both these application start working when the system is started and these applications are running in the background doesn't know anything about it. By viewing the static image of the client's desktop, the server can judge that is there anything illegal are running on the client's desktop. If it is then the server has ability to shut down client's machine or restart machine. When the server shutdowns the client's machine; at that instant of client's machine image is also saved to database. This will reduce the size of the database. we can save only those images if we want to store the image then by using image feature we can store image or shutdown the client. Rest of the images are discarded. This database is used as a record by the server for why the client's machine is shutdown. Server is provided with a GUI based application in Java. Server sends command to the client like get IP list, shutdown. This system can be used in offices, malls as well as school, colleges or university level.

IV. SYSTEM ARCHITECTURE

Stepwise working of the system: -

- Step-1) Client start its machine and then it will automatically connect to the network.
- Step-2) On the other side, Admin is present with its Login security through which he / she can logged in to the system & can see the list of all available client machine in the network.
- Step-3) After the login, Admin can select any particular client machine to check its activity and he / she can see all the client task or process run on client machine.
- Step-4) At that time system automatically store all running activity of that particular client machine in database which is in the Microsoft Excel Format.
- Step-5) If client is performing any illegal activity and if Admin found that particular activity then admin can kill or stop that particular activity and also shutdown client's machine to warn the client.
- Step-6) Also he / she can capture client's current desktop by using the Snapshot feature & that snapshot will get automatically stored on Admin machine.
- Step-7) Admin can also kill multiple processes which are currently running on client machine.
- Step-8) Restart feature is also provided to warn the user to stop any illegal activity.
- Step-9) Also Admin is able to see the list of software installed on the client machine which will help Admin to secure the all the machines in the network.

MODULES

The **REMOTE VIRTUAL DESKTOP** software is divided in to four modules based on their functionalities.

- Login.
- Remote Desktop view.
- Record view.
- Retrieve.

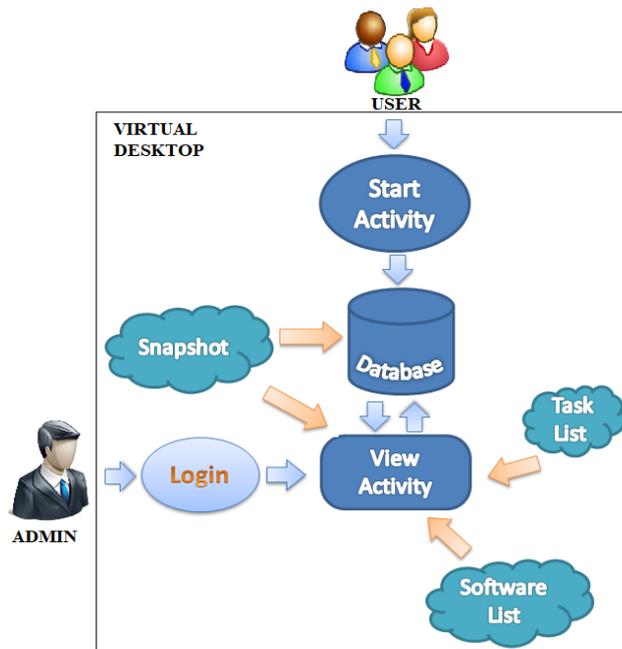


Fig. 2. Architecture Dig of System

➤ **Login:**

In this module Admin have to login, after Login Admin can be see the client activity.



Fig. 3. Login Page.

➤ **Remote Desktop view.**

When user turn on system then the recording will start on the admin machine. Admin will be able to see the Client/User activity from its REMOTE LOCATION. This system will reduce manual intervention of admin. It will also provide high security because we will have the proof of the activity of users. Admin can be Control the Client/User machine.

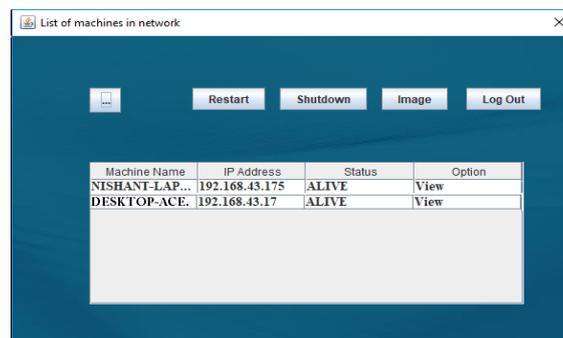
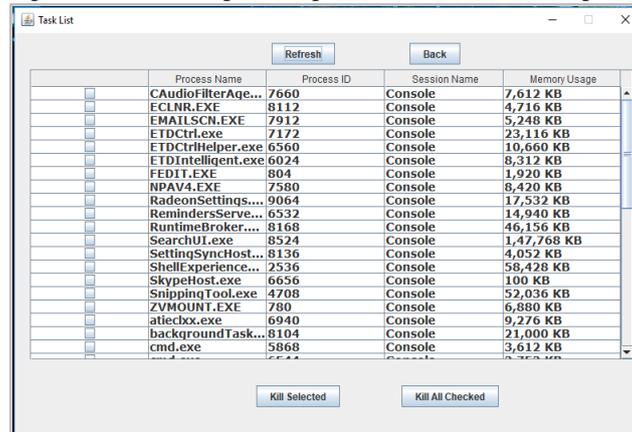


Fig. 4. Remote Desktop View.

➤ **RECORD VIEW:**

Many kinds of records and reports can provide valuable information about Client/User and operation. Admin can see the current activity by using Snapshot feature. Snapshot captures the current Desktop View of Client/User.



	Process Name	Process ID	Session Name	Memory Usage
<input type="checkbox"/>	CAudioFilterAge...	7660	Console	7,612 KB
<input type="checkbox"/>	ECLWR.EXE	8112	Console	4,716 KB
<input type="checkbox"/>	EMAILSCN.EXE	7912	Console	5,248 KB
<input type="checkbox"/>	ETDctrl.exe	7172	Console	23,116 KB
<input type="checkbox"/>	ETDctrlHelper.exe	6560	Console	10,660 KB
<input type="checkbox"/>	ETDIntelligent.exe	6024	Console	8,312 KB
<input type="checkbox"/>	FEDIT.EXE	804	Console	1,920 KB
<input type="checkbox"/>	NPAV4.EXE	7580	Console	8,420 KB
<input type="checkbox"/>	RadeonSettings...	9064	Console	17,532 KB
<input type="checkbox"/>	RemindersServe...	6532	Console	14,940 KB
<input type="checkbox"/>	RuntimeBroker....	8168	Console	46,156 KB
<input type="checkbox"/>	SearchUI.exe	8524	Console	1,47,768 KB
<input type="checkbox"/>	SettingSyncHost...	8136	Console	4,052 KB
<input type="checkbox"/>	ShellExperience...	2536	Console	58,428 KB
<input type="checkbox"/>	SkypeHost.exe	6656	Console	100 KB
<input type="checkbox"/>	SnippingTool.exe	4708	Console	52,036 KB
<input type="checkbox"/>	ZVMOUNT.EXE	780	Console	6,880 KB
<input type="checkbox"/>	atiechx.exe	6940	Console	9,276 KB
<input type="checkbox"/>	backgroundTask...	8104	Console	21,000 KB
<input type="checkbox"/>	cmd.exe	5868	Console	3,612 KB

Fig. 5. Task List

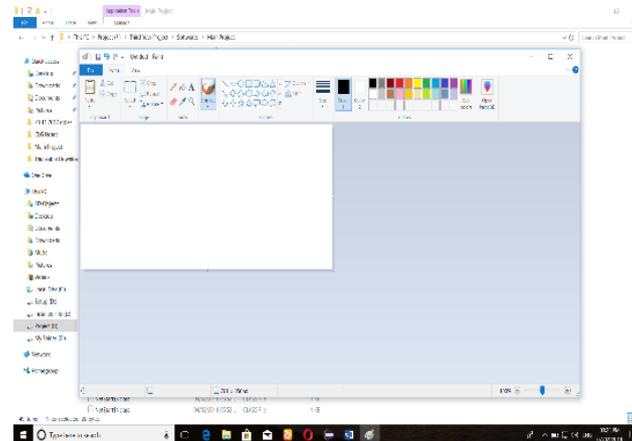


Fig. 6. Snapshot of Client Machine

➤ **Retrieve.**

The purpose of the Retrieve using this module can determine the processes that are currently running in a particular client system, present in a network. The administrator can know the details of the processes by specifying the IP address of the remote system. This module has two options like system information and process information. By using system information we can determine the system name, RAM free space, OS, etc.... By using the process information we can determine the processes running at the client system at that time. By knowing these information the server can know requirements for installing software remotely. This module is similar to that of a task manager present in the windows operating system.

V. HARDWARE AND SOFTWARE REQUIREMENTS

➤ **Software Requirement:**

Operating System	Windows, Ubuntu
Java Version	JDK 7.0/8.0/9.0
Front End	Java, JSP
Scripts	JavaScript
Database	Microsoft Excel



➤ **Hardware Specifications:**

Processor	Intel core i3 (MINIMUM)
Speed	1.1 GHz (MINIMUM)
RAM	256 MB (MINIMUM)
HARD DISK	20 GB (MINIMUM)
VDU	VGA COLOR MONITOR
KEYBOARD	104 STANDARDS
LAN	ENABLED

VI. CONCLUSION

This system explains the basics of monitoring LAN. This system that is Virtual Desktop System works as security provider to whole of the network. This is a complete front-end project build in JAVA used to provide the authority to the administrator to stop any illegal process and make him enable to monitor whole of the LAN and the work carried on connecting nodes. The project consists of several boundaries or limitations beyond which the project yields erroneous results. Nonetheless the project serves the vast functionalities regarding its performance. This project has been made keeping in mind the tasks and duties of a system administrator. It is convenient and easy to use. It has vast applications.

VII. ACKNOWLEDGEMENT

It is being rightly said that we are built on the shoulder of others. For everything I achieved, the credit goes to all those who had really helped me to complete this work successfully. I am extremely thankful to my Project Guide **Mr.M.U.Sanap** for guidance and review of this paper work.

REFERENCES

- [1] Wang Zhenqi and Wang Xinyu , The Research And Design Of Content-Based Network Monitor System, in 2nd International Conference on Power Electronics and Intelligent Transportation System, 2009.
- [2] http://en.wikipedia.org/wiki/Network_monitoring
- [3]http://www.eg.bucknell.edu/~cs379/Distributed Systems/rmi_tut.html.
- [4]<http://archive.itmanagementnews.com/itmanagementnews5420060301>
The Top Five LAN Security Issues Facing IT Managers Today .html.
- [5] Covkun and Ardam, A Remote Controller for Home and Office Appliances By Telephone, IEEE Transactions on Consumer Electronics, Vol. 44, No. 4, NOVEMBER 1998.
- [6] Dinesh C. Verma, Simplifying Network Administration Using Policy-Based Management, IEEE Network, March/April 2002.
- [7] Allen Householder, Kevin Houle, and Chad Dougherty, Computer Attack Trends Challenges Internet security, IEEE Security and Privacy 2002
- [8] Ninghui Li and John C. Mitchell, Securing Java RMI-based Distributed Applications, Proceedings of the 20th Annual Computer Security Applications Conference (ACSAC'04).