Mechanism of Identifying Network Sharing System

Puja Potdar¹, Roshani Bele², Pratiksha Bawankule³, Priti Motghare⁴ and A.B. Gadicha⁵

¹, ², ³, ⁴ Student, Final Year, CSE Department, P.R. Pote College of Engg & Tech, Amravati, India.
⁵ Asst. Prof., CSE Department, P.R. Pote College of Engg & Tech, Amravati, India.

Article Received: 01 March 2018  Article Accepted: 09 April 2018  Article Published: 08 May 2018

ABSTRACT

Remote Desktop Protocol (RDP) allows a client to communicate with a Windows server. With RDP, you can run applications on a server from a remote client. Windows series server is one kind of the most widely used servers nowadays. And there are plenty of scenarios for people to access it from remote locations. RDP uses authentication and encryption to prevent traffic from leak. But the methods used have vulnerabilities and may encounter attacks. In this paper, a security enhanced approach is proposed and implemented. Remote desktop sharing allows for sharing any application with one or more people over the Internet. The participants receive the screen-view of the shared application from the server. Their mouse and keyboard events are delivered and regenerated at the server. Application and desktop sharing enables collaborative work, software tutoring and e-learning over the Internet. We will develop an application and desktop sharing platform which is efficient, reliable, operating system independent, scales well, supports all applications and features true application sharing. Application and desktop sharing (ADS) allows sharing an application with remote users.

Keywords: RDP, RDS, ADS.

1. INTRODUCTION

Remote desktop can accomplish all of this and more. A student chooses when to consult the resources, when to do the research and when to solve the assignments. Similarly, the tutors can grade the students’ activities in their own time. Windows series server is one kind of the most widely used servers nowadays. And there are plenty of scenarios for people to access it from remote locations. For example, traveling Staffs need to use files and/or applications on Windows servers that locate within enterprise networks. To satisfy these needs, Microsoft defines a protocol, Remote Desktop Protocol (RDP). This kind of RDP has some problems. First, it has security vulnerabilities when used in Internet and may encounter man-in-the-middle attack and password guessing attack. client can access data and applications residing on Windows server through network connections.

Applications run on server, keyboard and mouse inputs are transferred to server, and the display data are sent to clients for explaining and displaying. With the continuous development of cloud computing, as one of the key technologies of cloud computing, remote desktop technology is becoming more and more mature. Remote desktop technology can effectively solve many problems existing in the process of the use of personal computers. Remote desktop transport protocol directly affects the quality of the desktop displays desktop to a remote student has great instructional value that must not be overlooked. “Remote Desktop Sharing System " is a tool to access another system's desktop at your machine. The Server module runs on the Remote machine and the Client module runs at your machine. This tool helps to invoke the application at desktop of Remote machine using the interface at your machine.

The tool has feature of providing the colour mode to view the desktop at different colour setting. In order to provide the quick data transfer rate to the client machine the data send from the Remote Server machine is compressed. System is mainly intended for those scenarios, which runs on a client/server, Internet and Intranet worked.
environment. The tool is implemented using TCP/IP network protocol, the server on the remote host machine initiate the connection and waits for the Client request. The client machines specify the remote host address. When the connection is established the Client get the View of the Remote host desktop. The activities at the remote machine are refreshed at the client at regular intervals. The information send over the network is compressed to enable quick data transfer. For this the Client can select various compression modes. This includes the Huffman's algorithm for data compression.

2. LITERATURE SURVEY

Network Administrator is a crucial job to monitor and manage systems in a LAN. LAN has different platforms and resources so if the administrator wants to monitor or share the resources on the remote systems in the LAN, operating systems doesn’t have compatibility. For example: if the Client is running on Windows XP and Server is running on Windows 2000 we don’t have the control on the remote system for doing desktop sharing and also if we want to transfer any file to any remote system we have to depend on 3rd party tools to have common platforms and compatibility. To overcome all these problems, we can develop Remote Desktop Administration which can manage and monitor the client and control the remote system. The goal was to design and implement a tool for remote teaching. The aim was to choose a solution based on new technologies, which will be easily further extensible by the support of new features. The result is a comprehensive system that offers the possibility to host online seminars and cooperate in the same manner as if the participants were in the same room or remote area. Before remote transmission services, the sender and receiver need to be synchronized with a NTP time server. The initialization time of the state transition matrix is set to 15 minutes, that is, the system enters the prediction stage after 15 minutes. In addition, the system performs a network state detection operation for each 4S in the preparation stage.

The RDA application client estimates the available bandwidth between the server and client by measuring the received data rate from the server. Pixel data fed from the server to the client is demand-driven, and the server transmits data in two cases: to respond to an explicit request from the client and to update the client's display due to changes in server's display. When there is data received in the client's buffer, a timer is started. The number of received bits is counted and the buffer is checked constantly until there is no data observed in the buffer. When the buffer is found to be empty, the timer is stopped, and the time duration t as well as the average received data rate b, are calculated. The available bandwidth bk is estimated as shown in the following equation: 

\[
bk = (1 + t + 1) b - l + (t) b t \quad (1)
\]

At start, bk = 0 and Hextile full colours encoding is selected. As and when bk measurements change, the NA encoding selection is based on the decision rules.

Tool for Desktop Sharing and Remote Teaching Force The goal was to design and implement a tool for remote teaching. The aim was to choose a solution based on new technologies, which will be easily further extensible by the support of new features. The result is a comprehensive system that offers the possibility to host online seminars and
cooperate in the same manner as if the participants were in the same room or remote area [1]. First time wiser (1991) predicted that computers can be used globally in every one’s life. There have been a number of research projects for controlling remote desktop using other systems. Remote Desktop Protocol (RDP) and Virtual Networking Computing (VNC) are also used, deference between them mainly lies on the features Specific to the protocols. Researcher also used J2ME and Dual Tone Multi Frequency (DTMF) method for controlling targeted Remote Desktop. web services or PHP also used by researcher for accessing remote database [2]. Before remote transmission services, the sender and receiver need to be synchronized with a NTP time server. The initialization time of the state transition matrix is set to 15 minutes, that is, the system enters the prediction stage after 15 minutes. In addition, the system performs a network state detection operation for each 4S in the preparation stage and erforms a prediction operation for each 4S in the prediction stage. Remote examination: As stated before, identity fraud is always a possibility when dealing with remote examination. To overcome this problem, a simple visual inspection of the student’s identity with a webcam should be enough. Of course, this surveillance must be continuous throughout the examination. Also, it is quite difficult to position the webcam in order to check both the identity of the user and their onscreen activity, so a separate stream of the user’s desktop is recommended. Although this increases significantly the necessary bandwidth, it also insures a more accurate surveillance.

**Summary and Discussion**

Remote Desktop Sharing System tool is use for sharing the data when both the client is in the network. If the user is present in the network then all the systems can locate which are present in the same network at the same time. There is no limit to the systems to be present in the network. After locating all the systems, the client can access any particular system whichever they want by using valid username and password. After entering valid username and password the client can be able to access particular data as like documents, images, file, etc. In this way the client can share any data or file from one client system to another client system with the help of remote desktop sharing system software.

**3. PROPOSED WORK**

**3.1 Proposed Idea**
3.2 Working of Proposed concept

Algorithm:
1: Start
2: Load all active system from LAN.
3: Select the load terminal (server)
4: Input username and password
5: If (username and password) \(=\) valid
   - Fetch server-side screen on the client side
   Else
   - Go to step 6
End
6: STOP

Proposed concept is a tool to access the desktop of another system in the LAN. It consists of two parts, the Server & the client. Server module runs on the Remote machine and the Client module runs at user's machine. Windows Management Instrumentation (WMI) technology provides uniform access to management information. The proposed system is based on this technology for basic functions like getting information on the processes etc. Primarily it displays the desktop and enables the system to allow the user to manipulate it as though he has logged in to the other machine. It allows the user to view the remote desktop in various view modes. Scaled mode lets you see the remote screen in a window on your monitor scaled to the remote screen's defined size by using mouse activities at interface window the client can invoke the applications at the remote host. This enables the remote invocation of application at the Remote host's desktop. The mouse activity of the client can be suspended so multiple clients' accessing the same remote host does not create chaos at the remote server's Desktop. The Client's View is refreshed at regular time intervals enough to keep the desktop fresh.

4. CONCLUSION

Network Administrator Tool is one of the best tool in the market for remote administration purpose. It is fast, secure, comfortable to use and platform independent. Remote desktop sharing system is a potentially huge growth area and several companies are currently developing software that enables users to access remote system from the office or other remote locations by using even embedded system. There is no limit for this application this can be used to any type of page by anyone based on the restrictions given by the developer. With this type of application, the strength of a page can be increased. The knowledge can be distributed to a large extent.

REFERENCE


[5] Prasad calyam1, Abdul Kalash2 AshokKrishnamurthy1, Gordon Renkes."A Humaand-Network Aware Encoding Adaptation Scheme for Remote Desktop Access".

[6] Angel, Gonzalez Villan, Student Member, IEEE and josep jobra esteve Member IEEE. "Remote control of mobile devises in android platform".