

Network Monitoring System Using Remote Desktop Service By IP Subnet Calculator Tool (Revised May 2017)

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Abstract- These Most of the organization they connect more numbers of systems to form a network to make their work easier to share their files and folders. While connecting we want to monitor the network system activities for secure purpose. This Project deals with monitoring the Network Screen Activities. It has two methodologies one for Client and another for Server. In the proposed system we introduce current session option to monitor the network systems at the same time and in the accesses folder option shows the username and user accessed folders. While client logins to the server, the Client IP Address and System names are added to the server. Server will display all the user names, from server we can monitor the particular Client Screen Activities like that currently opened screens, what are all the files created, modified and deleted.

Keywords- Remote Desktop, IP Subnet Calculator, Real time network monitoring system, host, folder watcher

I. INTRODUCTION

Remote Desktop Services is one of Microsoft Windows components to access a remote computer through the network. Only the user interface of the application is presented at the client. Any input is redirected over to the remote computer over the network. At work, we use Remote Desktop a great deal. It allows us to login to a remote server to perform health checks, deploy applications, troubleshoot problems, etc. We also use remote desktop often when we do WFH (work from home).

This project is an effort in to develop a simple IP Subnet Calculator tool only for class C IP. The IP Subnet Calculator was to give the user a quick and interactive method to calculate available subnet and hosts. Due to the repetitiveness of such calculates, tools such as an IP Subnet Calculator were developed to eliminate common mathematical mistakes. Furthermore, these tools also provide a means for the user to do such calculations without actually understanding the details behind calculating IP.

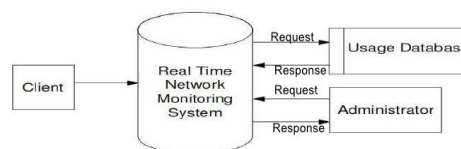
You have several choices for your email client application, including a range of web email services. However, many people prefer to use a stand-alone application designed specifically for email since they sometimes have a better focus and features. Some people avoid the Microsoft Outlook application because of its historic vulnerability to viruses.

II. EXISTING SYSTEM



DFD for the existing Manual Network Monitoring System

Top Level Data Flow Diagrams



DFD for the proposed Real Time Network Monitoring System

The existing system has been maintained manually. The system, which has been maintained manually, had been complex and complicated. There were many chances to loss the data and the work wouldn't be an effective and efficient one. Manual operation is always been complicated to the organizations for maintaining the records. In the existing system

- A. In this system we can't monitor who all are accessing the files at the same time.
- B. It's difficult to find which are the files are updated and renamed.

III. PROPOSED SYSTEM

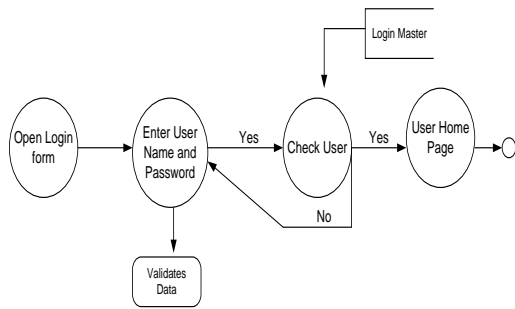


Fig : Login DFD Diagram

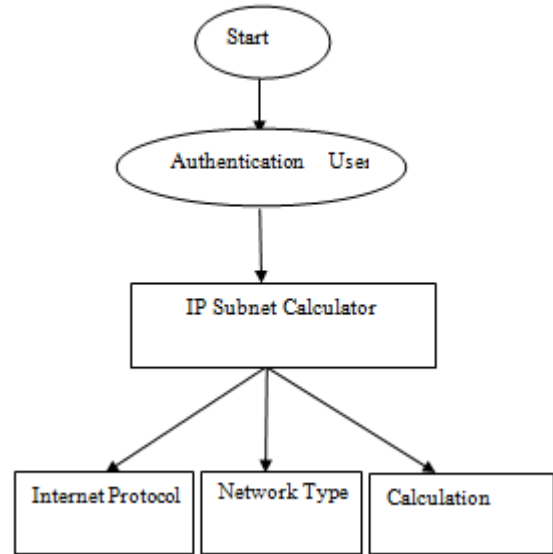


Fig : DFD 2

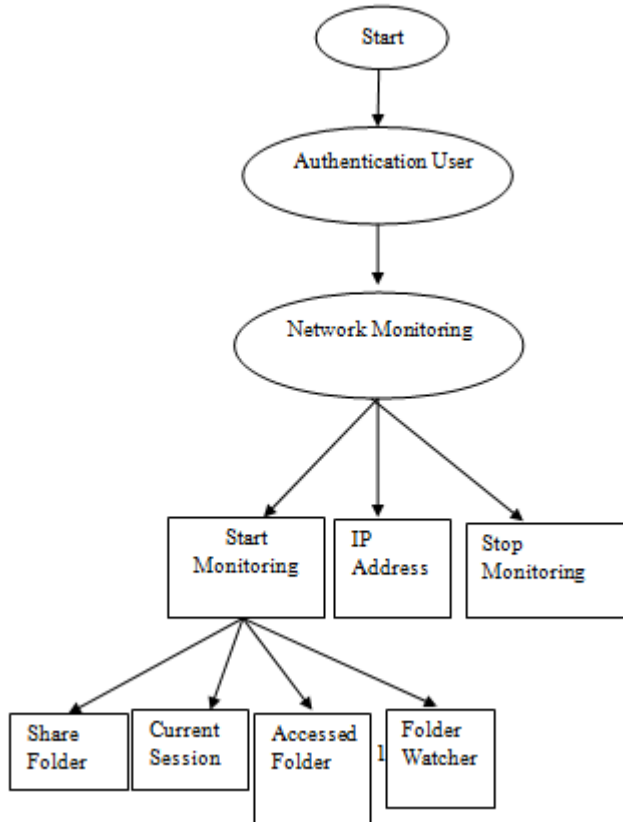


Fig : DFD 1

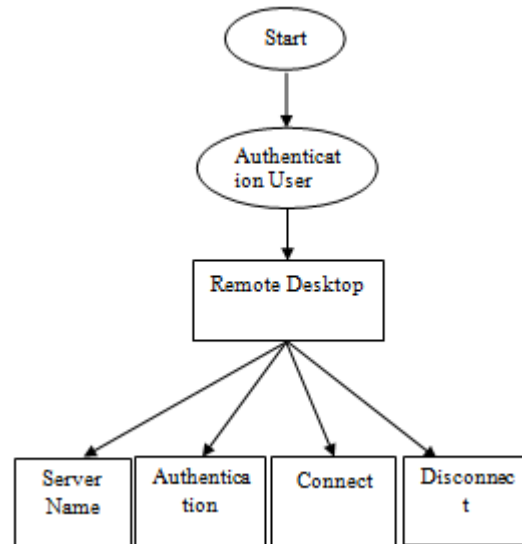


Fig : DFD 3

Considering the anomalies in the existing system computerization of the whole activity is being suggested after initial analysis by the organization.

In this system we can monitor who all are accessing the files in the network at the same time.

When monitoring the connected systems, we can easily found what are the files updated and renamed.

A. Advantages of The Proposed System

- a. Fully Secured

- b. Role based access
- c. Ease in maintenance
- d. Notification about the modification

B. Hardware Requirements

Processor	:	Pentium Iii 866 Mhz
Ram	:	128 Mb Sd Ram
Monitor	:	15" Color
Hard Disk	:	20 Gb

C. Software Requirements

Operating System	:	Windows 7
Environment	:	Visual Studio .Net 2010
Net Framework	:	Version 4.0
Language	:	C#.Net

IV. MODULE DESIGN

This project having Five Modules

1. Admin
2. Network Monitoring System
3. Remote Desktop Monitoring
4. E-Mail Client
5. IP Calculator
6. Hardware information of any computer.

1. Admin

The Login module consists of username and password. This process is for authentication. The user name and password is correct it is link into next page. This process is done in login.

2. Network Monitoring System

The most of the organization they connect more numbers of systems to form a network to make their work easier to share their files and folders. While connecting we want to monitor the network system activities for secure purpose. This Project deals with monitoring the Network Screen Activities. It has two methodologies one for Client and another for Server. In the proposed system we introduce current session option to monitor the network systems at the same time and in the accesses folder option shows the username and user accessed folders. While client logs in to the server, the Client IP Address and System names are added to the server. Server will display all the user names, from server we can monitor the particular Client Screen Activities like that

currently opened screens, what are all the files created, modified and deleted

3. Remote Desktop Monitoring

Remote Desktop Services is one of Microsoft Windows components to access a remote computer through the network. Only the user interface of the application is presented at the client. Any input is redirected over to the remote computer over the network. At work, we use Remote Desktop a great deal. It allows us to login to a remote server to perform health checks, deploy applications, troubleshoot problems, etc. We also use remote desktop often when we do WFH (work from home).

4. E-Mail Client

You have several choices for your email client application, including a range of web email services. However, many people prefer to use a stand-alone application designed specifically for email since they sometimes have a better focus and features. Some people avoid the Microsoft Outlook application because of its historic vulnerability to viruses. An application that runs on a personal computer or workstation and enables you to send, receive and organize e-mail. It's called a client because e-mail systems are based on client- server architecture. Mail is sent from many clients to a central server, which re-routes the mail to its intended destination.

5. IP Calculator Subnet

The calculator module certain process
Internet protocol
Network type
Calculate

The calculate is used to calculate the network type and it class. The other processors are prefix, maximum number of host, network, broadcast, IP range, maximum number of subnets, wanted number of hosts.

Internet protocol:

The Internet protocol is used to know about the network type. The protocol is entering in the textbox and calculates. It will show the network type. If wrong protocol is entering in the textbox. It will show the error message.

Network type:

The Network used to describes the class.

Class A: 0.0.127.255

Class B: 128.191.255

Class C: 192.223.255

Class D: 224.239.255

Class E: 239.254.255

Calculate:

The Calculate is used to calculate the internet protocol and network type. In this system Maximum number of subnet is display.

V. CONCLUSION

Deceptive defense, combined with network monitoring, opens up the potential for new defensive methods. We can engineer networks to be more “detection friendly”, combining multiple systems at the host and the network together. Successful integration will provide tools, but those tools may not be universally applicable.

We have outlined the architecture of a network monitoring service, also addressing related security and scalability issues. The basic building block of our architecture is the Network Monitoring Element, which monitors the network infrastructure between groups of resources sharing similar connectivity with the rest of the system. The monitoring activity is performed using passive monitoring, virtually without network overhead.

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