# Network Remote Surveillance

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*Abstract*— This Project deals with monitoring the Network Screen Activities. 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. Protocols we are using are SNMP, FTP, SMTP, RDP etc.

***Key words:*** Client, Server, Surveillance

## I. INTRODUCTION

In colleges and institutes while doing practical's students misuse college internet in practical's students can complete their given task and they can also do some other work which is not related to their given task.[1] This is the main problem of the current lab management system.[1] The other problem of the present existing lab management is that the lecturer cannot supervise the student activities.[1]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 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 subnets.

### *A. Aims & Objective of the Project*

1) Our project aim is to monitor the activities of students by the lecturer and to maintain the control and discipline while student's practical performance.[1]
2) To provide remote access to labs in various disciplines of computer engineering.
3) To provide a complete learning management system around labs where students can avail the various tools for learning including video lectures, practical performance, etc. with rules and regulations.

## II. LITERATURE SURVEY

There is an extensive literature survey on Network Remote Surveillance for computer labs using various techniques like FTP, SMTP, SNMP, RDP etc. But here we have mentioned few relevant papers on network remote surveillance.

1) In computer lab monitoring system [1] to overcome the problems faced by the lab managing staff. To monitor a LAN, the monitoring server is typically connected to a monitor port on the switch. If multiple switches used in an installation, the monitoring server may need a connection to all of them. That connection can either be a physical cable, or if your network switches support it, a LAN specifically configured for monitoring traffic.
2) In computer Lab monitoring system [2] is use to build up and improve the management system for computer labs. The purpose of development included in this project is to retrieve the original management system with a computerized system. Nowadays, teachers are required to maintain the practical sing the lab manual & currently the student do the login to the different computers which one is available in the lab, drawback of this the proper database of completion of practical's is not maintain, which is not easy for the inspectorate to check it and terminate the program.
3) The BMST University MOSCOW Russia was developed network architecture of remote laboratories [3] are being built upon different network architecture. These papers analyzes major classes of such network architecture from the point of view of network infrastructure with example of employed solutions. Pros and cons of each architecture are discussed. A new solution making network communications between laboratory servers and laboratory users to be more efficient is proposed.
4) In smart surveillance monitoring system [4] using Raspberry Pi. Video surveillance is important as far as security is concern these days. Commercial spaces, schools and hospitals, warehouses and other challenging indoor and outdoor environment required high end cameras. The current technologies require RFIDs which are costly and hence the security domain in all becomes expensive and hence there was need to work on this.
5) In remote surveillance via wireless controlled mobile robots. [5] A mobile robot built at the RISC Lab is controlled via the internet with the help of images obtained from a network.
6) The OAK Ridge national laboratory was developed structural monitoring system and visual system. The ORNL has many building that are in surveillance and

 

maintenance mode while awaiting deactivation and decommissioning. During this time entry for inspection is periodic with entry requirements based on previous knowledge of facility condition.

## III. PROPOSED SYSTEM

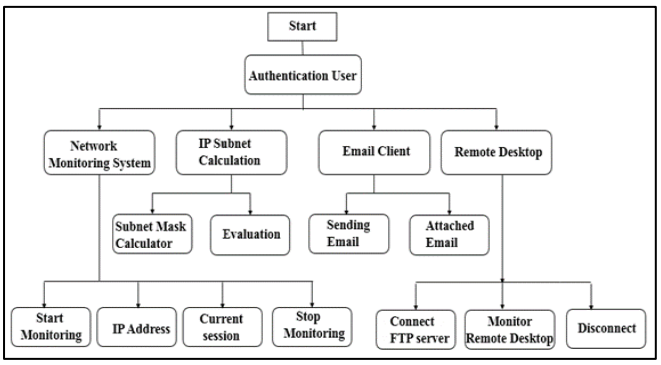


Fig. 1:

## IV. HARDWARE & SOFTWARE SPECIFICATION

### A. *Hardware Specifications*

PROCESSOR : Dual Core
RAM : 2 GB RAM
HARD DISK : 500 GB
CD DRIVE : LG 52X

### B. *Software Specifications*

OS: Windows 7
FRONT END : Visual Studio 2012
FRAME WORK : Version 4.0
LANGUAGE : C#.NET
WEB TECHNOLOGY: ASP.NET
BACKEND : My SQL

## V. FEATURES & ADVANTAGES

### A. *Features*

- Considering the anomalies of 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 folders or files in the network at same time.
- We can monitor the connected system in the network and we can also monitor what files are being modify and delete from the system.
- To provide remote access to labs in a various disciplines of computer engineering.
- To monitor activities of students by the lecturer and to maintain the control over students while performing practical.

### B. *Advantages of Proposed System*

- Fully Secured
- Role based access
- Ease in maintenance
- Notification about the modification

## VI. CONCLUSION

Here it is concluded that the proposed system will work well and will satisfy companies and colleges. Here the errors will be properly debugged. This application can be accessed from more than one system. Simultaneous login from more than one place will be tested.

The application will work according to the given specifications above and further enhancement can be made to the application so that the application functions very interactive and useful to existing application.

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