System Securing Tool

C.Allwyn Sarathkumar¹, Dr V.Saravanan²

¹Dept of Information Technology ²HOD & Professor, Dept of Information Technology ^{1, 2} Hindusthan college of Arts and science, Coimbatore

Abstract- Network security is the biggest concern and priority of any network administrator today, but it is very difficult to get a good definition of network security. Most of today's security threats are aimed at the enterprise desktop. It is critical that a robust mechanism be used to secure the desktops inside our network. The project Entitled as "SYSTEM SECURING TOOL" is used in the Computer Labs and Browsing Center and enterprises for preventing the hacking of secured information stored on a computer. The main aim of the project is to develop a new security mechanism to protecting the secured information stored on a network computer.

Thief Announcer is a GUI based software to monitor and control unauthorized person to access the personal computer connected on a network. This system is having motion detection feature to detect the unauthorized person sit on the computer. The system will send immediate notification directly to user system. As soon as motion intrusion is detected we can customize alerts. So we can view activities monitored by our camera from anywhere with an internet connection. Other features on this system are folder watch, File security, desktop lock, keys tracker and Process Monitoring . The folder watch allows the user to monitor the particular folder that is the log file used to store the activities occurring on the folder. The file Security is helps to lock the file by given secret password. The keys tracker is helps to capture the keys typed on a computer and it will be recorded automatically. The Process Monitoring helps to show the entire running processes of the computer.

This System is aimed at developing by using **Visual Basic.Net** as Front End.

I. INTRODUCTION

1.1 PROBLEM DEFINITION

Most of today's security threats are aimed at the enterprise desktop. It is critical that a robust mechanism be used to secure the desktops inside our network. The project entitled as **SYSTEM SECURING TOOL**" is used in the Computer Labs and Browsing Center and enterprises for preventing the hacking of secured information stored on a computer. The main aim of the project is to develop a new

security mechanism to protecting the secured information stored on a network computer. It is a network security.

Thief Announcer is a GUI based software to monitor and control unauthorized person to access the personal computer connected on a network. This system is having motion detection feature to detect the unauthorized person sit on the computer. The system will send immediate message notification directly to user mobile. Features on this system are folder watch, File security, desktop lock, keys tracker and Event log Viewer.

II. EXISTING SYSTEM

In Existing System describes only for login authentication security. Login authentication is helps to lock the system that prevent the unauthorized person can't start the computer without knowing the user name and password. But this is suitable for only personal computer it does not suitable in network computers. When we consider the company or college environment we need to propose new security for preventing the unauthorized access. Same time existing security system does not provide the security for sensitive information stored on the computer. It prevents to enter unauthorized access but it does not worry about data's stored on the computer.

2.1 Disadvantages of existing system

- Less Security
- It does not product the sensitive information stored on the computer by using advanced security method
- No cryptography techniques used
- It does not give alarm or send SMS when the computer is hacked

III. PROPOSED SYSTEM

The proposed system is developed to protect of computer that provide the advanced security method for indentifying the unauthorized access and prevent the misuse of computer. No one can't access the computer without permission and he can't copy or delete any information stored on the computer. The two levels of security is implemented in this system one is motion detection by using security web

Page | 421 www.ijsart.com

camera and another one is cryptography technique to protect the information stored on the computer. The motion detection will monitor the unauthorized person accessing the computer when it happens it will generate alarm and it will send the SMS to administrator.

3.1 Advantages of the proposed system

- High security for data
- Better accuracy and efficiency
- It provide reliability
- The authorization is highly provided

IV. DESCRIPTION OF MODELS

4.1 Motion Detection

This module helps to prevent the unknown person sit on the computer screen. If the unknown person sits on the computer the alert message will send to the user mobile via SMS.

4.2 Folder Watch

This Module is helps to watch the specific folder to monitor the activities occurring on this folder like renaming the files on the folder. Inserting or deleting any files on this folder.

4.3 File Lock

This module is helps to lock the important files on the computer by using Cryptography techniques. When the file is in lock no one can open the file and can't read the information on the file.



Figure 1. File Lock

4.4 Key tracker

This module is helps to monitor the keyboard events on a computer which runs in hidden mode. It tracking (or logging) the keys struck on a keyboard so that the person using the keyboard is unaware that their actions are being monitored.

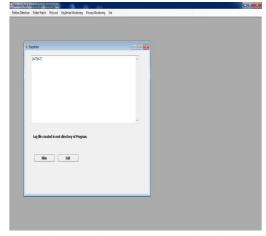


Figure 2. File key stroke monitoring

4.5 View Running Process

This module is helps to view all the processes and services running on the computer. If the unknown process is running on a computer that may be a malware application so we can find and prevent this application by using this module.

4.6 Event Log Viewer

This module is helps to monitor the all events (like login and logout details of the user, application running on the computer, services running on the computer and security issues occurring on the computer).

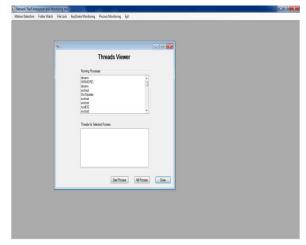


Figure 3. Process monitoring

Page | 422 www.ijsart.com

4.7 Admin Details

This module consists of administrator details like admin id, password, mobile number and, mail id.

V. INPUT DESIGN

The input design is the link between the information system and the user. It comprises the developing specification and procedures for data preparation and those steps are necessary to put transaction data in to a usable form for processing can be achieved by inspecting the computer to read data from a written or printed document or it can occur by having people keying the data directly into the system. The design of input focuses on controlling the amount of input required, controlling the errors, avoiding delay, avoiding extra steps and keeping the process simple. The input is designed in such a way so that it provides security and ease of use with retaining the privacy. Input Design considered the following things:

- ➤ What data should be given as input?
- ► How the data should be arranged or coded?
- ➤ The dialog to guide the operating personnel in providing input.
- ➤ Methods for preparing input validations and steps to follow when error occur.

5.1 OUTPUT DESIGN

A quality output is one, which meets the requirements of the end user and presents the information clearly. In any system results of processing are communicated to the users and to other system through outputs. In output design it is determined how the information is to be displaced for immediate need and also the hard copy output. It is the most important and direct source information to the user. Efficient and intelligent output design improves the system's relationship to help user decision-making.

- Designing computer output should proceed in an organized, well thought out manner; the right output must be developed while ensuring that each output element is designed so that people will find the system can use easily and effectively. When analysis design computer output, they should Identify the specific output that is needed to meet the requirements.
- Select methods for presenting information.
- Create document, report, or other formats that contain information produced by the system.

- Convey information about past activities, current status or projections of the
- Future
- Signal important events, opportunities, problems, or warnings.
- Trigger an action.
- Confirm an action.

VI. CONCLUSION

This application helps the system administrator by providing various features to keep track of all applications, services, and processes, drivers of the client system and person or object in front of the system. It also provides a facility of messaging between the administrator and users of the client system. It reduces the work of the System administrator to an extent. It is user friendly and easy for maintenance.

The developed system provides features of providing not only the list of processes that are active, passive at a time but also gives the properties of the selected processes. The administrator can easily terminate some of the applications directly. The administrator can also get the keyboard strokes which are usually maintained as a log file and can be converted to a database whenever needed.

This software is developed with scalability in mind. Additional modules can be easily added when necessary. The software is developed with modular approach. All modules in this system have been tested separately and put together to form the main system. Thus the system has fulfilled all the objectives identified and is able to replace the existing system

VII. FUTURE ENHANCEMENTS

The world of computers is not static. It is always subject to change. The technology today will become outdated the very next day. To keep abstract of the technological improvements the system need refinements, so it is concluded, it will be improved for further enhancements, whenever the user needs an additional feature into it.

This system totally ends on the data that has been entered by the personnel. This package has been designed such that this can be extended to any extent that could help it being more efficient system as the code in the system allow the programmer to develop any other modules with ease. Any further enhancements of the system can be made to the existing system without any need to change the previous coding.

In future this system will be enhanced by the flowing feature

Page | 423 www.ijsart.com

- Automatic Phone dial Feature will be added in Later
- The system lock feature will be added in future when the unknown person is tried to access the computer

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Page | 424 www.ijsart.com