

A SECURITY METHOD IN COMPUTERS AND LAPTOPS

*Asst. Professor, Department Of Computer Science,
Fergusson College, Pune.*

Email: sonalik18@rediffmail.com

Abstract - Today computers and laptops become a very essential thing in human's life. We use computers and laptops for storing our data, for listening songs, watching movies, playing games, downloading purposes etc. We always give as well as take our data from our friends and for these, we copy-paste our data to pen drive, CD, DVD or by uploading files on face book, emails etc. So now a day's maintaining security of computer and its data is the major problem. This paper focuses on a new method to secure computers and laptops.

Keywords - Computer, pen drive, log file

I. INTRODUCTION

A computer is the electronic device which takes input from user, processes it and gives the result or output back to the user. Like mobiles, we can access internet using computers and laptops. Computer performs arithmetic and logical operations. Laptop and desktop are shown in figure 1 and figure 2.



Figure 1: Laptop



Figure 2: Desktop

A log file is the file in which computer stores actions performed in the execution of the program on the computer. It is created during software installation as well as by web

servers. It is used in the server applications, data modification etc.

A pen drive is the flash device which is very small in size. In pen drive, we can store data and we can remove data whenever we want. We can have pen drives of different sizes. e.g. 1 GB, 2 GB, 4 GB, 8 GB etc. The pen drive is shown in figure 3.



Figure 3: Pen drive

II. LITERATURE REVIEW

Computer has total five generations:

1. **First Generation:** It is based on vacuum tube.
2. **Second Generation:** It is based on Transistor.
3. **Third Generation:** It is based on Integrated Circuit.
4. **Fourth Generation:** It is based on VLSI microprocessor.
5. **Fifth Generation:** It is based on artificial intelligence.

Computer is considered as an electronic device which is made up of two components.

1. **Software**
2. **Hardware**

Software is divided into two parts I) System Software II) Application Software

Hardware is divided into CPU, Memory devices, I/O devices.

III. IMPLEMENTATION

We always use computer, laptop and pen drive to store our data. Computer i.e. desktop is not moving but laptop and pen drive are movable. With pen drive we can store data taken from other devices; also we can delete stored data or format the pen drive. But one can take important data of another person by using pen drive and he/she may misuse of

that data. So to secure our data, a new method we have to apply.

When we attach any pen drive to desktop or laptop then that pen drive's unique id/number with owner of the pen drive is automatically captured and stored in a log file and for that one log file is automatically created and maintained by the system which stores last 10 pen drives attached to the system and last 10 files and folders copy-pasted or deleted and from which location this action took place and where the folder pasted or deleted permanently or it has gone to recycle bin. Figure 4 shows pen drive attached to the laptop and computer.



Figure 4: Pen drive attached to the laptop and computer

This helps us to detect which data is copied, deleted or which pen drive is attached to the computer or laptops and thus if anyone stolen important data then which file is accessed and which data is lost is easily determined and we can take action on that things. If there are two identical pen drives then only watching on those pen drives it is difficult to identify the owner of the pen drive or user has to attach pen drive to laptop or computer and has to see the name of the pen drive. But we can use log file to identify the pen drive , only user has to open log file and user can find owner of the pen drive with pen drive's unique id/number. This is shown in the figure 5:

Log file	
Pen Drive	
Unique Id	Owner of the Pen Drive
Gfsdghe634	ABC PQR
Djkh6kjjk	PQR XYZ
Files-Folder	
I:\a.txt copied into pen drive (Unique Id : Gfsdghe634 Owner of the Pen Drive: ABC PQR)	
E:\Resume.docx file is deleted on 12/06/2013 4:29PM	

Figure 5: A log file maintained by the system

IV. CONCLUSION

Using this log file in the system we can easily find out not only the owner of the pen drive but also file and folder names which got copied into any drive or deleted from the computer or laptops. This helps us to find out the theft easily and we will get better security of computers and laptops.

V. REFERENCES

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