Abstract

This paper discussed about different types of viruses along with its symptoms, causes as well as side-effects and correspondingly proposes a new designed methodology named OMVDPM (offline macro virus detection and prevention mechanism) on the time of MS-Word document accessing. The complete functioning of this new designed methodology is work under main two steps viz. at first detect macro virus in word document and in second step provide prevention from macro virus. This new designed methodology utilizes the concept of log files for continuous monitoring of the details of that specific MS-Word document as like the date of creation of document, time as well as space consumed and the working of this new designed methodology is totally based on automatic randomly generated encrypted digital signature on the time of MS-Word document saving. The more interesting feature of this new designed methodology is every time a log file is created when document will be accessed by that specific user (i.e. who is owner of the document) and it provides latest details of that specific file with automatic updated time, date and space consumed. The main focus of this paper is to reduce the growth of macro virus in MS Word document on the time of document accessing and provide offline encrypted
digital signature security of document at saving mode.

References

5. MIS Unit, the impact of computer virus attacks and its preventive mechanisms among personnel computer users, south eastern University, Sri Lanka.
8. Bag by KURT, Taking computer virus detection to a new level, University of Auckland, New Zealand.
20. Liu Jun Ding Hua Qing, Computer virus propagation model based on variable
propagation rate, International journal of advanced science and technology.


23. Toyoizumi Hiroshi, Performance evaluation of defence strategies against computer virus, University of Aizu.


**Index Terms**

Computer Science Security

**Keywords**

Macro Virus, Resident Virus, Log Files, Computer, Offline Security, Digital Signature, MS-Word document.