

HomePC users and office users have a wide range of facilities to manage their work through the public Internet Network. However, this can bring to the problem of data violation in Network, if any security and control measures are not taken.

Major is the importance and the difficulty about data confidentiality in office environments to deal with it because the communication is established between the private company network and Internet. Therefore, this Project focuses in a company environment.

To guarantee a certain level of security between two or more Networks, Firewalls must be employed to prevent from undesirable communications. This Project consists in the study, the implementation and the analysis of three Firewalls software in a Desmilitarizad Network, which contain common services used in the daily work of an enterprise. This services must be protected with a Firewall for a restricted access.

Firewalls are set up with applications of diferent Operating Systems:

- Iptables under Debian Sarge de GNU/Linux
- ISA Server 2004 Enterprise under Windows Server 2003.
- Packet Filter under OpenBSD.

The procedure followed has been:

Firstly, implementation and analysis of the advantages and disadvantages of each of them.

Secondly, with the aim of extracting a deeper study on effectivity, it is done a vulnerability services analysis with Nessus tool.

Finally, by the comparison and analysis of the three obtained results, conclude the work designing each Firewall its more efficient in office environments.

Notwithstanding, that the above referred study and conclusions of Firewalls analysis could also be applied to a Home networks.