

A STUDY AND DEVELOPMENT OF AN APPLICATION LEVEL GATEWAY BASED FIREWALL SYSTEM

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ABSTRACT

The main objective of this project is to develop a system that will function as a firewall which protects an entire network through application level. The firewall must be located at a gateway or proxy server of the network which connects them to the internet. This type of server usually used Linux as their operating system. This is because Linux provide rich networking and security features. In the first phase of the project, a literature review will be done on the concept of firewall, network security and also application level firewall. The purpose of doing this research is to have a clear concept on how the packets transfer between terminals of different location and what measurement must be taken for fast and secure packet transfer. The second phase is mainly on the final touches of the first phase which is primarily on the preliminary investigations. There are, nevertheless some findings on the analysis phase as well. The author studies the available techniques in developing the system. For the third phase, the author had enter the design stage and come out with a system structure design diagram. This includes the study and identifies the input and output of data and control between the system and user. Each of the processes in the system is identified and what type of data flowing between processes in sequence order. For the final phase, the author has to ensure all the function included in the design phase fit in the project. The author has to decide the suitable programming language to develop the system. This phase is the hardest phase because the author needs to use the programming language that she doesn't really familiar with to complete the project. This phase also include system testing after the completion of coding