Lan Network Analyzer with Alert Modes for Personal Computers

Prepared by: Aron a/l Somulu

ABSTRACT

The project focuses on the development of two common network applications which is packet sniffer (also known as network analyzer) and port scanner where each application carrying two different objectives. **Packet sniffer** is used as a tool to observe the network behavior of the INTI hostel network as well as monitoring the packets coming in and out of the host (user)'s computer.

On the other hand, the **Port scanner** is used to monitor the open ports and its connections where two types of states will be monitored which are CLOSE_WAIT and SYN_SENT. If either of the two states exceeds the assigned limit of 3, then an SMS warning will be generated (if user enables the SMS feature) to the user and a message dialog box containing the warning message will be generated as well (available for both SMS-enabled and disabled options).

On the analysis portion of the project, few researches have been done before the development stage of the project. The researches done the methods of intrusion, basic information regarding LAN, its topologies and the functionalities of the protocols need to be monitored (TCP, UDP and ICMP), methods of intrusion detections and SMS (Shortmessage service) and its architecture.

The Project is divided into four major phases where the progress of the system and documentation were reviewed by the project's first supervisor, Mr. Guok Tiong Hock as well as the project's second supervisor Ms Sarasvathi where comments and suggestions were given for project improvement.