

**Universiti Teknologi MARA**

**HIGH PERFORMANCE PACKET CAPTURING  
SYSTEM: HIGH AVAILABILITY & LOAD  
BALANCING ARCHITECTURE**

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May His blessing be upon the Prophet Muhammad s.a.w

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## ABSTRACT

In server environment, servers are constrained by to some numbers of request services in a given time. As in packet capturing system environment, each server resources are also tight up with limited amount of resource capabilities that can serve to the number of packets coming in to be processed.

Through out this issue, numbers of packet capturing environment usually face such packets drop out which totally eliminate the main purpose of the system intention, which to obtain the packets.

Referring the environment in most ISP (Internet Service Provider), this project was conducted generally to introduce the load balancing concept as well as the high availability system in packet capturing system environment in order to eliminate or at least to mitigate the percentage of packet loss during capturing process which called High Performance Packet Capturing System: High Availability & Load Balancing Architecture.

In this project development, we would like to use Fedora Core 9 as the main operating system to react as the platform for the system that we are going to implement. We use nProbe as the packet capturing system and heartbeat as the load balancer agent and high availability component. As per conclusion, we are expected that this high availability and load balancing system for capturing environment might more or less contribute something to improve the system efficiency and capability in the future.