Abstract

Title : Performance Analysis of Computer Network Using

VLAN Technology in UPH Advanced Computer

Laboratory

Name / NIM : Rudy / 08320020005 Major Advisor: Meiliayana, ST., MT. Co-Advisor : Ir. Samuel Lukas, M.Tech.

This fieldwork report is written based on computer network being occupied in UPH Advanced Computer Laboratory. Recently, this computer network adapted new LAN technology which is called VLAN (Virtual Local Area Network). Theoretically, using this technology, network scalability, security, and management are enhanced. In order to prove the theory, several factors must be included in analysis process, such as network cabling, network topology, network protocol, collision and broadcast domain, etc.

This report discusses thoroughly most of the processes being involved in the laboratory's computer network, identifying network's current condition and problems which may exist, analyzing the current condition compared to the theories and alternative solutions to improve network performance.

As conclusion, a number of key points that are observed, gained, and practiced from the field are presented to indicate whether the network's current condition is matched with the theories which exist.

(v + 71 pages: 8 tables, 41 pictures)

References: 9 (1994-2004)