ABSTRACT

Yayasan Kesehatan (Yakes) Telkom Bandung is an organization that provides health service to all Telkom employees and retired Telkom employees with the families in Indonesia. Yakes has implemented information technology to support their business process. However, Yakes is have an issues: planning in network service security. This issue caused by the lack of security that monitors data traffic such as communitacion security technology, restrictions on access rights in the form of access-control list configuration that is not yet optimally configured, no logs when network monitoring is ongoing, and badly configured server ports that leaves all server ports open.

Based on the issue, there needs to be a design of LAN network security according to the ISO/IEC 27000 series standard implemented using Network Development Life Cycle (NDLC) method, and results into an optimal design of LAN security for Yakes Telkom.

Test result propose the implementation of communication security technology, web protection optimization with proxy server, optimization of application monitoring by the use of logging feature, and recommendation to close some ports on the servers. Test results adapted LAN security design by ISO/IEC 27000 series in Yakes Telkom.

Key words: LAN, Network Security, ISO/IEC 27000 Series, NDLC.