

## **ABSTRACT**

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### **Implementation of LAMP Web Server and Firewall Security Management on Biznet Server Using Ubuntu 18.04 with VMware ESXi.**

In the implementation of the Merdeka Belajar Kampus Merdeka (MBKM) program, students are given the opportunity to integrate the theories learned during their studies with hands-on practice in the workplace. This initiative allows students to gain real-world work experience, enhance both technical and non-technical skills, and prepare them to contribute professionally in relevant industries. This report discusses the professional work experience at Biznet, a technology and communication service provider company specializing in IT infrastructure management. The intern was responsible for the installation, configuration, and management of Linux-based servers using the VMware ESXi virtualization platform. The main tasks included installing the Ubuntu 22.04 operating system on a virtual machine, configuring LAMP (Linux, Apache, MySQL, PHP) to support web services, and setting up firewalls using iptables to ensure secure access to the server. The intern also monitored network activity, inspected port access, and managed IP addresses to prevent threats such as unauthorized access and DDoS attacks. This experience provided practical insights into the implementation of virtualization technology, network security management, and the use of Linux as a server operating system. In addition to improving technical skills, the intern developed managerial and problem-solving abilities relevant to the industry. This program serves as a tangible example of MBKM's success in bridging the gap between education and industry needs.

**Keywords:** LAMP, Firewall, VMware ESXi, Ubuntu 18.04, Server Security