

Design and security of a multi-branch enterprise network system using IPsec VPN and Firewall.

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Abstract: In the context of increasing cybersecurity threats, this topic focuses on designing and developing a highly secure multi-branch enterprise network system by applying IPsec Virtual Private Network (VPN) technology combined with a Firewall. The goal is to create a safe and flexible network environment that allows the organization's branches to access the central system without compromising security. This research includes building a theoretical model and conducting experimental deployment on an existing platform, thereby determining the security effectiveness and scalability of the system. Through this, the topic aims to contribute to the development of cybersecurity in particular and enterprise information technology solutions in general.

Keywords: Enterprise network system, IPsec Virtual Private Network (VPN), Firewall, Network security, Secure network environment