Construction of a Network Security System for the Commercial Bank of Vietnam Hanoi Branch

ICTU Student 129
Thai Nguyen University of Information and Communication Technology
Thai Nguyen University, Thai Nguyen, Vietnam
student129@ictu.edu.vn

***Abstract*—This thesis focuses on the construction of a network security system for the Commercial Bank of Vietnam Hanoi Branch. It covers various aspects of network security, including security policies, threats, and firewall configurations. The research highlights the importance of network security in the context of rapid global network development and the increasing sophistication of cyber threats. The author acknowledges the limitations of the study due to time constraints and practical experience gaps, and expresses a desire for feedback to improve their knowledge and skills. The thesis provides a detailed analysis of network security issues, emphasizing the need for comprehensive security measures.**

***Index Terms*—network security, firewall, Cisco, security policies, threats, banking**

I. Introduction

The thesis addresses the critical issue of network security, which has become a major concern in the digital age. With the rapid development of global networks, there are significant economic and social benefits, but these networks also attract cybercriminals for various purposes. The study aims to understand and address the vulnerabilities in network security, emphasizing the need for comprehensive security measures [1].

II. Methods

The research involves a detailed analysis of network security issues, including security policies, threats, and firewall configurations. The author reviews existing literature and practical guides, such as Cisco Security Appliance Command line Configuration Guide and CCNA, to develop a comprehensive understanding of network security. The study does not provide specific numerical evaluations or performance metrics, but it does discuss the implementation of firewall configurations and security policies [1].

III. Results

The report surveys computer networks and network-security concerns in the context of VietinBank's Hanoi information-security environment. It discusses threats, administrative safeguards, and technical concepts including firewalls. The author explicitly states that limited time and practical access prevented hands-on work with real devices. The reported outcome is therefore a study of security principles and possible controls, not an implemented or tested protection system [1].

Supervisor: Nguyễn Tiến Thành, Thai Nguyen University of Information and Communication Technology.

IV. Discussion

The discussion focuses on the challenges and solutions in network security, particularly the use of firewalls and security policies. The author highlights the need for continuous improvement in network security practices to counteract the evolving threats. The author highlights the need for continuous improvement in network security practices to counteract the evolving threats, emphasizing the importance of staying informed and adapting to new security measures [1].

V. Conclusion

The thesis emphasizes that growing network use also creates opportunities for unauthorized access and that administrators need a sound understanding of security. The author reports studying computer networking and network security with guidance from the bank's information-security unit. Because practical exposure was limited and real equipment was unavailable for exercises, the work stops short of validating a deployed configuration. The report is best understood as a technical study that can inform later practical security work [1].

References

[1] ICTU Student 129, "Construction of a Network Security System for the Commercial Bank of Vietnam Hanoi Branch," internal undergraduate thesis (original in Vietnamese), Thai Nguyen University of Information and Communication Technology, 2009.
[2] Cisco Security Appliance Command line Configuration Guide for the Cisco
[3] Cisco networking Acadmy exploration 1
[4] Cisco - CCSP Cisco Secure PIX Firewall Advanced Exam Certification Guide
[5] Cisco Press -2004- Cisco Router Firewall Security
[6] Cisco Press - Network Security Fundamentals 2004
[7] Cisco.Press.Network.Security.Principles.and.Practices
[8] Công cụ hack máy tính cack phần mềm
[9] Kỹ thuật thâm nhập mạng máy tính và cách phòng ngừa hiệu quả. NXB thanh niên
[10] Sercurity ISO 17799 standard
[11] Upgrade-pix-asa7x-asdm
[12] Why infor sec is hard.pdf
[13] Information_security.pdf Các Website: http:// www.google.com http://www.cisco.com http://www.cisco.netacad.net http://www.hvaonline.net http://www.quantrimang.com http://www.gns3.net http://www.nhatnghe.com http://www.blogthuthuat.com http://www.benhvienmaytinh.com http://www.vnpro.org http://www.gns3-labs.com http://www.vn-zoom.com