Building a WAN Network for Thai Hung Corporation

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***Abstract*—This thesis explores the concepts and implementation of Wide Area Networks (WAN) for Thai Hung Corporation, a Vietnamese company. It details the current network infrastructure, identifies gaps, and proposes a solution to enhance the company's WAN connectivity and efficiency. The study covers the basics of WAN, the challenges in managing and maintaining WAN, and the specific needs of the company. The research identifies the current network topology, the number of devices, and existing network services. It also discusses the proposed network design, including the use of routers, switches, and leased lines to enhance WAN connectivity. The thesis evaluates the proposed network design and its potential impact on the company's operations, addressing the challenges in implementing the new network and the steps required to ensure a smooth transition.**

***Index Terms*—Wide Area Network, WAN, Router, EIGRP, Network Design, Thai Hung Corporation**

I. Introduction

The thesis aims to enhance the understanding of Wide Area Networks (WAN) and their application in building a robust network for Thai Hung Corporation. It covers the basics of WAN, the challenges in managing and maintaining WAN, and the specific needs of the company. The study begins by defining WAN and its importance in connecting different geographical areas. It then discusses the various types of WAN connections, such as circuit switching, leased lines, and packet switching, and their applications. The research also highlights the need for robust network infrastructure to support the company's operations, including the current network setup, the number of devices, and existing network services. The thesis outlines the proposed network design, including the use of routers, switches, and leased lines to enhance WAN connectivity. The study evaluates the proposed network design and its potential impact on the company's operations, addressing the challenges in implementing the new network and the steps required to ensure a smooth transition [1]. Related earlier ICTU undergraduate theses provide context for this English summary [2]. Published books on the methods and subject of this project provide context for this English summary [3].

II. Methods

The methods section describes the current network setup, including the existing network infrastructure, and identifies areas for improvement. It then outlines the proposed network design, including the use of routers, switches, and leased lines to enhance WAN connectivity. The research identifies the current network topology, the number of devices, and existing network services. The study also discusses the proposed network design, including the use of routers, switches, and leased lines to enhance WAN connectivity. The thesis evaluates the proposed network design and its potential impact on the company's operations, addressing the challenges in implementing the new network and the steps required to ensure a smooth transition [1].

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III. Results

The results section presents the findings from the network survey, including the current network topology, the number of devices, and the existing network services. The study identifies the current network topology, the number of devices, and existing network services. The research also discusses the proposed network design, including the use of routers, switches, and leased lines to enhance WAN connectivity. The thesis evaluates the proposed network design and its potential impact on the company's operations, addressing the challenges in implementing the new network and the steps required to ensure a smooth transition. The results indicate that the proposed network design will improve the company's WAN connectivity and efficiency, but the implementation will require careful planning and execution to avoid disruptions [1].

IV. Discussion

The discussion section evaluates the proposed network design and its potential impact on the company's operations. The study addresses the challenges in implementing the new network, such as the need for additional hardware and software, the potential for network downtime during the transition, and the need for training and support for network administrators. The research also discusses the benefits of the proposed network design, including improved WAN connectivity and efficiency, better management of network resources, and enhanced security. The thesis evaluates the proposed network design and its potential impact on the company's operations, addressing the challenges in implementing the new network and the steps required to ensure a smooth transition [1].

V. Conclusion

The conclusion summarizes the key findings and the proposed network design. The study highlights the importance of understanding and applying WAN technologies to improve network efficiency and security. The research concludes that the proposed network design will enhance the company's WAN connectivity and efficiency, but the implementation will require careful planning and execution to avoid disruptions. The thesis summarizes the key findings and the proposed network design, emphasizing the need for a robust network infrastructure to support the company's operations [1].

References

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