INTERNATIONAL JOURNAL OF PURE AND APPLIED RESEARCH IN ENGINEERING AND TECHNOLOGY

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NETWORKING AND NETWARE SECURITY

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Abstract*:* Network security has become more important to personal computer users, organizations, and the military. With the advent of the internet, security became a mamajor concern and the history of securityallows a better understanding of the emerence of security technology. The interne structure itself allowed for many security threats to occur. The architecture of the internet, when modified can reduce the possible attacks that can be sent across the network. Knowing the attack methods, allows for the appropriate security to emerge. Many businesses secure themselves from the internet by means of Network Operating Systems, firewalls and encryption mechanisms. NetWare has many security features to help secure the server and the network NetWare is well known for its extensive security features. However, as with most other operating systems, few of NetWare's security features are enabled by default when you install the OS. One such security feature has been planned with the help of Netware Security. The present paper focuses on the security evolution of Network and NetWare security system. I have started by giving an introduction to the Network system and Netware security features. A method of Intrusion Detection and Intrusion Prevention is also discussed.

Keywords: Network Security, Internet, Network operating system, Netware, Firewalls, Businesses, Intrusion Detection, Intrusion Prevention

PAPER-QR CODE

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Access Online On:

www.ijpret.com

How to Cite This Article:

Amol Jawanjal, IJPRET, 2016; Volume 4 (9): 1309-1313

INTRODUCTION

On the most fundamental level, a network is an interconnected collection of devices that enables you to store, retrieve, and share information. In today's business world a network is more than a collection of interconnected devices. For many businesses the computer network is the resource that enables them to gather, analyze, organize, and disseminate information that is essential to their profitability. The rise of intranets and extranets—business networks based on Internet technology—is an indication of the critical importance of computer networking to businesses. Intranets, extranets, and the Internet will be treated in more detail in a later section. For now, it is enough to understand that most businesses have installed intranets to collect, manage, and disseminate information more quickly and easily than ever before. They established intranets simply to remain competitive; now, the momentum continues, and extending the company network to the Internet is the next technological transformation of the traditional business.

Securing corporate information is one of the essential duties of every network administrator and consultant. Yet protecting network data is an increasingly difficult challenge. Almost every day we read about hackers exploiting some new security hole or unleashing some new virus on desktop operating systems, e-mail programs, office applications, network operating systems, or the Internet. It seems hacking is a passion for many people. Some are in it just out of curiosity or for the thrill of breaking in to "secure" sites. Others are driven by more sinister motives, actively seeking to steal or destroy valuable data.

NetWare is well known for its extensive security features. However, as with most other operating systems, few of NetWare's security features are enabled by default when you install the OS. Many novice administrators--and even some veterans--are unaware of which options to enable to protect against various types of attacks. Since no organization can afford to lose valuable data, it is essential to know what security doors to close to the curiosity seeker, the computer hacker, and the accidental deleter.

Objective

Securing corporate information is one of the essential duties of every network administrator and consultant. Here the objective of this research paper is to simplify the work of a network administrator and speed up the security incident response using Netware security.

Methodology

A method of Intrusion Detection and Intrusion Prevention using the Netware security features is deployed. A Network-based Intrusion Detection systems and Intrusion Prevention system is used. This type of detection and Prevention is performed on a host computer in a computer network. Network-based Intrusion Detection and Intrusion Prevention approach observes the whole network or its part. All inbound or outbound network traffic is inspected for suspicious patterns.

Benefits of Computer Networking

The most obvious benefit of computer networking is that you can store virtually any kind of information at, and retrieve it from, a central location on the network as well as access it from any connected computer. You can store, retrieve, and modify textual information such as letters and contracts, audio information such as voice messages, and visual images such as facsimiles, photographs, medical x-rays, and even video segments. A network also enables you to combine the power and capabilities of diverse equipment and to provide a collaborative medium to combine the skills of different people—regardless of physical location..

Cost-Effective Resource Sharing

By networking your business computers you can reduce the amount of money you spend on hardware by sharing components and peripherals while also reducing the amount of time you spend managing your computer system.

Streamlined Business Processes

A well-designed computer network produces benefits on several fronts: within the company, between companies, and between companies and their customers. Within the company, networks enable businesses to streamline their internal business processes.

Freedom to Choose the Right Tool

Networking allow you to choose the system that best works in your environment without sacrificing interoperability with other companies' systems.

Powerful, Flexible Collaboration between Companies

When two or more companies connect selected portions of their networks, they can streamline business processes that normally occupy inordinate amounts of time and effort and that often become weak points in their productivity.

Improved Customer Relations

Networks provide customers with more benefits than simple convenience: they also make it easier for businesses to customize services for each customer and to respond more quickly to customer concerns.

Secure Management of Sensitive Information

Another significant advantage of computer networking is the ability to protect access to network resources and files.

Worldwide, Instantaneous Access to Information

With the help of networking you will be able to disseminate critical information to multiple locations anywhere in the world, almost instantaneously.

Netware Security

NetWare has many security features to help secure the server and the network. The key areas of NetWare security include the following:

Resource access- Resource access in NetWare is controlled, as is everything else related to security, through directory services.

User authentication-As with the other network operating systems, accessing a NetWare server and network resources requires a username and password combination.

File and directory security- NetWare provides a very comprehensive file and directory permissions system, which allows rights to be assigned to users, groups, and other NDS objects. Like the Windows console, the NetWare console can and should be locked for security purposes.

File system security on NetWare is the most sophisticated of any of the popular network operating systems.

CONCLUSION:

Security on a network is not something to be taken lightly. In today's interconnected world, it is essential that you take steps to protect your valuable data from all points of attack, both external and internal. The goal of this paper was to design a system that simplifies a security analysis of large networks using Netware security and for this purpose Intrusion Detection and Intrusion Prevention method is used. This method can help the administrator to keep their data secure from intruder.

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