

## Simple Analysis of Campus Network Security Status

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**Abstract.** In this paper, we are going to discuss as well as analysis about the security issue of campus network, promoting different security strategy for dealing with different security threatens, carrying on effective and approachable security checking, making rootly eliminating any threaten come true, so that it can guarantee the security of campus network, high effecton as well as the smooth operating.

**Keywords:** Campus Network; Security Status; high effecton.

### 1 Introduction

With the coming of Information Age, our lives have been greatly effected and changed by the rapid development of computer technology, and especially by computer network technology. On campus, both the communicators of social science and technology and the construction of campus network play very important roles in improving the stansard of teaching quality, protecting of teaching resources as well as polishing up the competence Education. Which, especially for those universities which are with multi campus. The using of campus network connection and management of multi campus can make different schools achieve faster convergence. What's more, the construction of campus network also plays a huge role in support in the management and teaching part of universities. We must be soberly aware that the construction of campus network information has brought about a variety of advantages, and at the same time, there also are various kinds of serious challenge to the traditional campus security system. With the rapid development of information and network in Campus, the school teaching, research, management and service work would be greatly promoted. School teaching, research, management and service work is dependent on the campus network. If the school campus network can not get a certain degree of security protection, it will hinder the construction of the school's information technology to some extent. From where it stands, a variety of security protection strategy which is based on the access control list(ACL) and parallel security programs should be implemented in the campus network.

## 2 The security of network.

Network security refers to the normal operation of network security, Take various measures and through various methods to make sure the availability, the Integrity as well as the confidentiality of the network. Figure 1-1 shows the network security identifier



Figure 1-1 Network security identification map

The construction of network security system, on one hand, due to authentication, encryption, monitoring, analysis, records, etc., affecting the efficiency of the network, reducing customer application flexibility; on the other hand, it also increases the cost of management.

Nowadays, there are quite some threat to the security of the network, and especially when it is time to operate some critical services on the network. All in all, network security is the primary problem to be solved.

According to the current form, we can easily find that selecting the appropriate security technology and security products and addressing a flexible network security strategy can ensure the network security provide flexible network channels in accordance with the need.

Adopting a certain standard applicable safety system design planning and management methods, which can effectively reduce the impact of certain network security performance as well as reduce the cost of management.

Backup and recovery of backup data and services: holding good data backup and recovery mechanism can be in the corresponding network attacks caused by the loss of the relevant processing as soon as possible in order to restore data and system services.

Multiplayer defense, an attacker who breaks through in the first line to slow or stop the attack. Most of the basic information hidden in the internal network, so that the attacker can not understand the basic situation of the system in the field. The construction of safety monitoring center, safety management system, monitoring information system, pipeline nursing and emergency service.

## 3 Physical security analysis

The physical security of network is the precondition of network security in the whole network. The construction of campus network security in Colleges and universities according to the special characteristics of the school network system -- weak electricity engineering, In the case of low voltage values in the design and construction of network engineering, priority must be given to the protection of electrical and electronic equipment without electricity, fire and lightning damage; In consideration of the network cabling and wiring related facilities also adapt to the morning reading but also consider the establishment of the lightning protection system and the obstacles and infrastructure and so

on related entities. The overall risk factors of physical security is a major environmental accident, earthquake, flood, fire; power failure; Personal errors or errors; equipment theft and destruction; electromagnetic interference; line interception; Personal errors or errors; equipment theft and destruction; electromagnetic interference; line interception.

#### **4 Security analysis of network structure**

The topology of the network will directly affect the security of the network, and the connectivity between the external network and the internal network. The transmission of the corresponding data is bound to be a certain security threats, it is necessary to connect the external network and internal network in the middle of the relevant configuration device to carry out the necessary isolation in the network, which is in order to prevent the external leakage of the structural information in the network, the relevant external service requests are filtered, and only certain operations are allowed.

#### **5 System security analysis**

In today's era of the information age, its safety is not only related to disclosure of confidential information, but also involve in unauthorized access and destroy the integrity information of counterfeit, damage the system availability. In the current network system, there are a lot of confidential information, once these important information is stolen or destroyed, its economic and social impact is not limited, which is very serious. According to this problem, we can draw such a strategy: the user to use the relevant computer authentication, to have permission to use. And in the process of using encryption to improve its confidentiality, access control level and access control, data security protection; The application of such encryption technology can ensure the confidentiality and integrity.

Generally speaking, people pay more attention to prevent the attack from the Internet, and pay much attention to the installation as firewall, intrusion detection between Internet and Intranet, security tools such as virus killing, But often overlooked by such a reality, some attackers are derived from the internal one. Most of the major damage and attack is from the inside, the situation is caused by the following two situations:

With the low level of responsibility and quality, low safety awareness, the staff can not effectively detect the invasion, not their own documents or e-mail was exposed, infected files or e-mail circulated on the Internet, which shows the objective that the cause of the spread of the virus.

Some people who are in internal use their own preferences related to non security operations. For example, with the help of some tools to try to break some of the password should not know to enter some areas should not enter.

All in all, to ensure the safety of campus network is determined by many factors, and school leaders attach importance to success is the primary factor.

#### **6 Conclusion**

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