

Security Hidden Danger and Protection Measure of Digital Campus Network

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Abstract. With the development of science and technology progress, electronic information technology has been accepted by the public, the network information popularization, Internet plus has also become a hot topic, the campus network has become the standard configuration of daily life and study, application of computer and mobile phone also will be more extensive in our life gradually eroded by the network today, network security issues more and more attention from all circles of society, has become one of the main existing problems of campus network. Campus network faces the problem of network security is becoming more and more serious, so how to effectively protect the network security problem, and more become the key problem, set up a firewall, anti-virus software, strengthen identity authentication and data encryption is the effective protection measures. In this paper the present safety hazards and protective measures of campus network are analyzed.

Introduction

With the increasing levels of China's economy, science and technology level is also in constant progress, the Internet has become an indispensable tool for practical production, including life and consumption and other aspects of learning, not the application of network, informatization level in China increased year by year, including electric providers on the real economy has brought no small impact. In the aspect of teaching activities, also gradually toward the informationization, modernization and internationalization constantly forward. Now the campus network has almost all over the country at all levels of the school don't, and constantly promote the development of the campus network, and other network situation, campus network with more knowledge exchange and sharing of information, the communication between teachers and students and research professional technology transfer and so on. The campus network for the school teaching activities and daily management work smoothly to provide a strong guarantee. But China's current campus network form Is not optimistic, in the network to bring us convenience, we should also clearly recognize that the current network virus, network security has become a problem to be solved in the campus network.

Analysis of security problems in campus network

User is much, the concentration is high and personnel more messy. Because students are a group of relatively concentrated, especially in some colleges and universities, little criterion thousands, tens of thousands of people, living in a small range, density, on the network is also a corresponding increase in demand, the now commonly used are Ethernet technology and speed requirements of large load, in this case will lead to once the virus appears, propagation speed is very fast, affected the number, range will relatively wide, appear this kind of circumstance is impact on the overall network security will be great.

User security awareness is weak. The object of the campus network the main face of the nature is on campus, and students use the Internet, the highest frequency is to play the game and download movies and social network chat, in use process, may inadvertently click on some links with the virus or rely on others, click the send to other people's pictures or links so that the network virus invasion. Because of the campus network is crowded, characteristics of fast speed, which makes the virus spread very quickly, affecting the normal operation of the entire network. In addition, because the

student age, serious polarization, some students about network knowledge, do not think of setting up a firewall, anti-virus software is very easy, hacker intrusion also, the network is down. Some of the students, is the study of computer network and other related professionals, because have mastered some professional knowledge, to verify self learning by self Has knowledge of the network structure and the modules, unscrupulous invade other people network, attacks, network security, one of which is currently in campus network problems.

Lack of network environment optimization management. The main purpose of the campus network settings and open is convenient communication between academic, knowledge sharing information, therefore, there is a large campus network is the main characteristic of greater openness, especially some of the campus information website set is shared by many people, the relationship between network interoperability is very large, if the campus network take private management then, some advanced research and theory, it can be an effective transmission, it cannot achieve the original effect on knowledge transfer. But because of the characteristics of the campus network openness, for the security of the campus network planted a major hidden trouble, once the host attacked, the entire network will receive serious impact. The probability of attack of the whole network will also increase.

Ignore the genuine resources. For college students, the problems of intellectual property rights and other basic knowledge is zero, because the students lack of awareness of copyright, also limited economic conditions, need to pay for some students to genuine, cheap, and some will use to buy pirated software or VCDs. Some students including machine software installed, operating system is through the free download version, which will bring great danger to the network security in the future. On the one hand, the network software and video data occupy the network bandwidth, on the other hand, some pirated software is pre written Trojans, backdoor code, more or less there will be some loopholes in the subsequent use of these vulnerability is very easy to be exploited, ranging from software can not run normally, it caused heavy leakage of information and even affect the entire network operation.

Low maintenance cost. Campus management personnel in the teaching management and professional technology does have the advantage, but in network operation management and safety awareness aspects of lack of knowledge, do not pay enough attention to the campus network security problems, only the pursuit of speed of network and website, do not pay attention to the following network construction and maintenance, less investment, less staff, heavy maintenance tasks such as are common problems now existing in the campus network, which makes the security of campus network maintenance without adequate protection, campus network for a long time in unsafe environment, also let some malicious network attack vectors.

Security management and preventive measures of digital campus network

Strengthen organizational learning, strengthen security awareness. Schools, especially colleges and universities, should be timely to organize students and teachers to learn the network security knowledge, the importance of network security, strengthen security measures, improve awareness of prevention, and then popularize safety knowledge.

Strengthen the network firewall settings. To maintain the network security, it is not easily received network attacks, network firewall is to protect computer system a strong barrier and to establish between internal and external network security protection, at the same time, firewalls can provide a variety of network services, protecting network resources from unauthorized access and destruction and other organizational resources using the campus network platform, and play a role in tracking and protection.

Strengthening the installation and application of network anti-virus software. In the web server installed network anti-virus software is also effective way to prevent the network problems and to be able to control the network virus propagation in a certain extent, but the network anti-virus software installed, but also pay attention to the selection of genuine anti-virus software and software to can support all system platform, the antivirus software but also at any time to update and upgrade

the software, has adapted to the network requirements in different periods, the virus database, the engine can be in the new state.

Enhanced access licensing review. Network access license is usually the first line of defense in network security, is the first barrier to protect the security of network system. Commonly used network license examination to verify that the user name and password and verification code, log on to the network time, location and the way to IP addresses and other multi pathway restriction. Can according to visitors of different security levels to allow access to the different range of open content, including some specific access rights, which also requires visitors to the login name and password protection, password is try to avoid using the birthday of the commonly used combination of numbers, so as not to be intercepted by an attacker and deciphered.

Strengthen the server testing system maintenance. In the daily maintenance of network security, software problem is network problems more prominent and complex problems, have taken a vulnerability screening method, multi workstation, server, switches and other network equipment of safety inspection, and check the feedback report, found problems in a timely manner and processing, through the network administrator found hidden in a timely manner.

Strengthen the system operation safety. In some software installation, pay attention to close some other software comes with automatic installation. We also recommend that choose to manually install the software processing, some software will be incidental malicious plug-in, which also requires administrator in the background of common software for routine screening and maintenance.

Conclusion

In the era of rapid development of information technology, network technology is gradually swallowed up our life, Internet plus has become the hottest topic, omnipresent network technology, network security is more and more people are concerned, the security problem of digital campus network should not be ignored, only when we constantly updated technology, raise awareness of prevention and to strengthen safety management, at any time in order to cope with various threats, hope that through our continuous efforts, to create a harmonious and healthy network environment, we can make the network security guarantee.

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