

Analysis on Problems and Countermeasures of Computer Network Information Security Management

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Keywords: computer; Information security management; countermeasures

Abstract: With the continuous development of science and technology, the number of people online in our country is increasing and tends to form a phenomenon of Internet addiction, which is mainly because the convenience of the network greatly improves the efficiency of people's work and the quality of life, the existence of the network has become an inseparable part of people. However, the Internet is also a double-edged sword, which brings convenience to people and some defects at the same time. In particular, the problem of network information security brings people a lot of troubles, and the disclosure of information will make people's life suffer continuous interference, and even bring about property losses. This paper briefly expounds some problems existing in computer network information security management and puts forward some pertinent countermeasures.

1. Problems in computer network information security

1.1 Defects of wireless network itself

The existence of the wireless network can provide many people online at the same time, when the power system stability, consumer also need not worry about whether the Internet appear similar to the mobile phone flow under the limit of suddenly happen, the wireless network to improve the speed of acquisition and transmission of information to the people, and based on the wireless network privacy feature, so people for the dependence of network is more and more strong. However, it is out of the sense of trust for wireless network, lead to some hackers or the use of people's psychological vulnerability to attack the network eventually steal their users on the network, for example, in May 2017 or so, many colleges and universities in China's college campus network and wireless campus network attacked more than other countries, these students' graduation thesis is locked by computer virus, appear even after computer can't use, it has seriously affected the progress of the students graduate. At the same time, there are some pseudo base station through to provide free wireless Internet, and do not set the password, so that users can connect directly, but the pseudo base station is stealing the information of Internet users to accomplish some ulterior purpose, and the pseudo base station provides wireless network with other ordinary network is not very big, the differences between this creates for the user in the process of identification, heart, this is normal wireless network and pseudo recognizable difference between wireless network defects.

1.2 Vulnerabilities in the computer system

Our country's computer basic configuration system is the windows10 system updated on the basis of the Windows 7 system, and these two systems will generally exist in most people's computers, without this basic system, the computer will not be able to use. But even as these systems continue to be updated and improved, there will still be vulnerabilities in the system itself that cannot be recognized by ordinary people, and these vulnerabilities will be targeted by hackers with special algorithm programs. In addition to the large computer system, some type of computer software, the basic operation also need to rely on the system and the software programming system generally can be copied, while output the results of the program code is relatively fixed, but there are a variety of code corresponds to a function, a programmer in the process of imitating other

procedures for the performance of the new program need to do some modification, and in the process of change, the code could be bugs, so these systems loopholes let part of criminals given become the breakthrough point to attack the computer information security defense system.

2. Security problems in computer hardware and software

2.1 Computer hardware security

The computer system consists of hardware system and software system. The hardware system includes the central processor, main memory, input devices and output devices, such as CPU, memory, mouse and so on. These hardware devices constitute the frame structure of the whole computer and are the basis for the normal operation of the computer. Some people don't know the carrier will be damaged and cause an effect to the computer system security, such as in the case of a computer central processing unit CPU, CPU is similar to the "brain" of the entire computer, the computer system plays a very important role, and the inside of the CPU running system instruction is made up of very secret code, even though the code is extremely complex, but there will still be the criminals with strong technical design code against the CPU internal integration for the virus to steal the circumstance of computer information, and these information are illegal trading activities, is more serious is that the immediate collapse of computer hardware system, Each unit of the hardware system in the computer can be controlled by special instructions, because these components are controlled by programmable control chips, and the design program code of these chips can be controlled, and then the system security of the computer will have problems.

2.2 Computer software security

Computer software and computer hardware are completely relative all the components of a computer system, and there are many types of computer software system, the basis of the software system includes the operating system and programming language system, etc., these two kinds of software is to write the other basic operation control and design of system software mainly software system. Other software systems include those commonly used in People's Daily life, including office software system, media tool software system, and network tool system software similar to various game and entertainment tool systems. All the above kinds of software systems are the basic material carriers of computer operation and control, and they are important guarantees to improve the richness of computer platforms. Software security issues, however, are often affects the user's main problem, because with the development of computer technology, the software system are overwhelmed, users can't respectively, the system is safe and through formal authorization, and what software is covered with convenient user name to virus attacks and the user's computer information stolen, virus associated with software downloaded in a web browser can quickly implanted in the computer and difficult to be perceived by the user.

3. The method of computer network information security management

3.1 Improve the security performance of software and hardware and carry out necessary protection

For the user, the user cannot be independent of improving the security of the hardware, will in time for the new hardware updates, because the new hardware system in the aspect of safety performance tend to be perfect again, for the software system of information security management there are many ways of, for example in high-profile search engine and web page to download the software system, and download the software system is the best of all the people often use system, in order to avoid strange software system for computer information security threat, for documents and data that exist in the computer software for certain encryption protection, To prevent software systems from infecting computers with these vital data after spreading viruses. And for the computer information security related departments, first of all, should strengthen the management and control of these illegal software systems on the computer platform, strengthen the punishment

of illegal elements, increase the cost of illegal management of computer information security; Second, we should constantly strengthen the publicity of computer security information, improve the awareness of vigilance of users.

3.2 Improve the use of computer information management software

Software associated with the computer information management software, including computer program of the firewall and the user can according to own needs the installed anti-virus software, etc., the role of the computer firewall not only is to help users block and block out most malicious attack the virus software, at the same time also can prevent and control rules of some connection with the computer don't match the external inbound links, such as part of a malicious web site network, so that can improve the internal computer information security. And similar to the 360 security steward housekeeper or computer software, such as the role of is mainly for internal information and security of the computer, for example, can be directly to find and remove some latent computer viruses, etc., in addition the computer butler will also be able to find security vulnerabilities that exist in the computer software and in a timely manner to add patch to improve the security of the whole system.

4. Conclusion

Hardware system and software system is a important system of computer architecture, thus to improve the management of computer information security helps to improve the safety performance of hardware and software, and user and the information security management departments to promote awareness of the protection of computer information, timely for the safety of the hardware system and software system of management and perfect, improve its management of computer information management.

Acknowledgement

Teaching Reform Research of Programming Course Based on MDP Model in Jiangxi Higher Education Institutions (JXJG-16-19-2).

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