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# Research on Computer Application Technology based on Network Information Security

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**Abstract:** With the rapid development of network technology, while bringing convenience to people, there are also many security hazards. Therefore, the computer application technology based on network information security is proposed. Through the description of network information security, this paper puts forward the preventive methods in the field of computer application. The results show that the research method has important reference significance.

**Keywords:** Network; Information security; Technology; Method

## 1. Introduction

Computer entering people's life not only brings more convenience to people, but also brings about faults and problems. These faults and problems not only threaten users' normal use of computers, but also bring some interference to users' daily life, cause certain losses, and even infringe on users' rights and interests. Problems limit the use and development of computers. Therefore, people must be alert to the risks brought by computers and avoid network risks in the process of applying computers. Nowadays, network information is very developed. Only by ensuring network security can information resources be guaranteed. Only by this way can we promote the orderly development of computer network era [1-3]. But in order to promote computer network security, first of all, people must accurately recognize the hidden dangers of information security in the network era and their detailed manifestations, carefully analyze the application effect and value of network information security technology in computers, and also recognize the relationship between computers and network information in order to fully develop it. Give full play to the value of network information security technology management [4-5].

## 2. Principles of Computer Information Technology System

As an inevitable requirement of information management, information management system has also become the key technology foundation of public utilities management. Scientific information management system can ensure the efficiency and quality of public utilities management, and is an important link in the development of social public management system. Information management system includes many different disciplines, including

computer technology, statistics and economics. There are many and complex disciplines theory. It is a comprehensive and systematic interdisciplinary subject which integrates multi-disciplinary theory and has good practicability. Information management system is based on mass storage of Internet information database, the number of information

According to the comprehensive and systematic management, the quality and efficiency of management can be enhanced. As far as computer communication technology is concerned, computer terminal is the basic platform of information data transmission, and modern communication is the theoretical basis, so as to transmit information data efficiently and accurately, and to ensure the timeliness and reliability of information data transmission between computer and terminal equipment. Computer communication technology is one of the key methods of information data transmission. Communication structure and protocol framework have become closely related housekeeping technical indicators. There are mutual influences and important links between them. In the process of analyzing and studying computer communication technology, they can be combined.

Think of it as the same whole. In terms of computer communication technology, it is obviously different from mobile terminal communication technology, which usually takes data communication as the key processing target. The important function of computer communication technology is to systematically and comprehensively classify and manage information data and integrate them efficiently to ensure that the data has good accuracy, practicability and authenticity. With the continuous development of modern information technology, computer communication technology has gradually developed into modern communication technologies such as integrated

optical fiber communication and power line carrier communication.

### 3. The Manifestation of Network Information Security

#### 3.1. Wilfully tampering with information

After the intruder has mastered the method of obtaining information in the middle, it means that the intruder has fully mastered the method and data format of intercepting information in the middle, and it means that the intruder can tamper with the information intercepted in the middle freely. Illegal elements can make full use of this feature and send information to users after tampering with information. But because the information is intercepted halfway, the original sender has not changed, so the user receiving the information can not accurately identify the information.

#### 3.2. Internet self-risk

Internet can improve people's quality of life, but it also carries risks. The Internet itself is a complex form, encompassing a variety of information and data. These information, the scope of data dissemination, coverage and coverage are very large. However, the quality of different information from different channels also has obvious differences. Many information has been tampered with in the middle of the way, or the person who sent the information is illegal. So we can say that there is a certain danger in Internet information itself. Some information even carries viruses. As long as the user opens the information, the virus will attack the computer, and then cause great losses to the user. Moreover, if the virus spreads wildly in the network, it will not only endanger some users, but also cause network security problems, which will lead to more users' rights and interests being damaged, and then lead to network panic and restrict the development of the network.

#### 3.3. Information theft

Under normal circumstances, the network information resources are not encrypted in the transmission process, which provides an opportunity for intruders to steal. Data must pass through routers or gateways during transmission, where intruders can stay and steal valuable information. But because data is freely transmitted, many intruders will analyze and calculate according to the mode of information transmission, and finally obtain more accurate information content, which leads to the intruders can freely obtain all kinds of resources they want, so as to maximize their interests. However, information resource theft will seriously disrupt the network information security transportation, and then affect the application of the network.

### 4. Strategies of Network Information Technology Security Technology Management

#### 4.1. Formulate safety management system to realize integrated safety management

In order to ensure the safe operation of computers and related networks, it is necessary to vigorously improve the management level of network safe operation system. The perfection of safety management mechanism can further optimize the operation environment of computer network. First, the government

Intervention and policy control of network operation risk are very important. Through the improvement of laws and regulations, information security can be achieved.

Management work has been implemented by both individuals and units. Secondly, for the key defense of virus intrusion work, mainly through improving safety monitoring, emergency management system and other work, timely and effective control, to reduce security threats and ensure daily work.

Normal development. Finally, strengthening the network supervision and management, as well as the daily updating of the monitoring system, can greatly improve the efficiency of the computer system.

#### 4.2. Strengthen the propaganda of network information security and enhance users' security awareness

Network security is not a matter of state or government, but closely related to people's life and work. Therefore, every computer user should improve their computer level and care about network information security. The state, government, enterprises and computer users can unite to organize network security propaganda work, constantly publicize the "Network Security Law" of our country, continuously improve the computer level and self-literacy of computer users in our country, and promote the network culture to become more harmonious and healthy. At the same time, the government and Relevant departments must strengthen network security management, strengthen the crackdown on network criminals, and never be merciless. Once investigated and punished, they should severely punish and eliminate the network atmosphere. At the same time, China's regions should do a good job in network security propaganda, to achieve diversified propaganda, such as broadcasting network information security videos on small television on buses, pasting various pictures and text about network information security in various public places, or conducting propaganda on public platforms such as micro-blog and micro-message. It can even hold lectures on network information security knowledge in major enterprises, units and universities, and constantly publicize network information security knowledge.

### 4.3. Application of antivirus technology in computer

Anti-virus technology has played a very active role in the protection of computer hardware, mainly including: virus prevention Technology, detection technology and removal technology. In the work, virus can be handled in time so that the Internet and computers can make use of it.

It's safer to use. Virus prevention work is mainly to use technical means to block the spread of viruses, and in the detection of viruses, will be

The virus is detected and processed to prevent it from destroying the information in software and computer. At the same time, the use of firewall should be strengthened. The filtering firewall mainly filters the data acquired by computer system from routers.

### 5. Concluding Remarks

With the rapid development and promotion of science and technology, computer communication technology has become the most widely used advanced science and technology in many industries, bringing great convenience to people's production and life. With the populari-

zation of computer communication technology, the timeliness, security and reliability of data are improved, and the efficiency of integrated management of information management system is obviously increased. Therefore, it is necessary to conduct a comprehensive and in-depth analysis of the key technical points of computer communication technology, in order to promote the rapid change and development of information management system.

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