

# Analysis on the Core Ideas of Computer Network Information Security Technology

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**Abstract:** *With the continuous progress of science and technology, people's demand for the Internet is increasing, and computer management technology has been further improved. Nowadays, computer technology has been integrated into various professional fields, and played an important role. However, during the development of computer management technology, network security issues have gradually become prominent, which has a negative impact on the development of computer management technology. Based on this, this paper discusses the application of computer information management technology in network security, hoping that computer information management technology can develop steadily and healthily.*

**Keywords:** *network security; Computer; Management technology; app; application*

## 1. Introduction

At present, computer management technology has become an indispensable and important part in various industries. However, during the practical application of computer management technology, the hidden problems of network security become more and more obvious, such as system vulnerabilities, information theft, computer viruses, etc., which have a very adverse impact on the application and development of computer management technology. Therefore, computer management technology must be constantly improved to effectively guarantee its stability and security, so that computer management technology can be better applied and developed.

## 2. The important value of network security in computer information management technology

Under the background of informationization, computers and the Internet play an important role in promoting social development in an all-round way, which is of key significance to the development of the country and the construction of society. Therefore, the level of computer management technology has a long-term impact on the development of various industries. If the security of computer management technology cannot be guaranteed, problems will occur in the development of all walks of life. The network security in computer management technology must be paid attention to.

The application significance of network security in computer information management technology embodied in two aspects: first, under the background of information age, network security is an inevitable demand in the development of computer information management technology. From the point of view, computer information management technology has a direct impact on global economic development. However, in China, computer information technology has become a part of people's daily life, and its application range is very wide, so only when network security can be effectively guaranteed can it be better. The second aspect is that network security is the realistic demand of computer information management technology at present, when the network hidden troubles are obvious, so network security is of great significance to computer information management technology<sup>[1]</sup>.

## 3. Problems in network security

### 3.1 Information security cannot be guaranteed

Nowadays, one of the most obvious network security problems is that the security of personal information can't be effectively guaranteed. As the network information detection is still carried out in the traditional way at this stage, the security of personal information can't be effectively guaranteed,

then it is stolen by criminals. It can be seen that there are obvious loopholes in network security in information detection.

### ***3.2 Significant internal and external security problems in the network***

At this stage, the most common network security problems are divided into three categories: the first category is computer virus with strong diffusion ability inside the computer; the second category is hacker attacks from outside; the third category is the loopholes in the system. Among them, viruses and hacker attacks can both cause problems in system vulnerabilities, which have crucial adverse effects on computer information management technology.

## **4. Application strategy of computer information management technology in network security**

### ***4.1 Establish a network security assessment system***

From the point of view of improving the security of computer information management technology, the establishment of network security evaluation system plays a very important role in safeguarding computer information management technology. Only a sufficiently complete network security evaluation system can effectively guarantee users' communication on the network.

Before establishing a network security assessment center, it is necessary to define three essential parts: the first part is that when planning the components of the network security assessment center, detailed planning is needed; The second part is that in the process of building the network security evaluation center, it is necessary to check and test it regularly, so as to make the network security evaluation center more perfect as much as possible; The third part, after perfecting the network security assessment center, carries out the overall operation of the network security assessment center, and corrects the problems in the operation process of the network security assessment center, so as to ensure the completeness and feasibility of the network security assessment center.

### ***4.2 High management personnel safety awareness***

Only a complete network security assessment center can not fully guarantee the network security, but also needs technical managers with security awareness.

At present, with the rapid development of the Internet, the scale of information and network has been continuously expanded, and the network security problem has also increased<sup>[2]</sup>. Therefore, in order to better deal with frequent network security problems, it is first necessary to improve the security awareness of technical managers. As professionals responsible for network security issues, technical managers play an important role in maintaining network security. Therefore, only when technical managers can change their own ideas and improve their security awareness can they better maintain network security.

In improving the safety awareness of technical managers, the stable development of computer information management technology can be ensured by organizing technical managers to carry out training.

### ***4.3 Strengthen network security detection***

Among the network security issues, security risks have a significant adverse impact on computer management information management technology, which not only hinders the development of computer information management technology, but also causes irreparable losses to the development of computer information management technology. Therefore, only by formulating relevant strategies can we better promote the development of computer information management technology in China, and then improve the risk avoidance.

In order to effectively avoid security risks, technical managers must plan relevant countermeasures against network risks, which not only need to include relevant plans to avoid risks, but also need to include how to solve problems with minimal loss when encountering risks, so as to strengthen network security detection.

At the same time, technical managers also need to build a risk prevention platform, so as to strengthen the degree of contact between various departments and provide effective guarantee for risk

prevention.

#### **4.4 Improve the encryption degree of network information**

At this stage, the security of personal information can not be guaranteed, and the fundamental reason is that the encryption degree of information is insufficient. Therefore, if you want to effectively guarantee the security of personal information, you must improve the encryption degree of network information. Therefore, technical managers need to improve the technical research on information encryption to ensure the security of personal information.

Nowadays, the traditional information and data security management mechanism system is no longer suitable for dealing with the information and data security problems in the era of big data, so it is very important to establish the information and data security management mechanism system in the new era. The establishment of the information and data security management mechanism system should be carried out from three aspects: the first aspect is the technological development, which must change the management mode of manual operation in the traditional mode to the information security management mode combining information technology and intelligent technology; The second aspect is the cultivation of talents, which not only includes science and technology, military affairs, politics, etc., but also needs to be innovative-oriented, so as to cultivate diversified and comprehensive talents; The third aspect is the management mechanism, which needs to build a complete database audit mechanism system and flexible and dynamic management methods to better manage information data.

Nowadays, with the continuous expansion of the scale of information data, the amount of information acquired by people has also increased. At the same time, there are a large number of false information, junk information and bad information in the network, which not only is not conducive to people's better access to information, but also has a certain impact on network information security. In order to better promote the management of network information security, we must formulate a scientific and reasonable management mechanism according to the actual situation of network information, so as to ensure the security of network information.

When managing information and data, national network management departments need to adapt to the development of the era of big data, explore the rules and characteristics under its background, and then formulate information and data security management mechanism to make network information more standardized and legalized, and carry out unified management work on this basis. In order to strengthen the systematicness of the database, we should first check the security of the data information before information entry, and after ensuring that the data information itself does not carry Trojans or viruses, we need to remove some repetitive information in the data, which will help to improve the efficiency of information entry<sup>[3]</sup>.

## **5. Conclusion**

To sum up, in order to better guarantee the application of computer information management technology in network security, it is necessary to establish a network-oriented security evaluation system, improve the safety awareness of managers, and at the same time, strengthen the detection of network security, so as to improve the encryption degree of network information, thus effectively ensuring the stable development of computer information management technology.

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