

# Analysis of Computer Information Security and Protection

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**Abstract:** In recent years, with China's constant attention and attention to the protection of computer network information security, higher standards and requirements have been put forward for the protection of computer information security. Although considerable progress has been made, there are still many loopholes, such as imperfect laws, weak computer information security awareness of Internet users, and unsound computer information security management system, All of these hinder the implementation of computer security protection in China. Based on this background, this paper starts from the connotation of computer information security, analyzes various hidden dangers of current computer information security, and puts forward some suggestions on protecting network information security.

**Keywords:** Big data; Computer network information; Information security; Protect

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## 1. The connotation of computer information security

Computer network security technology is a comprehensive discipline, involving network operating system, password technology, data structure, network construction, program design, etc. Many disciplines should serve for network and information security. Network security includes system stability and smooth operation of websites and programs. Information security is mainly to protect users' information privacy. For the majority of terminal network users, information security is particularly critical.<sup>[1]</sup>

## 2. Hidden dangers in current computer information security

### 2.1 The legislation of computer information content supervision lags behind

On the one hand, the number of normative and low order methods almost accounts for more than 60% of all. The absence of high level laws directly leads to the restriction of low level law authority. Without the support of high level laws, the authority can only be adjusted to regulate the system and behavior, and the supervision efficiency is greatly reduced.

### 2.2 Citizens have poor awareness of computer information security

At present, computers have successfully infiltrated into every household. Although most people are exposed to computers or networks every day, their awareness of the security of computer network information is relatively weak. There are many hidden risks in some daily behaviors we often operate, such as shopping, but people do not pay attention to this. Some residents also conduct capital transactions in Internet cafes, which is more risky. Because computers in Internet cafes are all infected with viruses, the accounts of residents are often stolen. There are also many Internet users who are tempted by various false advertisements of some websites to enter their websites to download things in the process of surfing the Internet. These are very dangerous behaviors, which will pose a great threat to our personal network information security.<sup>[2]</sup>

## 3. Suggestions on Improving the Protection of Computer Information Security

### 3.1 Improve the legislative level of computer information content supervision

At present, with the Internet News Information Service Management Provision as the core, including but not limited to the search services of Google, Baidu and other websites, relevant advertising supervision services, live broadcast services, online game product review services, microblog forum post following comments and other Internet information services, the entire set of management provisions support the entire huge network content regulatory system. The service and regulation objects of this system are all targeted at the providers of network information, applications, advertising services and other information, but their legal provisions are divided into different legal texts. If we need to provide network information services in different fields,

we need to refer to these different legal provisions at the same time, and then refer to the content of the service management regulations of the Ministry of Radio and Television, the Ministry of Information Industry, the Ministry of Culture and so on. This undoubtedly causes a serious waste of human resources and legal resources, which greatly harms the healthy development of Internet enterprises.

### **3.2 Improve citizens' awareness of computer information security protection**

First of all, Internet users should actively install anti-virus software on their computers and regularly check and kill viruses, and timely update the system and install system patches. Secondly, our government should vigorously strengthen the education of network information security protection awareness, issue warning signs and relevant laws and regulations tips on websites with security implications, and hire professionals to open online network information security education classes. We should also improve the awareness of network information security protection through vigorous publicity, raise the awareness of network information security of the whole society, constantly publicize the harm of network information security issues, and let everyone realize the importance of network information security and the awareness of network information security protection is not optional, but necessary. Moreover, it is also essential to strengthen legal education. To improve citizens' quality education and moral construction, so that ordinary people can understand to consciously respect others' privacy and self-consciously restrain their own behavior, this can also reduce cyber crime to a large extent.

### **3.3 Strengthen the construction of computer information security management system**

First of all, the relevant departments do not need to pay attention to the security of network information. This requires relevant departments to formulate rules and regulations according to their own development, "there are rules to follow and orders are feasible", effectively and maximally guarantee the security of network infrastructure, operation and maintenance, and greatly reduce the potential network security risks in all aspects. Relevant departments can contact the actual situation, divide relevant staff into different posts, and each person performs his or her own duties. On the basis of mastering the entire network information security management system, the department can subdivide responsibilities, comprehensively maintain various network information security work, ensure that all work can be carried out smoothly, and can optimize and solve any risk problems in a timely manner.

## **4. Conclusion**

In a word, science and technology and the development of the times complement each other. The development of one side will inevitably lead to the progress of the other side. In this era, the value of data information has risen significantly, which also makes it the target of criminals' illegal acts. At present, we are taking corresponding countermeasures to solve some shallow problems. However, with the continuous development and progress of computer technology in the future, the protection of computer network information security will become increasingly difficult. Therefore, we need to keep computer information security in check at all times, not only update technical equipment, but also create a relatively safe network space for Internet users.

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Haoran Zhu (1969 - ) male, Han nationality, born in Tai'an, Shandong Province, with a postgraduate degree and a master's degree. His main research direction is computer.