Research on Monitoring Technology of Intelligent Computer Information Security

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Abstract. At present, the development of science and technology in our country is very fast and quickly occupied the larger economic market, at the same time, it also draws great attention in the communication industry. With the development of science and technology, computer technology has attracted the attention of the majority of people in the society with the major concern that whether it can truly keep customers’ privacy. Network information security, for national enterprises or the government, is crucial, but it is difficult to use information in the process of absolute confidentiality. Therefore, in today's network research and development, it is necessary to carry out more rigorous processing of information to ensure that the information is not leaked during the use of the network. In the actual application process, the information should also be privatized. We can apply the computer security monitoring information network technology to protect information security, reduce virus invasion in order to ensure the green and healthy network. This paper mainly studies the security of the network based on the monitoring technology research while application and development prospects of the current situation of computer information security monitoring technology are described, which can be a good reference for the future construction of security information network.

Keywords: Intelligent Computer, Safety Monitoring, Network Technology Research

1. Introduction

The rapid development of computer technology has brought great convenience to people's life, but it has also brought a lot of troubles to computer users. At present, China's social computer information security monitoring technology is not mature and there are some problems in its operation, which leads to the situation that a lot of information is difficult to be guaranteed. So it is difficult to resist computer virus and hacker invasion. If this situation happens, it will not only harm the interests of users, but also reflect the immaturity of our computer technology. In this case, in order to better
protect the rights and interests of users, the birth of computer monitoring technology will let people usher in a new hope. Computer network itself has a certain degree of development and sharing, which leads to that the monitoring technology is difficult to specifically prevent and monitor the circumstance. However, intelligent computer can effectively deal with this problem so that information security has a better prevention measures [1].

2. Present situation of intelligent computer in security monitoring information network technology

At present, intelligent computer security monitoring can effectively promote the current computer technology to maturity that is the main content of its development process. On this basis, the relevant staff should attach great importance to the monitoring information network. With the continuous efforts of the staff, China's intelligent monitoring has made great progress and achieved many achievements in the industry. Common methods of intelligent computer monitoring are shown in figure 1.

![Diagram of common methods of intelligent computer monitoring](image)

**Figure 1.** Common methods of intelligent computer monitoring

At present, Chinese researchers have initiated an intelligent computer security monitoring measure on the basis of "Web Service", which can only be implemented with the support of DFNMS. In general, the staff should place corresponding security check equipment at the entrance and exit of the information network to ensure the security of the data flowing in the information network. At the same time, they should also analyze the data and detect its risk in the data. After the concrete implementation of this method, it can improve the intelligent monitoring to some extent, and at the same time, it can protect the data more comprehensively and reduce the probability of information leakage to the greatest extent. However, in the implementation process of this method, more capital needs to be invested and staff needs to carry out maintenance at the same time. Therefore, high economic costs are involved in the investment and maintenance process while the cost of manpower and material resources is countless [2].

3. Monitoring technology research by manual work
3.1. Keyboard monitoring technology

Keyboard monitoring technology mainly starts from the use of users, and it gives corresponding tips to customers. When customers use the computer, they will match three different monitoring methods for customers that have different monitoring principles. The system will monitor the customer's computer and at the same time carry out the corresponding management of all the operations of the computer. The management method is running independently and it is difficult to monitor it as a whole. These three monitoring methods are all independent operation, in general, WH_KEYBOARD_LL monitoring method is based on the key to monitor the behavior of the computer security as well as effective registration of information. In this method, the keyboard is monitored under the condition of relying on functions so as to pass the information to such functions without storing the information, thus achieving a certain protection mode. When monitoring, the WH_JOURNALRECORD technology needs to collect and process the information so that users can get all the content of the data information at any time. However, the deficiency of this technology is that it is difficult to adjust and modify the message [3].

3.2. Mouse monitoring technology

In addition to keyboard monitoring, mouse monitoring can be used mainly through the WH_MOUSE_LL system. With the help of the mouse monitoring technology, the behavior of the mouse will be recorded and the main content is the number of keystrokes, sequence and what is typed to monitor the computer. Therefore, in the process of monitoring, some data is mainly analyzed after sorting out, and then the operation of users is checked with the help of functions so as to achieve the purpose of monitoring. After the whole monitoring work is realized, mouse monitoring technology will be similar to keyboard monitoring technology, that is, information will continue to pass in order to ensure the normal operation of the entire network. Among the two monitoring technologies, Windows Hook technology is needed. That is to say, only the combination of multiple technologies can better improve the security of information.

4. Development prospect of intelligent computer security monitoring network technology

At the present stage, the development of science and technology in China is fast, and new technologies have emerged. The intelligent monitoring technology developed recently in China has more convenient application methods than the previous monitoring technology. At the same time, it is able to monitor a wider range of areas to better monitor and prevent risks. However, in the current society, we still need to continue to carry out research and development, because it has some shortcomings. At present, the speed of the development of intelligent computer in China is really fast, but its application has not been expanded to the national scope, that is to say, in the actual life process, many areas have not started to use intelligent computer monitoring technology, which means the technology has not better play its own function.

This situation also shows the shortcomings of the development of intelligent computer monitoring technology in our country. It is also necessary for scientific researchers to improve the technology so as to guarantee the security of computer user information. The countermeasures to the above situation are shown in figure 2.
Figure 2. Countermeasures

In this case, the relevant departments need to increase the introduction of technical talents, reduce the talent gap, pay attention to the research of intelligent computer and finally promote the development of intelligent computer monitoring technology.

5. Conclusion

At present, computer technology has penetrated into the life of our citizens and enterprises or governments as well as schools all need to have a computer to help them complete their work, schoolwork and so on. In this case, it also highlights the importance of security monitoring system, which is the basis to ensure that enterprises or governments can work normally as well as encrypt or monitor files in transit. China is vigorously developing intelligent technology to promote its maturity, which can also enhance customer satisfaction. Through the research on the Chinese market, the security monitoring technology has been applied in various fields in China. At the same time, this technology is the best means to keep the information of enterprises confidential, so the relevant departments can use this technology to protect the company's secrets from disclosure. In addition, the application of security technology also reflects great attention of the major areas of information security along with the construction of network information. In this case, strengthening the control of outflow information will continuously promote the progress of China's information age.

References

[1] Wang Xingyu. Research on intelligent computer security monitoring information network technology [J]. Computerite, 2018(6):69.

[2] Hu Xiaojun. The application of artificial intelligence in computer network technology in the era
of big data [J]. Information systems engineering, 2017 (09):95.

[3] Li Xiangming. Research on intelligent computer security monitoring information network technology [J]. Computer Measurement & Control, 2017, 25(6).