On the Application of Computer Archives Management System and the Path of Security Maintenance

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Abstract. The concept of archives management is closely related to the renewal of the concept of computer technology. Various technologies in the field of computer are changing with the times. At present, computer technology has been widely used in various fields of real life. In the field of file management, the computer has greatly improved its work efficiency, speed and quality. At present, in the file management work, the computer file management system has got good feedback effect and popularization rate. However, in the computer environment, the file management system in the actual application will also appear a lot of security problems[1]. It has become an important problem to do a good job in the security maintenance of computer file management system.

Keywords: Computer Archives Management, File Management, Application, Security

1. Introduction

Archives refer to the basis for the retention of some important historical materials produced in the process of the development of an enterprise. It is an intangible asset of an enterprise. If the file management work of an enterprise is very poor, the progress space of the enterprise will also be compressed. Therefore, archives management has a high impact effect and value in the process of enterprise development. Most of the ancient archives management work is done by human[2]. In order to reduce people's burden and speed up the management, scholars put forward the establishment of computer archives management system. At present, this system has got good application effect.

However, the security of the computer system has become an important issue in the file management of an enterprise. If the enterprise's computer system is invaded, the internal files of the enterprise will also be infringed. This situation is very disadvantageous to enterprises. Therefore, the computer file management system security maintenance work is also very important. In real life, in
order to ensure the smooth progress of archives work, we should take appropriate measures to provide good security for the computer file management system.

2. On the computer archives management information system security related concepts

2.1. Two meanings of security

In fact, the meaning of security of archives management information system can be understood as two meanings. From the academic level, it refers to the security of physical and logical forms of archival information. From the practical level, it refers to the security of information content. The main problem to ensure the security of computer file management information system is to ensure the security and integrity of database. Only in this way can the database run smoothly. The scope of knowledge involved in safety protection measures is very wide. It includes access control technology, audit technology and password setting technology. The combination of these technologies can prevent the file data from being tampered and destroyed by others without authorization. On the other hand, the protection measures to ensure the integrity of information also include integrity constraints, concurrency control and disaster recovery.

2.2. Analysis of the main reasons for the destruction of archival information

The destruction of computer file information system is something people don't want to encounter. However, this kind of situation can not be avoided under special circumstances. From the actual situation, there are four main reasons for the destruction of archives management information system. They include the database failure caused by the computer system's own problems or external problems, the new data or new updated data can not meet the complete constraints of information, the incompatibility of data and system, and the malicious damage of hackers or viruses[3]. Malicious damage includes software damage and hardware damage. In general, the damage of software in the system is a common thing.

3. On the protection measures of personal behavior in computer archives management system

3.1. Copy of data

The method of data copy is a simple and effective way of data storage that many people can think of. In the working process of small archives department in some enterprises, the use of this method is very common. Staff can save the data on the computer disk. They can also choose the form of CD-ROM and tape for secondary storage. Of course, the two methods mentioned later need to be approved by the superior leaders before they can be completed. However, the operation of copying data is complex. Some large archives departments have a large amount of information and they are not suitable for data protection in this way. On the other hand, this method can not update the data in time.(see Figure 1)
3.2. Disk array protection

For some large archives management institutions, the amount of information is very huge. If the computer crashes or gets stuck suddenly, the data may be damaged. The threat of disk failure is terrible. In order to prevent this kind of phenomenon, in many cases, enterprises will equip their computers with more disks. The amount of storage on these disks is huge. They can relieve the computational pressure of computers. This technology is called disk array technology. Disk array technology is the first scheme to prevent the disk from being damaged.

3.3. Dual backup mode

In short, the form of dual computer backup is worth the staff can use two electronic devices to store data repeatedly. This method is generally used for the storage of important file information. In addition, we also need to ensure the continuity of the two electronic devices. An electronic device can also monitor the working state of another device at any time. This way of data protection is effective. However, the cost is also high.

4. Application analysis based on computer file management system

4.1. Establishment of website and platform for archives management

In fact, in the process of enterprise development, some archives information resources can be properly displayed through the application of computer information system. This way can more clearly show the history of enterprise development and the specific situation of file information. Technical personnel can establish the corresponding file management platform and website through the enterprise's file management system[4]. This way can help the top management of enterprises to see the internal file management more clearly. It can make the work of file management more clear and simple.

4.2. Establishment of complete archives database
A complete file database is an essential system structure in the file management of a large enterprise. On the other hand, in the process of archives management, the determination of the integrity, authenticity and reliability of some archives must be confirmed by the database. The establishment of database can help managers to carry out file management efficiently. The databases of various branches can also be linked appropriately.

Table 1. Application of computer archives management system and investigation of security maintenance path

| Application of computer file management system | Security maintenance path                      |
|------------------------------------------------|------------------------------------------------|
| Archives management platform                   | The use of network firewall                     |
| The perfection of archives database            | User related privacy protection of the system   |
| Optimization design of process                 | Inspection of system failure                    |

4.3. The optimization design of file management process

In order to realize the progress of modern enterprises, the informatization construction of archives management is a stage that every enterprise must go through. The emergence of this stage also makes the computer information technology has been well respected and applied. In many cases, the manual file management process is complex. There are also many repetitive steps in this way of management. In order to avoid the redundancy of information resources in the process of file management, technicians can use the computer file management system to optimize the file management process. If the design is successful, there is no doubt that it will change the form and speed of internal file management of the enterprise (see Table 1).

5. Analysis of security maintenance path of computer archives management system

5.1. The establishment of network firewall

Network environment is a good environment, but also a very bad environment. In this environment, computer files are easy to be attacked and destroyed by various factors. In order to alleviate this situation, the establishment of network firewall is a basic protection measure. Without any protection measures, the firewall can effectively improve the security and reliability of the file management system. It can effectively block the hacker's attack and virus invasion on a certain basis[5].

5.2. Protection of account and password

The protection of user's password and account number is also an important effective measure to shield network attack. The administrator of the system can set up the necessary account login mobile token or other password protection rights. If a user's account number and password are leaked, hackers without authority can not log in to the enterprise's file system.

5.3. Regular troubleshooting of the system

In fact, the failure of the company's file management system should be divided into two aspects. On
the one hand, the hardware of the system is not compatible with the software and data. On the other hand, the failure can be the firewall or internal vulnerability of the system. In the first case, we can carry out appropriate regular hardware maintenance and computer system update. The treatment of the second case is very complicated. We know that hackers can invade the system through loopholes. Therefore, we need to hire a computer virus expert to control computer vulnerabilities. If the computer file management system detection and maintenance process found loopholes, technical personnel must not ignore the seriousness of the problem.

6. Conclusion

In fact, the work of archives management is a more complex content. The computer system has brought great convenience to the traditional file management. However, people are also facing the challenge of computer system security[6]. Therefore, maintaining the stability and security of the file management system is an important issue at present.

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