Optimization of Computer Network Database Security Technology

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Abstract: With the continuous updating of information, it is very important to build a complete set of Internet data system, and on the basis of it, we should continue to improve, to ensure that the network database is safe, at the same time, for the network information system, its construction requirements also need to be able to correctly understand. Based on the current situation of the network database and the security risks around it, this paper further puts forward the methods of how to optimize the network database security technology, so as to provide reference suggestions for the relevant computer network database security technicians when facing technical difficulties.

1. Introduction

With the continuous updating of information, the development of science and technology is more and more shocked. With the continuous application of computers, the use of computer networks has spread throughout all walks of life. Using computer technology, the data in network database has been saved and managed. However, because the network has the characteristics of development, it is extremely easy to cause the external impact on the application of computer network database in the field, which poses a great danger to network security. In addition, because a lot of information is stored in the network database, if security problems arise, the data in the database will disappear in large numbers, which will have unimaginable consequences. Returning to reality, network database will be affected by many factors when it is used safely, such as software operation, manual operation, etc. Therefore, it is very important to explore the methods of optimizing network database security technology, which is also for the sake of computer network database security.

2. Application of Computer Network Database

In the actual operation of computer network, we need to use the information preservation module and management module, so we need the computer network database to assist, in order to achieve the goal of network technology to develop in a sequential manner. For the computer network database, its foundation is based on the ordinary background, using the relevant browser app to browse and save information and data. The network database often has the following characteristics: first, for the preservation of information and data, can have integrity; second, for a large number of information and data, can be effectively preserved; in addition, the use of network database is quite simple and convenient. However, the network environment is in an open and complex state, because the network is open, so it is easy to cause the database to be affected by the outside world, and therefore threatened, for the security of the network database, can not provide security. Therefore, it is urgent to optimize the security technology of network database.

3. Security threats faced by computer network databases

When the computer network system is applied in the field, it is easy to pose a security threat to the network database. Most of the reasons lie in the following aspects: firstly, when users operate, they use it improperly, which results in the deviation of information and data in the network database; secondly, the network system does not set a higher security. It is easy to get the illegal

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intrusion of network means, which can not guarantee the security of network database. Third, users are attacked by virus when they use network database to access. Fourth, some users do not access data and information legally and have crossed the boundary within their jurisdiction. Fifth, some data resource information. It was stolen illegally.

4. Measures to optimize the security technology of computer database

4.1. Verify and verify their identity

For the current computer network, it is developed by multi-users, so it often forms such a situation, that is, when the database is used, it will form the situation of multi-users jointly accessing data. For the network database, it reduces its security at a certain level. Therefore, it is necessary to collect users'information and verify their real identity on this basis. At the same time, the system login and database application operations are constantly improved to meet the user's requirements for the preservation of information and data. On the one hand, it can not only prevent virus attacks, but also enhance the security of network database. When verifying and verifying the identity of users, there are roughly three links: login network system link; database connection link; data object selection link; the first login network system link is to verify whether the user's username and login password are consistent. The second link of database connection is to let its management system check the real identity of users; the third link of data object selection is to provide different users with different permissions to select database objects, which can ensure the security of information and data. With the help of the above three links, on the one hand, it can protect the identity information of its users, on the other hand, it can enhance the security of the network database.

4.2. Encryption protection of its database

Because network database is widely used in many fields, it is a reliable measure to encrypt and protect its database. This method can effectively reflect the actual security and effectiveness of the database, and can also be understood as a unique database encryption program. It runs a specific algorithm in the database encryption program, further adjusts the data information, at the same time, it also provides convenience for the user's personal information encryption. However, we should pay special attention to the fact that the developer should set up the database encryption program, pay attention to and remind the user not to forget its decryption method, and master the original data from the beginning. At the same time, the module should improve its database encryption system in particular when it is deployed, and use relevant measures to strengthen the encryption and decryption links continuously. The conversion between data and information should be adjusted reasonably. At the same time, the collected data and information can be improved in a reasonable and efficient way. Row reading and decryption. In addition, for data encryption, those who do not authorize users can not read, only in this way can the original security of network data be guaranteed.

4.3. Take backup and recovery operations on data

We can develop a technology about data backup and recovery, and vigorously promote it. This operation is not only conducive to ensuring the collection of database information, but also to finding out the different problems formed in the database, and can also optimize the network system in the later period and follow up timely. Therefore, the data information administrator can manage the relevant backup files well, and can backup and restore the relevant data operations in a short time. It can prevent the database system from failing. In addition, it can also reduce a little about social and economic losses. Therefore, the creation of a reasonable data backup and recovery is also a guarantee of security system, which can become a common technical method. Moreover, the system can restore the data to the initial state with the help of the previous backup when the network database is in trouble. At the same time, data backup information can take a variety of measures, such as static and dynamic combination. At present, there are several data recovery

technologies on the market, such as online log, etc. In addition, in the application of this technology, according to the operation mode of the database, the technology should be selectively used.

5. Conclusion

Because the computer network has the characteristics of development and the security of network database is easily threatened by the outside world, it is urgent to optimize and reform the security technology of computer network database. By verifying and verifying its identity, encrypting and protecting its database and backing up and restoring its data, this paper analyses how to optimize the security technology of computer network database, which provides security for the use of network database. At the same time, for users, it also provides personal information. Protection was carried out.

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