Application of Computer Database Technology in Information Management Use

Qingguo Nie(✉) and Yongfang Nie

Nanchang Institute of Technology, Nanchang 330044, Jiangxi, China
gyx84562@163.com

Abstract. With the increasing utilization of computers, the system functions of computers are constantly optimized.In information management, the application of computer database technology makes information management more efficient and convenient. Computer database technology mainly includes parallel database, multimedia database, distributed database, active database, object-oriented database, data mining and database, etc.Database technology carries out high-speed data information sharing in information management, establishes a systematic information database system, and greatly improves the security of information management network data. This paper mainly analyzes the problems of computer database technology in information management and provides solutions.

Keywords: Computer · Database Technology · Information Management · Data Processing

1 Introduction

Database technology mainly uses the storage and processing functions of computer for information collection and data analysis. The database management system can provide a set of scientific solutions for information management, timely find the faults in the management system and quickly repair the faults, so as to prevent the data from being damaged. The database system can recover the faults occurred during the operation of the database system as soon as possible, which may be physical or logical errors. In information management, data information generally presents a decentralized storage state. The files processed by different users or the same user in different processors cannot be exchanged and shared. Therefore, information management can centrally control and manage the managed data by using the database, and express the organization of various data and the relationship between data through the data model.

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2 Computer Database Technology System

Optimizing the security of the computer database system can improve the stability of the database system, improve the security performance of the system and maintain the normal operation of the system [5]. Therefore, relevant designers must constantly carry out the research, development and design of database security technology, fully meet the current development of computer network and improve the reliability of network system operation. The security of network system also needs to be improved in information management. Therefore, the application of computer database technology to the security of information management system can greatly improve the operation efficiency of information management system and promote the security and stability of information management system [3]. In information management, a large amount of data information is stored. Once the system security is attacked by the outside, it will face the problem of information leakage [11]. Therefore, the most important thing in information management is to improve the system security, and the computer database technology can be well solved. The information management unit can not only ensure the security of information, but also strengthen the system network security management, and can transmit data more reliably and stably. When strengthening the security of information management system, computer database technology should also improve its own security performance, so as to further provide guarantee for information management [6] (Fig. 1).

3 Application of Computer Database Technology in Management System

3.1 Integrated Information Management Data System

In the process of combining innovation with the two technologies, computer database technology continues to practice network security system [2]. The continuous change of computer network makes the computer database technology change. The computer database will observe and evaluate the optimized practical function. Database is a general data processing system for a unit or an application field. It stores a collection of relevant data belonging to enterprises, institutions, groups and individuals [4].

Data is no longer application specific, but for the whole organization, with overall and structured characteristics. The data in the database is created for many users to share their information, and has got rid of the limitations and limitations of specific programs [7]. The data in the database can be used by different users according to their respective purposes; Multiple users can share data resources in the database at the same time, that is different users can access the same data in the database at the same time. Data sharing not only meets the needs of different users for information content, but also meets the data information sharing of users between different servers [13] (Fig. 2).

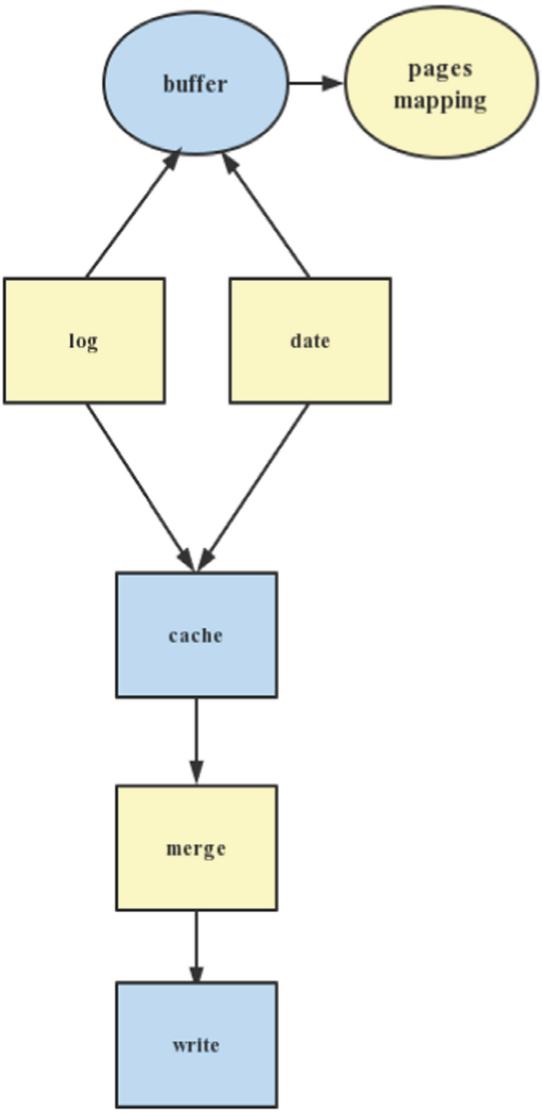

Fig. 1. Schematic flow of database technology.

3.2 Strengthen the Security of Information Management System

The system security technology of computer database is closely related to computer security and computer database technology [1]. At present, some users have weak security awareness when using it. Therefore, it is necessary to help users check information through the establishment of security system technology. In addition, some users do not pay attention to network security in their daily use, resulting in the failure to implement security measures, so many security events occur [15]. The hierarchical structure

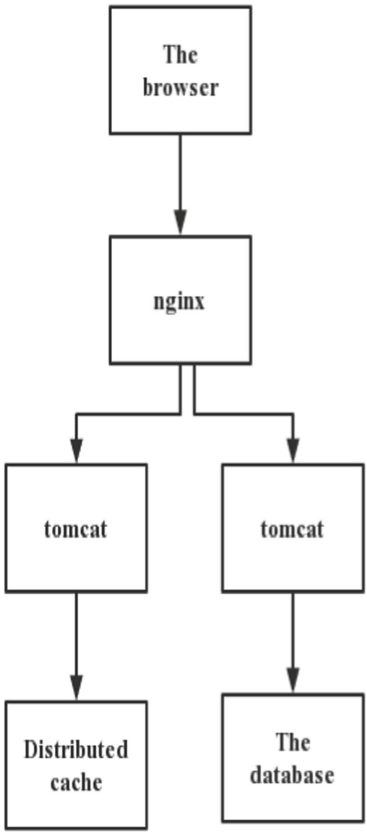

Fig. 2. Database security management.

model in database technology is essentially a directional ordered tree with root nodes (in mathematics, "tree" is defined as a connected graph without return). The following Fig. 3 shows the organizational structure of an institution of higher learning. This organizational structure image is a tree. The school department is the root (called the root node). Departments, majors, teachers and students are the branch points. The relationship between the root and branch points is called the edge. The ratio of root to edge is 1:n, that is, there is only one root and n branches[12].

4 Database Technical Features

Database technology not only processes the data information used for management and analysis, but also processes the information from various software systems to build the digital model of the system. The relationship among these information is reorganized by using digital model, and data evaluation is carried out respectively [10].

Database technology has automatic identification technology, which can identify and save data for different information elements in information management. During

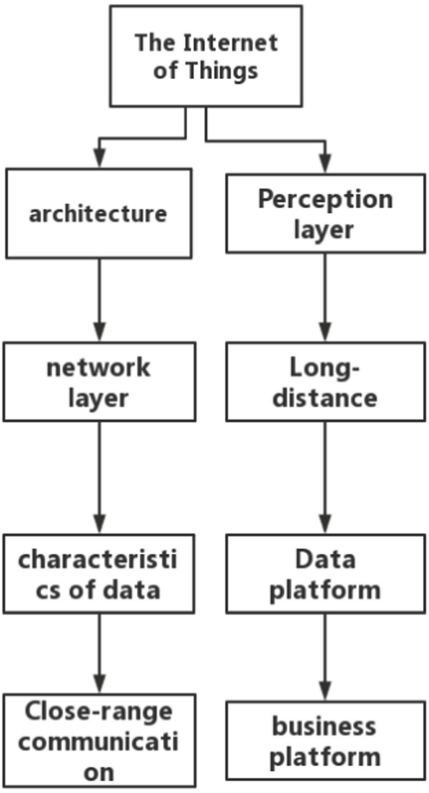

Fig. 3. Modeling model.

the operation of the system, it will be classified and stored according to the relationship between information [14]. There are a lot of network information, software information, platform information, use information and so on in information management [9].

5 Conclusion

Computer database technology is applied to information management to continuously strengthen the integration and innovation of information management [17]. Computer database technology improves the comprehensive degree of information and the efficiency of information management through the processing of data information sources and system management [16]. It can meet the actual functions of computer database technology in information management, promote the model and convenience of information management, and provide a reliable technical basis for information management. It is based on the database that the information management system can be further developed and provide solutions for the future information management work [8].

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