Application of Cloud Computing Technology in Computer Big Data Analysis

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Abstract: As a new technology of data processing and information analysis, cloud computing technology can process and analyze information and data through the use of multiple servers, so as to provide users with accurate information and data. Strengthening the application research of cloud computing technology in big data analysis can not only improve the processing efficiency of information and data, but also create conditions for the optimization and improvement of related technologies. Combined with the actual development of cloud computing technology in China, this paper analyzes the practical application of this technology in computer big data analysis.
Keywords: Cloud Computing Technology; Computer Big Data Analysis; Application

1. Introduction

The diversified development of information acquisition technology has greatly improved the efficiency of information processing and data analysis, and created convenience for the development and management of many industries. Computer has gradually become an important management tool, which can not only store a large amount of information and data for enterprises, but also process relevant information and data. Data and information play an increasingly important role in enterprise development. Data analysis has gradually become the key to enterprise development and management. As a new information processing and data analysis technology, cloud computing technology has significantly improved its information processing capacity and adaptability. Making full use of relevant technologies can promote the acquisition of effective data and create conditions for the long-term development of enterprises and industries.

2. Overview of cloud computing technology

Cloud computing technology is the product of the combination of information technology and development needs. In the current information age, the ways of information acquisition and processing are increasingly diversified. As the core technology of information technology innovation, cloud computing technology is more and more widely used in many industries. As the core of computer data analysis technology, the application of cloud computing technology is related to the acquisition and analysis of massive information.

With the in-depth application of information technology, the types of data tend to be diversified, and the scale of data is also expanding. Massive data and information has become the key in information processing. Data storage and analysis has gradually become the focus of information technology applications.

Cloud computing technology was born in the third scientific and technological revolution. It is not only a new IT service mode, but also a network sharing service mode. After completing the collection of information and data, it can promote the design of applications based on user needs, so as to provide effective tools for information storage and data analysis for different industries and enterprises, and provide accurate information for different user groups.

3. Development trend of cloud computing technology in computer big data analysis

Compared with the traditional computer model, the adaptability and practicability of cloud computing system have been greatly improved. The use of cloud computing technology can simplify the process of data analysis, not only reduce the working pressure of staff, but also avoid the negative impact of unreasonable human operation on data processing, which is very helpful to reduce the error of information processing; Secondly, cloud computing technology has lower economic cost and time cost, and can complete data analysis and processing tasks in a short time.

With the optimization and improvement of cloud computing technology, cloud computing data processing scheme is also maturing, and the efficiency and adaptability are gradually improving. In addition, the establishment of the technical system is also the key to the application of this technology. Staff should summarize their previous work experience and solve some problems that users are prone to in information storage and data analysis, which can not only improve the service quality of the network, but also improve the operation efficiency of the cloud computing platform. The application of cloud computing technology is conducive to the construction of Internet mobile data processing platform and can inject new development vitality into the development of many industries.

4. Specific application of cloud computing technology in computer big data analysis

4.1 Building storage application platform

With the development of science and technology and the development of the times, people's way of life and work have changed to a great extent, their information needs are becoming more and more diverse, and their reading habits have also changed greatly. In the past life, people mostly obtain information through book reading. In the information age, people can read books through web pages and digital libraries. Therefore, the application of cloud computing technology should also keep up with the development trend of the times and industry, build an information-based reading mode based on the actual reading needs of contemporary people, and build a storage application platform integrating video, text, voice and other elements. Users can choose according to their own needs. For example, in the application of cloud computing technology in digital library, professional staff first extracts the relevant graphic information and data in the library, and then promote further classification and integration, to make use of the computer network and collect the relevant graphic information. After the integration of multiple information and data, integrating relevant materials into the system platform can not only optimize users' reading experience, but also improve the convenience of reading. Users' reading is no longer limited by time and space, and conforms to the development trend of the industry and the times.

4.2 Building data processing model

The construction of data processing model can greatly improve the pertinence of data processing, and it is also very helpful to improve the efficiency and quality of data processing. The use of cloud computing technology can complete the cloud storage of massive data and information. This storage method not only reduces the storage pressure of hardware, but also provides guarantee for users' information security. In addition, the use of relevant technologies can build the data processing system model in a short time. When processing cloud information and data, the work efficiency of the enterprise computer center is higher. At the same time, the optimization and improvement of the organizational structure can also create convenience for the decision-making and business model adjustment of the enterprise. For example, government data system, as a typical cloud computing processing system, gives full play to the advantages of Alibaba cloud platform and can realize efficient analysis and processing of information and data. For some work units with large amount of information, the system can meet the actual data processing requirements and effectively avoid information leakage, and it is of great significance to promote information security protection.

4.3 Internet analysis platform

As an important embodiment of cloud computing technology in big data analysis, artificial intelligence technology is increasingly widely used in many industries. Through the use of Internet and information technology, different users can store, query and process relevant information data in combination with their own information needs. Cloud

computing technology is widely used in many links such as data storage, query and processing. The construction of Internet analysis platform can not only meet the multi language needs of users, but also promote the targeted processing of information and the application of personalized modules, and create favorable conditions for users' information query and processing. Through the application of the Internet analysis platform, users can secondary process information and data, which not only improves the use efficiency of cloud computing technology, but also improves the utilization of information and data.

5. Application strategy of cloud computing technology in computer big data analysis

5.1 Changing the concept of application

Cloud computing technology has strong practicability and adaptability. Therefore, when it is applied in big data analysis, it should be applied based on the actual data processing and analysis requirements. Before promoting specific applications, professional staff needs to be arranged to analyze the needs, and then formulate perfect application plans. As an important guide of application, application concept is related to the development of later application work. Therefore, it is necessary to promote the transformation of application concept. The change of application concept should not only summarize the previous application experience, but also combine the development characteristics of the times.

5.2 Promoting technology integration

Technology and equipment are also closely related to the application of cloud computing technology. Many different technologies are often applied in computer big data analysis. These technologies have different application conditions and advantages. Promoting the integration of different technologies is conducive to giving full play to the advantages of different technologies and greatly improving the application efficiency of cloud computing technology. In addition, the industry should strengthen the construction and improvement of infrastructure in combination with the actual needs of big data analysis, so as to lay a solid material foundation for the application of relevant technologies.

5.3 Promoting technology research and development

Innovation and development is the key to technology application. Promoting the research and development of hybrid cloud computing is of great significance for the application of this technology in computer big data analysis. Relevant departments should create a good external environment for the promotion of relevant research and development work, and combine cloud computing technology to give full play to the advantages of cloud computing technology. The research and development of cloud computing technology can not only reduce the operating cost of computers, but also greatly improve the information processing efficiency of computers. Research and development personnel should closely follow the development trend of the industry and constantly add new characteristics of the times to cloud computing technology.

6. Conclusion

Cloud computing technology has low operating cost and high work efficiency, and has gradually been favored by many industries and enterprises. There is no doubt about the development prospect of related technologies. It is widely used in computer big data analysis. It is not only related to the efficiency and quality of data processing, but also closely related to the operating cost of enterprises. When applying cloud computing technology, industry staff should constantly change their application concepts, pay more attention to cloud computing technology, and strengthen the training of professionals, in order to create convenience for giving full play to the advantages of cloud computing technology. It is also of great significance to promote the renewal and development of computer and related information technology.

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