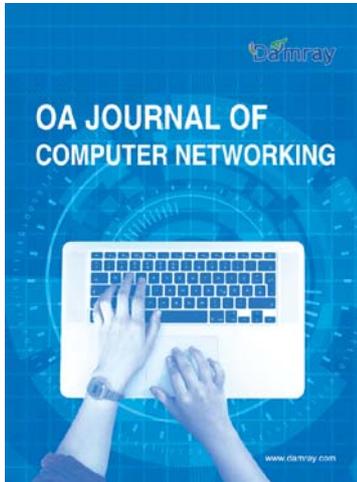


# Computer Cloud Computing and Its Implementation Technology Analysis



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## Abstract

With the development of the information age, the level of computer technology in my country is also constantly improving. Computer cloud computing has now become the most important research direction in my country. From the development of recent years, computer cloud computing has also made breakthroughs. Sexual progress. In the computer field, cloud computing is gradually replacing traditional computer computing methods, and computer cloud computing has also begun to be widely used in people's lives and work. At present, computer cloud computing technology is gradually becoming mature, and it has also been applied in business. It can be clearly seen that cloud computing technology has more advantages than traditional computing.

## Keywords

Computer, Cloud Computing, Realization Technology

## 1. Introduction

In the background of the information age, information technology has been widely used in people's daily life, and its wide application has also led to a more rapid development of information technology. Under the development of information technology, the development of computer cloud computing has become the next main development direction of information technology. Cloud computing technology has a large difference with traditional computing, and cloud computing can make more data resources accessible through special terminal connections. The application of cloud computing can help users to download data better, and the access to information is more convenient and faster. The reasonable use of computer cloud computing technology can effectively improve the traditional computer work mode and enhance computer efficiency.

## **2. Characteristics of cloud computing**

### **2.1. Virtualization Technology**

Computer cloud computing has been widely used in the network structure, in which the most obvious feature of cloud computing technology is virtualization, virtualization is mainly divided into two kinds, respectively, application virtualization and resource virtualization. The network also belongs to the virtualized platform, and the application of the virtual platform will not have a certain impact on the physical platform or the nearby environment. The reasonable management of the virtual platform can efficiently migrate or expand the data information, and the virtualization technology can also backup and store the data.

### **2.2. Dynamic scalability**

The dynamic scalability in computer cloud computing can reasonably divide the virtual layer and also complete the expansion of applications. Cloud computing technology can help achieve cooperation between servers through dynamic scalability and enhance the application effect of cloud computing technology [1].

### **2.3. Relatively high cost performance**

The application of computer cloud computing technology makes it possible to reasonably manage and integrate different programs in the computer in a virtual environment. Cloud computing technology in the process of application, although the demand for hardware is low, the functions of the system can effectively play out, which reflects the high cost performance of cloud computing.

### **2.4. Good reliability**

In the application of cloud computing, the process of reasonable use of virtual technology can make the connection between physical platforms to increase, and also reduce the physical platform in contact with the impact of other environmental factors, so as to ensure the security and stability of cloud computing technology in the application, so that the application effect of the program can be significantly improved.

## **3. The specific implementation form of cloud computing**

Computer cloud computing technology specific implementation form is mainly divided into five aspects, of which the first point software is the service. Mainly the application of cloud computing technology can simplify the server and related software, this way can effectively reduce costs, while this computer cloud computing technology in the application in accordance with a single program will be able to browse the full range of functions, but also help users to effectively share data and information, but also to communicate the work.

The second point is the use of computing, cloud computing technology can virtualize the server as well as storage functions, through the virtualization platform to combine the two, so that it can better store the data, effectively achieving the purpose of data reserves of intensive, in the process of Internet applications can provide better virtual content.

The third point is the Internet service, computer cloud computing technology in the use of the Internet, according to the actual phenomenon of the Internet, the service function in the Internet to be realized [2].

The fourth point is the platform is the service, this form is mainly reflected in the development of computer applications to be able to actively and effectively, but also to be able to user-oriented, this form can ensure that the transmission function of the Internet is effectively improved.

The fifth point is the management service provider, referring to the computer in the application of some viruses easily, through the application of computer cloud technology, to be able to monitor the computer in real time, so that it is the first time to find the virus and repair.

The sixth point is the commercial service platform, the use of computer cloud computing technology, so that users to achieve online shopping, through the Internet to achieve the function of online payment, but also to build a platform for interaction and coordination.

The last point is also able to integrate resources, which means that through cloud computing technology, it can help businesses to establish a platform for communication and sharing.

## **4. The key technology of computer cloud computing**

### **4.1. Architecture**

In the construction of computer cloud computing architecture, generally divided into four parts, the first of which is the user interface, in the design of the user interface, the need to clarify the functions of the user page, mainly to help

the user and the service side to form a bridge between the two to connect, to ensure effective interaction between the two [3-8]. The second is the service directory, whose function is mainly to integrate and manage data resources, and the effective management of resources can guide the user to the next operation. The third part is the system management function, this function is mainly to serve the data resources of the program in the application, but also to be able to manage it effectively, in the process of management according to the program's use needs, reasonable deployment work, but also should pay attention to the user's use needs, according to the user's needs, to recycle or reset the resources. The last point is to monitor the program, which is to monitor the whole process of the program in operation, and also to test the running speed of the program, so as to prevent the emergence of unexpected conditions in the operation of the program.

## 4.2. Resource monitoring

The system is supported by more servers and data resources in the process of operation, and at the same time, the data resources are constantly changing during the operation of the program, so it is necessary to observe the data resources in real time, and the role of computer cloud computing is to effectively integrate the servers and data resources effectively [9]. Through the monitoring program in cloud computing technology, the system resources are monitored and also the resources should be reasonably allocated, so as to ensure that the system program can reasonably use the resources in the process of operation. The cloud computing technology integrates dynamic data and transforms dynamic data resources by constructing data service basis. The monitoring of data resources can analyze data information comprehensively and ensure that it can effectively configure cloud resources and reasonably deploy cloud resources so that the program will not have unexpected conditions in the process of data transmission.

## 4.3. Automated deployment

Automated deployment can enhance the intelligence of the computer, mainly through the installation of a variety of programs and network structures, so that it can quickly integrate data information and transformation, transformation can also be classified for different types of resources, to ensure that users can be more convenient when looking for resources, enhance the user experience, to meet the user's needs. The deployment process should also be based on the actual operation of the system, so that it can improve the rationalization of the system services, while the server terminal, should also have the storage and backup of data information. When deploying the system, it should be done in various ways, and finally realize automatic deployment, so as to improve the efficiency of the system operation.

## 5. Conclusion

To sum up, in the era of rapid development of science and technology, computer cloud computing technology is also progressing. Cloud computing is mainly a virtual information network, but its large storage capacity and fast computing speed are its main advantages, and will become the main direction of information technology development in the future development of society. Although China's start in the computer cloud computing technology is late, but the difficulties encountered in its development can be solved, making the development prospects of China's computer cloud computing technology is also extremely broad.

## References

- [1] Duan Jiabing, Hu Aijiang, Feng Yantao, Wu Jinshun. (2021). Research on the realization path of network security technology in the context of cloud computing [J]. *Network Security Technology and Applications*, 2021(06): 70-71.
- [2] Cai Guixiu. (2020). Modern research on the application of cloud computing technology in computer networks [J]. *Computer products and circulation*, 2020(09): 82-83.
- [3] Zou Lianfa. (2019). Research and implementation of a digital virtual workshop system based on cloud computing [D]. Beijing University of Technology, 2019.
- [4] Fu Lin, Wang Yu, Cheng Huafu. (2017). Design and implementation of supply chain collaboration system with cloud computing virtual reality technology [J]. *Electronic Technology and Software Engineering*, 2017(24):146.
- [5] Pan Wei. (2019). Discussion on computer cloud computing and implementation technology [J]. *Information Communication*, 2019, 195(03): 146-148.
- [6] Cui Chen. (2020). The shortcomings of computer network cloud computing technology application and perfect countermeasures [J]. *Information Systems Engineering*, 2020(1): 75-76.

- [7] Li Shuang. (2015). Analysis of the application security of computer cloud computing [J]. Consumer Guide, 2015(1): 219-220.
- [8] Zhou Ailing. (2017). Exploration of computer security issues and countermeasures in the context of cloud computing [J]. Digital user, 2017(7).
- [9] Li Ning. Building-up laboratories without walls: Exploration on construction mode of computer service platform in the age of cloud computing service platform in age of cloud computing in colleges and universities [J]. Experimental Technology and Management.