Research Article

Application of Cloud Computing Technology in Computer Secure Storage

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To investigate the use of cloud computing technologies in safe computer storage, firstly, it is proposed to complete the central control function by building a cloud computing data center, collect multiple platforms and network safety technologies, and then connect computers in unlike sites to confirm computer information security. Then, based on the implementation advantages of cloud computing technique in computer network safe storage, specific applications are analyzed. Finally, a cloud computing secure modeling and analysis idea based on multiqueue and multiserver is proposed. The proposed cloud security approach ensures that both data and applications are easily accessible to authorized users. One always has a consistent way to access your cloud data and applications, allowing you to address any potential security issues as soon as they arise. It has greatly improved computer security storage convenience while also greatly improving computer network storage security. After verification, with the cloud computing technology platform to carry out relevant businesses at any time, the operation effectiveness has been meaningfully enhanced by 80%. At the same time, it promotes the construction of information sharing and gives full performance to the benefits of hardware, accelerates the process of resource integration, and provides information support for the formulation of enterprise strategic plans. Combined with the actual situation, the current study discusses the development and application direction of cloud computing, so as to add new impetus to the economic growth of enterprises.

1. Introduction

In the context of big data, the factors affecting data security are gradually increasing, so security protection is particularly important. Among many security protection methods, cloud computing technology has become the first choice of many users. Currently, information storage mainly includes computer hard disk storage and mobile device storage [1]. Data encryption, hashing, tokenization, and access control are all data security solutions that protect data across all platforms and apps.

Encryption is the process of masking or hiding data by changing the format so that it can no longer be interpreted or understood unless decrypted. As a result, the data remain but are scrambled or hidden. Tokenization is a process in which you try not to own the data, similar to how credit card merchants store the information instead of encrypting it and giving it a key; imagine it as a safe deposit box. Hashing is a mathematical equation or algorithm that is used to process information. Organizations all over the world are investing heavily in information technology (IT) cyber security skills to protect their critical assets [2, 3].