Abstract

Cloud computing is now the biggest hotspot in modern era, which is spreading its impact in the technical site. For introducing a modern approach of cloud system, user’s mobile devices are placed at the top and bottom layer of the cloud system while different virtual servers are present at the middle layer that forms the structure of three-tier technology. For implementing the established idea of the three tier cloud technology, a scenario with different users that has been demonstrated in the paper where users can upload and download data to/from the cloud server using their handheld devices whereas users’ own device is also acting as cloud storage in behind scene. The result of the implementation of the three tier technology hashes out that the storage cost at the server can be roughly reduced by using a portion of users’ mobile device storage as server storage. In consequences, a reduction of power consumption and maintenance cost happened at the cloud servers side due to less storage uses and increasing parallel processing in clients devices. Moreover, the solutions of some rising problems to the cloud organization can also be introduced after thoroughly with the analytics and statistics of the
result of this expedition.

References


Index Terms

Computer Science Distributed Computing

Keywords

Cloud, shared memory, virtualization, encryption, synchronization, RAID, security, Virtual Machine(VM), Media Access Control(MAC), Rivest-Shamir-Adleman (RSA), Advanced Encryption Standard (AES), Central Processing Unit(CPU)