Abstract

Cloud computing has emerged to meet the requirements of large, Internet based and data intensive applications. Commonly clouds are implemented on large data centers consisting of thousands of servers. All application processing and resources are centralized in these data centers. As the number of users increases, this centralized approach produce bottlenecks and affect the quality of cloud services. This brings inconvenience to users. Fortunately centralized approach is not the only way to provide cloud services. Other possible architectures for cloud computing are federated approach and peer to peer approach. Federated cloud combines independent clouds and provides interoperability between them. P2P clouds are a low cost model for cloud computing. This paper reviews centralized, federated and peer to peer approaches to cloud computing.

References

1. P. Mell and T. Grance, The NIST definition of cloud computing in NIST Special
3. Ozalp Babaoglu, Moreno Marzolla, Michele Tamburini, Design and Implementation of a P2P Cloud System, in Universit di Bologna, Dipartimento di Scienze dell’Informazione Mura A. Zamboni 7, I-40127 Bologna, Italy
6. Calcavecchia, N. Celesti, A. Nitto, Understanding Decentralized and Dynamic Brokerage in Federated Cloud Environments in M. Villari, I. Brandic, F. Tusca (Eds.), Achieving Federated and Self-Manageable Cloud Infrastructures: Theory and Practice, (pp. 36-56)

Index Terms

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Keywords

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