Abstract

Cloud computing provides platform for improving the flexibility in designing applications through exploiting the different layers of virtualization. Cloud computing is a new technology used for large scale enterprise applications. Cloud computing provides platform for improving the flexibility in designing applications through exploiting the different layers of virtualization. The requirements of the business processes are met in the cloud computing. Cloud computing provides very high scalability, reconfigurable resources and higher availability of the resources. A robust Fault Tolerance strategy is a very critical component of cloud computing to meet the Service Level Objectives in cloud. High level of cloud serviceability is achievable through fault tolerance. The widely used strategies of fault tolerance are Checkpointing and Replication. In this paper an overview has been provided on various techniques of fault tolerance, dimensional view Checkpoint classification and a dynamically adaptive checkpointing model has been proposed.


**Index Terms**

Computer Science  
Distributed Systems

**Keywords**

Cloud computing, Fault Tolerance, Checkpoint , Virtual Machine