CLOUD COMPUTING

Group 5 CSE (Dual Degree)

ABSTRACT

Cloud computing has become one of the prominent fields of Computer science and because of its flexibility, elasticity and supporting a wide range of users to access distributed resources/infrastructure over the Internet. As cloud can be accessible from any location anytime through commodity hardware its demand is increasing day by day. Due to this increasing demand it must provide security to data as well as high performance so that it can be beneficial for the users as well as for the service providers. To achieve the above motives Load balancers are used in clouds. Load balancing is a way to efficiently distribute workload/traffic to the available nodes/resources over the network. It optimizes the resource utilization by distributing work load effectively, reduces response time and maximizes the throughput, it is also required for it to be fault tolerant and secure. Therefore load balancing is one of the crucial parts of the cloud to enhance its performance. Cloud computing operates in a distributed manner which consists of a large number of service nodes that performs several specific tasks collectively in coordination with the other nodes. Theses systems and environments are highly stable and also can handle requests from multiple users concurrently. But the explosive rise in data in current trends attracts more service requests and hence the load on the cloud impose a performance challenge on the service provider. Various load balancing algorithms has been proposed for load balancing , here we are try to solve the problem of load balancing by using a centralized load balancing algorithm that dynamically balances the load. The concept tries to achieve high resource utilization while considering fault tolerance by creating backups.