

ADAPTIVE FAULT TOLERANT SERVICE PROVISIONING [AFTSP] STRATEGY FOR CLOUD ENVIRONMENT

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ABSTRACT

A Cloud is a vast pool of shared resources. It provides its resources as services to the requested users on demand over the internet. Generally multiple services are hosted by the Cloud, so managing the QoS for these services in the Cloud is a major challenge. Hence in order to achieve good QoS and high performance of the Cloud, an effective resource allocation technique for dynamically scalable system is needed. In this paper, a data center based Cloud architecture and an adaptive Fault tolerant dynamic service (virtual machine) provisioning strategy are presented to satisfy the QoS requirements of multiple requests that arrive at the Cloud. This is done by monitoring the changing resource and virtual machine status and adopting the dynamic VM configuration. The main targets of the proposed work are to achieve increasedThroughput with good QoS, reduced request rejection rate and service deadline miss rate. The simulation results demonstrate that it achieves the objectives.

KEYWORDS: Resource Allocation, Virtual Machine Provisioning, Service Rate, Deadline, QoS, Performance