

Abstract

Cloud computing emphasis on using underlying infrastructure in a much efficient way. That is why it is gaining immense importance in today's industry. Like every other field cloud also has some key factors for judging the level of working of cloud for matching industry standards one of key point is elasticity in cloud. Elasticity term related to cloud is referenced as the time taken during user request response in other hand it is time that a cloud takes for responding user requests i.e response time. But due to increase in demand and a huge shift of industry towards cloud the problem of handling user requests also arise. To tackle this cloud manufacturer use many technologies one of them is virtual machine. For a large era the concept of virtualization holds industry with all its merits and demerits. One disadvantage is its heavy load on underlying kernel or server specially during provisioning and de-provisioning of resources. But from past some decades an alternative technology emerges and get popular in a few time for its great efficiency known as containerization. In this thesis first we discuss about elasticity in detail, then study about working of containerization and in the last we will use two technology i.e virtualization and containerization and their related tools for our experiments and will check whether or not containers are more worthy than virtual machine specially in respect of elasticity.