

Abstract

As virtualization matured through the last three decades, various architectures with versatile features were added to the abstraction stack, which was in practice, all this evolution was caused by the never-ending list of services which came into existence and the medium of internet and its mega growth during this period.

The performance, stability, scalability, security and viability of the virtualization platforms were actually challenged when the cloud technologies were introduced with all its complexities. The primary genre of these complexities was actually the central role of virtualization in the datacenter i.e. the sharing of incoming and outgoing volumes of data traffic, in other words load management or load balancing amongst the physical machines. This genre has been addressed by the academia and the industry variably and lack many untouched areas such as the one we are addressing in this thesis i.e. the effect of qualitative factors on data center decision making which is actually the load balancing. Therefore we are trying to put some light on these factors and there effect on load balancing results.