Virtualization technologies share the hardware resources among multiple operating systems and maintain isolation between virtual machines. Thus, they are used to optimize resource utilization, minimize job response time and for more efficient use of servers and other resources. For this, it is necessary that the load is evenly distributed over all the hosts in the network. The proposed work emphasizes on the design and implementation of a policy engine to dynamically balance the load over a network, using live migration feature of KVM. The goal is to provide a provisioning monitor that can dynamically make decisions about migration of heavily/lightly loaded virtual machines.
Dynamic Load Balancing of Virtual Machines using QEMU-KVM

- Yi Zhao, Wenlong Huang, Adaptive Distributed Load Balancing Algorithm based on Live Migration of Virtual Machines in Cloud, Fifth International Joint Conference on INC, IMS and IDC, 2009.
- Christopher Clark et. al., Live Migration of Virtual Machines, 2nd Symposium on Networked Systems Design & Implementation, NSDI'05

**Index Terms**

Computer Science

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