Virtual machine migration (VMM) is one of important services is used as a tool to facilitate system maintenance, load balancing, fault tolerance, on-demand service offerings. Live VMM transfers an active Virtual Machine (VM) from one physical host to another across different data centres. It involves a sequence of operations in iteration under a specific protocol/method for migrating execution context (active memory) and control data of a VM to the destination machine. These operations are dependent on data transfer schedule, availability of resources and overall timing constraints. The migration process is implemented by establishing shared network storage and/or a network communication channel. Along with the execution context the security configuration of the VM need to be transferred. In this paper we have proposed a security context migration framework. Both the static as well as dynamic security context is considered for migration.
A Security State Transfer Model for Virtual Machine Migration in Cloud Infrastructure

20. Live migration, Available online: https://en.wikipedia.org/wiki/Live_migration

Index Terms

Computer Science

Security
Keywords

VM Migration, Security Context, Security Configuration