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**MS200515**

*Security of mobile agents.*

**ABSTRACT**

In the past few years the computer systems have evolved from monolithic computing device to much complex client-server environment. Now new phase of evaluation allows complete mobility of application code among supporting platforms to form a loosely-coupled distributed system. Mobile-agent paradigm is one such technology. It has numerous application where it can be beneficial, to name a few areas where the mobile-agents have potential deployment are database search, distributed systems and e-commerce. This technology has given a new direction to networking. It can produce very good results in limited resources or in deficient environment where bandwidth, memory are significant constraint. But still it is not widely accepted due to its security issues.

The title of this thesis "*Security of Mobile Agent*" suggests itself about the work emphasized in this thesis. The main area of discussion is the security of mobile agents on malicious host. Here a malicious host refers to a system in a network which can take advantage of the vulnerabilities of a mobile agent that has come to the host machine to get its work done. This thesis discusses about the mobile-agent, the various security threats that can be posed by malicious host and consequently the solutions. This thesis proposed a solution by combining few solutions and distilling the best from the solutions so that it can provide a better solution. Finally this thesis concludes with implementing the solutions and the results obtained by the experiments using trading example.