## ABSTRACT

Mobile agents are increasingly becoming popular in the development of current distributed applications. However, the mobility and autonomy factors of mobile agents present a host of security challenges in a distributed environment. In an attempt to ensure security of the mobile agent against a malicious host, a security framework is proposed. Our security mechanism uses a multi-faceted approach to protect mobile agents and must be incorporated from the design stage of agent systems. We identify major security threats against mobile agents by a malicious platform and propose algorithms to counter them. We then test a multi-agent system that incorporates these algorithms against one that doesn't and compare the results.