Abstract

A mobile-agent system is one where user programs (the agent) may voluntarily and autonomously migrate from one computer (the host) to another (the mobile agent server). A large deployment of mobile agent systems is not possible without satisfying security architecture. The major obstacle facing wide deployment of mobile agents is the attack of a
visiting code by a malicious host. The fact that host computers have complete control over all
the programs of a visiting agent makes it very hard to protect agents from un-trusted hosts. This
has resulted to restricted deployment of mobile agents to known hosts in closed networks where
the security of the agents is guaranteed. However, this restriction negates the original major
concept of autonomy on which mobile agent technology is established. In this paper we propose
dynamic protection architecture for mobile agents systems, using Travel Diary Protection
Scheme and Platform Registry. The scheme protects and allows mobile agents to roam freely in
open networks environment without being compromised in a malicious hosts.

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Index Terms

Computer Science

Network Security

Key words

Mobile Agents

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Travel Diary

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