

1. Record Nr.	UNINA9910143631603321
Titolo	Mobile agents and security // Giovanni Vigna, editor
Pubbl/distr/stampa	New York : , : Springer, , [1998] Â©1998
ISBN	3-540-68671-1
Edizione	[1st ed. 1998.]
Descrizione fisica	1 online resource (XII, 257 p. 8 illus.)
Collana	Lecture notes in computer science ; ; 1419
Disciplina	006.3
Soggetti	Mobile agents (Computer software) Computer security
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Foundations -- Security Issues in Mobile Code Systems -- Environmental Key Generation Towards Clueless Agents -- Language Issues in Mobile Program Security -- Protecting Mobile Agents Against Malicious Hosts -- Security Mechanisms -- Safe, Untrusted Agents Using Proof-Carrying Code -- Time Limited Blackbox Security: Protecting Mobile Agents From Malicious Hosts -- Authentication for Mobile Agents -- Cryptographic Traces for Mobile Agents -- Mobile Code Systems -- D'Agents: Security in a Multiple-Language, Mobile-Agent System -- A Security Model for Aglets -- Signing, Sealing, and Guarding Java™ Objects -- Active Content and Security -- The Safe-Tcl Security Model -- Web Browsers and Security.
Sommario/riassunto	New paradigms can popularize old technologies. A new \standalone" paradigm, the electronic desktop, popularized the personal computer. A new \connected" paradigm, the web browser, popularized the Internet. Another new paradigm, the mobile agent, may further popularize the Internet by giving people greater access to it with less eort. MobileAgentParadigm The mobile agent paradigm integrates a network of computers in a novel way designed to simplify the development of network applications. To an application developer the computers appear to form an electronic world of places occupied by agents. Each agent or place in the electronic world has the authority of an individual or an organization in the physical world. The authority can

be established, for example, cryptographically. A mobile agent can travel from one place to another subject to the destination place's approval. The source and destination places can be in the same computer or in different computers. In either case, the agent initiates the trip by executing a "go" instruction which takes as an argument the name or address of the destination place. The next instruction in the agent's program is executed in the destination place, rather than in the source place. Thus, in a sense, the mobile agent paradigm reduces networking to a program instruction. A mobile agent can interact programmatically with the places it visits and, if the other agents approve, with the other agents it encounters in those places.

---