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Titolo	Moving Target Defense II [[electronic resource] ] : Application of Game Theory and Adversarial Modeling // edited by Sushil Jajodia, Anup K. Ghosh, V.S. Subrahmanian, Vipin Swarup, Cliff Wang, X. Sean Wang
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Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (209 p.)
Collana	Advances in Information Security, , 1568-2633 ; ; 100
Disciplina	005.8
Soggetti	Computer security Computer communication systems Data encryption (Computer science) Electrical engineering Data structures (Computer science) Systems and Data Security Computer Communication Networks Cryptography Communications Engineering, Networks Data Structures and Information Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Game Theoretic Approaches to Attack Surface Shifting -- Security Games Applied to Real-World -- Adversarial Dynamics: The Conficker Case Study -- From Individual Decisions from Experience to Behavioral Game Theory -- Cyber Maneuver Against External Adversaries and Compromised Nodes -- Applying Self-shielding Dynamics to the Network Architecture -- Moving Target Defenses in the Helix Self-Regenerative Architecture -- Diversifying the Software Stack using Randomized NOP Insertion -- Practical Software Diversification Using In-Place Code Randomization.
Sommario/riassunto	Our cyber defenses are static and are governed by lengthy processes, e. g., for testing and security patch deployment. Adversaries could plan

their attacks carefully over time and launch attacks at cyber speeds at any given moment. We need a new class of defensive strategies that would force adversaries to continually engage in reconnaissance and re-planning of their cyber operations. One such strategy is to present adversaries with a moving target where the attack surface of a system keeps changing. Moving Target Defense II: Application of Game Theory and Adversarial Modeling includes contributions from world experts in the cyber security field. In the first volume of MTD, we presented MTD approaches based on software transformations, and MTD approaches based on network and software stack configurations. In this second volume of MTD, a group of leading researchers describe game theoretic, cyber maneuver, and software transformation approaches for constructing and analyzing MTD systems. Designed as a professional book for practitioners and researchers working in the cyber security field, advanced -level students and researchers focused on computer science will also find this book valuable as a secondary text book or reference.

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