Record Nr. UNINA9910220157303321 Autore Porche Isaac <1968-> Titolo A cyberworm that knows no boundaries / / Isaac R. Porche III, Jerry M. Sollinger, Shawn McKay Santa Monica, Calif., : Rand Corp., 2011 Pubbl/distr/stampa 1-280-12696-5 **ISBN** 9786613530820 Edizione [1st ed.] Descrizione fisica 1 online resource (54 p.) Collana Occasional paper Altri autori (Persone) SollingerJerry M McKayShawn Disciplina 005.8 Soggetti Computer security - United States Computer networks - Security measures - United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "Prepared for the Office of the Secretary of Defense. Approved for Note generali public release; distribution unlimited." Includes bibliographical references. Nota di bibliografia Cover; Copyright; Preface; Contents; Figures and Tables; Figures; Nota di contenuto Tables; Summary; Acknowledgments; Abbreviations; A Cyberworm That Knows No Boundaries; The Difficulty of Defending Cyberspace; How to Identify an Attack; What Was Needed to Carry Out the Attack; The Implications of Stuxnet and Similar Worms; Implications of the Success of Stuxnet; What Is Needed to Defend Against Stuxnet and Similar Worms; How Organizational Boundaries Hinder Efforts to Mount an Effective Defence; Intragovernmental Limitations; 1. Selected Relevant U.S. Organizational Initiatives, Laws, and Reviews Intersectional LimitationsConclusions; The Threat of and Opportunity for Real Damage from Cyberspace Is Increasing; Not All Attacks Can Be Prevented; The Best Defense Includes an Offense; 2. Organizational Strengths and Weaknesses of Federal Agencies in Defending U.S. Cyberspace Infrastructure; Current Organizational Boundaries Hinder Identification and Mitigation; Recommendations; 3. Examples of Proposed Legislation Regarding the Assignment of Federal Roles in Cyberspace; Future Work; A.1. Cyberspace Today; Appendixes; Appendix A: The Cyberspace Domain; A.2. Cyberspace and Social

Appendix B: WormsB.1. Conficker Worm Progression; Appendix C:

Networking

## Sommario/riassunto

Einstein Intrusion Detection and Protection; Appendix D: Federal Cyber Legislation; D.1. Federal Cyber Legislation; Bibliography

It has become clear that Stuxnet-like worms pose a serious threat even to critical U.S. infrastructure and computer systems that are not connected to the Internet. However, defending against such attacks involves complex technological and legal issues. In particular, at the federal level, different organizations have different responsibilities and levels of authority when it comes to investigating or defending against intrusions.