

1. Record Nr.	UNINA9910632994203321
Autore	Bernabe Jorge Bernal
Titolo	Challenges in Cybersecurity and Privacy : the European Research Landscape // edited by Jorge Bernal Bernabe and Antonio Skarmeta
Pubbl/distr/stampa	Taylor & Francis, 2019 Denmark : , : River Publishers : , : CRC Press, , 2019
ISBN	1-00-333749-X 1-000-79218-8 1-003-33749-X
Descrizione fisica	1 online resource (xli, 328 pages) : illustrations
Disciplina	323.448
Soggetti	Computer security Computer crimes - Prevention Privacy, Right of Europe
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1.Introducing the European Research Landscape on Cybersecurity and Privacy 2. Key Innovations in ANASTACIA: Advanced Networked Agents for Security and Trust Assessment in CPS / IOT Architectures 3. Statistical analysis and economic models for enhancing cyber-security in SAINT 4. The YAKSHA project 5. The FORTIKA edge solution for Automating SMEs Security 6. CYBECO: Supporting cyber-insurance from a behavioural choice perspective 7. Cyber Threat Intelligence from European-wide sensor network in SISSDEN 8. CIPSEC- Enhancing Critical Infrastructure Protection with innovative SECURITY framework 9. A cybersecurity situational awareness and information sharing solution for local public administrations based on advanced big data analysis: The CS-AWARE project 10. Complex project to develop real tools for fighting counter terrorism: Real-time Early Detection and Alert System for Online Terrorist Content based on Natural Language Processing, Social Network Analysis, Artificial Intelligence and Complex Event 11. TRUESSEC: Trustworthiness Label Recommendations 12. An overview on ARIES: Reliable European Identity Ecosystem 13. The LIGHTest

Project: Overview, Reference Architecture and Trust Scheme Publication
Authority 14. Secure and Privacy-Preserving Identity and Access
Management in CREDENTIAL 15. FutureTrust -- Future Trust Services
for Trustworthy Global Transactions 16. LEPS. Leveraging eID in the
Private Sector

Sommario/riassunto

Cybersecurity and Privacy issues are becoming an important barrier for a trusted and dependable global digital society development. Cyber-criminals are continuously shifting their cyber-attacks specially against cyber-physical systems and IoT, since they present additional vulnerabilities due to their constrained capabilities, their unattended nature and the usage of potential untrustworthiness components. Likewise, identity-theft, fraud, personal data leakages, and other related cyber-crimes are continuously evolving, causing important damages and privacy problems for European citizens in both virtual and physical scenarios. In this context, new holistic approaches, methodologies, techniques and tools are needed to cope with those issues, and mitigate cyberattacks, by employing novel cyber-situational awareness frameworks, risk analysis and modeling, threat intelligent systems, cyber-threat information sharing methods, advanced big-data analysis techniques as well as exploiting the benefits from latest technologies such as SDN/NFV and Cloud systems. In addition, novel privacy-preserving techniques, and crypto-privacy mechanisms, identity and eID management systems, trust services, and recommendations are needed to protect citizens' privacy while keeping usability levels. The European Commission is addressing the challenge through different means, including the Horizon 2020 Research and Innovation program, thereby financing innovative projects that can cope with the increasing cyberthreat landscape. This book introduces several cybersecurity and privacy research challenges and how they are being addressed in the scope of 15 European research projects. Each chapter is dedicated to a different funded European Research project, which aims to cope with digital security and privacy aspects, risks, threats and cybersecurity issues from a different perspective. Each chapter includes the project's overviews and objectives, the particular challenges they are covering, research achievements on security and privacy, as well as the techniques, outcomes, and evaluations accomplished in the scope of the EU project. The book is the result of a collaborative effort among relative ongoing European Research projects in the field of privacy and security as well as related cybersecurity fields, and it is intended to explain how these projects meet the main cybersecurity and privacy challenges faced in Europe. Namely, the EU projects analyzed in the book are: ANASTACIA, SAINT, YAKSHA, FORTIKA, CYBECO, SISSDEN, CIPSEC, CS-AWARE. RED-Alert, Truessec. eu. ARIES, LIGHTest, CREDENTIAL, FutureTrust, LEPS. Challenges in Cybersecurity and Privacy - the European Research Landscape is ideal for personnel in computer/communication industries as well as academic staff and master/research students in computer science and communications networks interested in learning about cyber-security and privacy aspects.
