1. Record Nr. UNINA9910298530903321

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Titolo	Real-time security extensions for EPCGlobal networks : case study for the pharmaceutical industry / / Matthieu-P. Schapranow
Pubbl/distr/stampa	Berlin ; ; New York, : Springer, c2014
ISBN	3-642-36343-1
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (157 p.)
Collana	In-Memory Data Management Research, , 2196-8055
Disciplina	005.8
Soggetti	Computer security Computer networks - Security measures
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	Introduction -- Related Work -- Security in EPCglobal Networks -- Device-level Extensions -- Business-level Extensions for Event Repositories -- Qualitative and Quantitative Discussion -- Evaluation -- Conclusion -- Appendices.
Sommario/riassunto	The transformation towards EPCglobal networks requires technical equipment for capturing event data and IT systems to store and exchange them with supply chain participants. For the very first time, supply chain participants thus need to face the automatic exchange of event data with business partners. Data protection of sensitive business secrets is therefore the major aspect that needs to be clarified before companies will start to adopt EPCglobal networks. This book contributes to this proposition as follows: it defines the design of transparent real-time security extensions for EPCglobal networks based on in-memory technology. For that, it defines authentication protocols for devices with low computational resources, such as passive RFID tags, and evaluates their applicability. Furthermore, it outlines all steps for implementing history-based access control for EPCglobal software components, which enables a continuous control of access based on the real-time analysis of the complete query history and a fine-grained filtering of event data. The applicability of these innovative data protection mechanisms is underlined by their exemplary integration in the FOSSTRAK architecture.