

1. Record Nr.	UNINA9910299754203321
Titolo	Industrial Cloud-Based Cyber-Physical Systems : The IMC-AESOP Approach // edited by Armando W. Colombo, Thomas Bangemann, Stamatis Karnouskos, Jerker Delsing, Petr Stluka, Robert Harrison, Francois Jammes, Jose L. Lastra
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-05624-7
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (261 p.)
Disciplina	004 006.3 620 629.892
Soggetti	Industrial engineering Production engineering Application software Robotics Automation Industrial and Production Engineering Computer Applications Robotics and Automation
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	Intro and Vision of IMC-AESOP -- State of the Art -- Envisioned Architecture -- Promising Technologies -- Infrastructure Migration -- Engineering Methods.
Sommario/riassunto	This book presents cutting-edge emerging technologies and approaches in the areas of service-oriented architectures, intelligent devices, and cloud-based cyber-physical systems. It provides a clear view on their applicability to the management and automation of manufacturing and process industries. It offers a holistic view of future industrial cyber-physical systems and their industrial usage, and also

depicts technologies and architectures as well as a migration approach and engineering tools based on these. By providing a careful balance between the theory and the practical aspects, this book has been authored by several experts from academia and industry, thereby offering a valuable understanding of the vision, the domain, the processes and the results of the research. It has several illustrations and tables to clearly exemplify the concepts and results examined in the text, and these are supported by four real-life case-studies. We are witnessing rapid advances in the industrial automation, mainly driven by business needs towards agility and supported by new disruptive advances both on the software and hardware side, as well as the cross-fertilization of concepts and the amalgamation of information and communication technology-driven approaches in traditional industrial automation and control systems. This book is intended for technology managers, application designers, solution developers, engineers working in industry, as well as researchers, undergraduate and graduate students of industrial automation, industrial informatics and production engineering.

---