

1. Record Nr.	UNISA996483158103316
Autore	Di Nitto Elisabetta
Titolo	Deployment and operation of complex software in heterogeneous execution environments : the SODALITE approach // editors, Elisabetta Di Nitto [et al.]
Pubbl/distr/stampa	Cham, : Springer Nature, 2022 Cham : , : Springer International Publishing AG, , 2022 ©2022
ISBN	3-031-04961-6
Descrizione fisica	1 online resource (vii, 148 pages) : illustrations (some color)
Collana	SpringerBriefs in applied sciences and technology
Altri autori (Persone)	Di Nitto Elisabetta Gorroño goitia Cruz Jesús Kumara Indika Radolovi Dragan Tokmakov Kamil Vasileiou Zoe
Soggetti	Computer software - Development - Management Software engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Orchestrating Heterogeneous Applications: Motivation and State of the Art The SODALITE Approach: an Overview The SODALITE Model-driven Approach Quality Assurance and Design-time Optimization The SODALITE Runtime Environment SODALITE in Context SODALITE Use Cases Toward Impact Generation and Future Research
Sommario/riassunto	This open access book provides an overview of the work developed within the SODALITE project, which aims at facilitating the deployment and operation of distributed software on top of heterogeneous infrastructures, including cloud, HPC and edge resources. The experts participating in the project describe how SODALITE works and how it can be exploited by end users. While multiple languages and tools are available in the literature to support DevOps teams in the automation of deployment and operation steps, still these activities require specific

know-how and skills that cannot be found in average teams. The SODALITE framework tackles this problem by offering modelling and smart editing features to allow those we call Application Ops Experts to work without knowing low level details about the adopted, potentially heterogeneous, infrastructures. The framework offers also mechanisms to verify the quality of the defined models, generate the corresponding executable infrastructural code, automatically wrap application components within proper execution containers, orchestrate all activities concerned with deployment and operation of all system components, and support on-the-fly self-adaptation and refactoring.
