

1. Record Nr.	UNINA9910960649703321
Titolo	Fundamentals of grid computing : theory, algorithms and technologies // edited by Frederic Magoules
Pubbl/distr/stampa	Boca Raton, : CRC Press, c2010
ISBN	1-04-021258-1 0-429-16608-7 1-4665-3242-4 1-282-90260-1 9786612902604 1-4398-0368-4
Edizione	[1st ed.]
Descrizione fisica	1 online resource (323 p.)
Collana	Chapman & Hall/CRC numerical analysis and scientific computing
Classificazione	ST 205
Altri autori (Persone)	MagoulesF (Frederic)
Disciplina	004/.36
Soggetti	Computational grids (Computer systems)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Chapman & Hall book."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Title; Copyright; Contents; List of Figures; List of Tables; Foreword; Preface; Chapter 1: Grid computing overview; Chapter 2: Synchronization protocols for sharing resources in grid environments; Chapter 3: Data replication in grid environments; Chapter 4: Data management in grids; Chapter 5: Future of grids resources management; Chapter 6: Fault-tolerance and availability awareness in computational grids; Chapter 7: Fault tolerance for distributed scheduling in grids; Chapter 8: Broadcasting for grids; Chapter 9: Load balancing algorithms for dynamic networks Appendix A: Implementation of the replication strategies in OptorSim Appendix B: Implementation of the simulator for the distributed scheduling model; Glossary; Author Index
Sommario/riassunto	The integration and convergence of state-of-the-art technologies in the grid have enabled more flexible, automatic, and complex grid services to fulfill industrial and commercial needs, from the LHC at CERN to meteorological forecasting systems. Fundamentals of Grid Computing: Theory, Algorithms and Technologies discusses how the novel technologies of semantic web and workflow have been integrated

into the grid and grid services. The book explains how distributed mutual exclusion algorithms offer solutions to transmission and control processes. It also address
