

1. Record Nr.	UNISA996465474303316
Autore	Vogler Walter
Titolo	Modular Construction and Partial Order Semantics of Petri Nets [[electronic resource] /] / by Walter Vogler
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1992
ISBN	3-540-47282-7
Edizione	[1st ed. 1992.]
Descrizione fisica	1 online resource (XII, 256 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 625
Disciplina	005.1/2/028
Soggetti	Architecture, Computer System theory Software engineering Computers Mathematical logic Computer System Implementation Systems Theory, Control Software Engineering Computation by Abstract Devices Mathematical Logic and Formal Languages
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Petri nets and their semantics -- Parallel composition and deadlocking -- Behaviour preserving refinement of places and transitions -- Action refinement and interval words -- Action refinement and bisimulation -- Partial order semantics for nets with capacities -- Concluding remarks.
Sommario/riassunto	Petri nets are a well-known model for parallel systems, used for both applications and theoretical studies. They can be used for specification, modelling, and analysis, and offer a graphical representation and a clear view of concurrency. For the design of large systems, modular construction is indispensable, and considerable effort has been spent on studying the modular construction of Petri nets. This book studies the modular construction of nets, and in particular the top-down design of nets by action refinement. Suitable behavior descriptions are

presented and special care is taken to justify these descriptions by showing that they are necessary under reasonable specification requirements. In particular, it is shown that partial-order semantics is necessary to support action refinement.
