1. Record Nr. UNISA996466015403316

Autore	Tomas Gerald
Titolo	Visualization of Scientific Parallel Programs [[electronic resource] /] / by Gerald Tomas, Christoph W. Ueberhuber
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1994
ISBN	3-540-48325-X
Edizione	[1st ed. 1994.]
Descrizione fisica	1 online resource (XIV, 314 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 771
Disciplina	005.2
Soggetti	Architecture, Computer Application software Computers Computer programming Software engineering Numerical analysis Computer System Implementation Computer Applications Theory of Computation Programming Techniques Software Engineering Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Visualization tools -- Design goals and techniques -- Available software -- Paragraph -- Parallel IDeC methods -- Performance modelling and evaluation of parallel IDeC methods -- Representative target machines -- Trace file -- IDeC-specific displays -- Shared memory IDeC methods -- Distributed memory IDeC methods -- Parallel integration -- Simulated target machines -- Trace file -- Integration-specific displays -- Visualization of parallel integration algorithms.
Sommario/riassunto	The substantial effort of parallelizing scientific programs is only justified if the resulting codes are efficient. Thus, all types of

performance tuning are important to parallel software development. But performance improvements are much more difficult to achieve with parallel programs than with sequential programs. One way to overcome this difficulty is to bring in graphical tools. This monograph covers recent developments in parallel program visualization techniques and tools and demonstrates the application of specific visualization techniques and software tools to scientific parallel programs. The solution of initial value problems of ordinary differential equations, and numerical integration are treated in detail as two important examples.