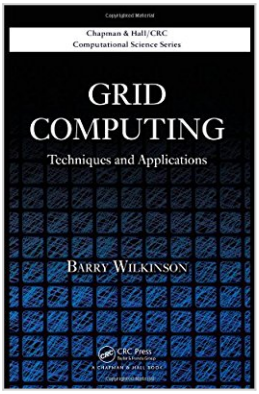

Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science)

By Barry Wilkinson

Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson

Designed for senior undergraduate and first-year graduate students, **Grid Computing: Techniques and Applications** shows professors how to teach this subject in a practical way. Extensively classroom-tested, it covers job submission and scheduling, Grid security, Grid computing services and software tools, graphical user interfaces, workflow editors, and Grid-enabling applications.

The book begins with an introduction that discusses the use of a Grid computing Web-based portal. It then examines the underlying action of job submission using a command-line interface and the use of a job scheduler. After describing both general Internet security techniques and specific security mechanisms developed for Grid computing, the author focuses on Web services technologies and how they are adopted for Grid computing. He also discusses the advantages of using a graphical user interface over a command-line interface and presents a graphical workflow editor that enables users to compose sequences of computational tasks visually using a simple drag-and-drop interface. The final chapter explains how to deploy applications on a Grid.

The Grid computing platform offers much more than simply running an application at a remote site. It also enables multiple, geographically distributed computers to collectively obtain increased speed and fault tolerance. Illustrating this kind of resource discovery, this practical text encompasses the varied and interconnected aspects of Grid computing, including how to design a system infrastructure and Grid portal.

Supplemental Web Resources
The author’s Web site offers various instructional resources, including slides and links to software for programming assignments. Many of these assignments do not require access to a Grid platform. Instead, the author provides step-by-step instructions for installing open-source software to deploy and test Web and Grid services, a Grid computing workflow editor to design and test workflows, and a

Grid computing portal to deploy portlets.

Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science)

By Barry Wilkinson

Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson

Designed for senior undergraduate and first-year graduate students, **Grid Computing: Techniques and Applications** shows professors how to teach this subject in a practical way. Extensively classroom-tested, it covers job submission and scheduling, Grid security, Grid computing services and software tools, graphical user interfaces, workflow editors, and Grid-enabling applications.

The book begins with an introduction that discusses the use of a Grid computing Web-based portal. It then examines the underlying action of job submission using a command-line interface and the use of a job scheduler. After describing both general Internet security techniques and specific security mechanisms developed for Grid computing, the author focuses on Web services technologies and how they are adopted for Grid computing. He also discusses the advantages of using a graphical user interface over a command-line interface and presents a graphical workflow editor that enables users to compose sequences of computational tasks visually using a simple drag-and-drop interface. The final chapter explains how to deploy applications on a Grid.

The Grid computing platform offers much more than simply running an application at a remote site. It also enables multiple, geographically distributed computers to collectively obtain increased speed and fault tolerance. Illustrating this kind of resource discovery, this practical text encompasses the varied and interconnected aspects of Grid computing, including how to design a system infrastructure and Grid portal.

Supplemental Web Resources
The author’s Web site offers various instructional resources, including slides and links to software for programming assignments. Many of these assignments do not require access to a Grid platform. Instead, the author provides step-by-step instructions for installing open-source software to deploy and test Web and Grid services, a Grid computing workflow editor to design and test workflows, and a Grid computing portal to deploy portlets.

Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson Bibliography

- Sales Rank: #4440350 in Books
- Brand: Brand: Chapman and Hall/CRC
- Published on: 2009-09-28
- Original language: English
- Number of items: 1
- Dimensions: 9.63" h x .90" w x 6.50" l, 1.51 pounds

- Binding: Hardcover
- 387 pages

Editorial Review

Review

… the most outstanding aspect of this book is its excellent structure: it is as though we have been given a map to help us move around this technology from the base to the summit … I highly recommend this book …
?Jose Lloret, *Computing Reviews*, March 2010

About the Author

Barry Wilkinson is a professor of computer science and the director of the computer science master's program at the University of North Carolina at Charlotte.

Users Review

From reader reviews:

Harold Graham:

Have you spare time to get a day? What do you do when you have much more or little spare time? Sure, you can choose the suitable activity intended for spend your time. Any person spent their very own spare time to take a move, shopping, or went to typically the Mall. How about open as well as read a book eligible Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science)? Maybe it is being best activity for you. You understand beside you can spend your time using your favorite's book, you can more intelligent than before. Do you agree with its opinion or you have different opinion?

Sherry Stevens:

This Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) book is absolutely not ordinary book, you have it then the world is in your hands. The benefit you have by reading this book is definitely information inside this e-book incredible fresh, you will get information which is getting deeper an individual read a lot of information you will get. This specific Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) without we understand teach the one who examining it become critical in thinking and analyzing. Don't become worry Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) can bring any time you are and not make your handbag space or bookshelves' grow to be full because you can have it inside your lovely laptop even phone. This Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) having great arrangement in word along with layout, so you will not sense uninterested in reading.

Charles Baker:

Now a day people who Living in the era just where everything reachable by connect to the internet and the resources included can be true or not require people to be aware of each facts they get. How a lot more to be smart in acquiring any information nowadays? Of course the solution is reading a book. Reading a book can help folks out of this uncertainty Information specially this Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) book since this book offers you rich information and knowledge. Of course the data in this book hundred % guarantees there is no doubt in it you probably know this.

Kimberly Wheatley:

Reading a book to be new life style in this calendar year; every people loves to examine a book. When you examine a book you can get a great deal of benefit. When you read books, you can improve your knowledge, because book has a lot of information into it. The information that you will get depend on what forms of book that you have read. If you would like get information about your review, you can read education books, but if you want to entertain yourself read a fiction books, these kinds of us novel, comics, along with soon. The Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) will give you new experience in looking at a book.

Read Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson for online ebook

Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson books to read online.

Online Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson ebook PDF download

Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson Doc

Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson Mobipocket

Grid Computing: Techniques and Applications (Chapman & Hall/CRC Computational Science) By Barry Wilkinson EPub