Grid Computing Security

Anirban Chakrabarti, Springer, 2007, \$69.95,
ISBN: 3540444920.

One popular aspect of grid computing is the promise of getting computing power anywhere. As with electricity, you just plug in and use it, regardless of how or from where it is being delivered. This analogy works well to understand the ultimate goal of grid computing, but of course reality is much more complex.

Many advances in interoperability and performance in recent years make grid technologies an alternative to cluster computing for certain distributed applications. Now is the time to focus attention on other problems, such as security. In *Grid Computing Security*, Anirban Chakrabarti studies security issues related not only to grids, but also to computer networks and operating systems that may affect future development.

The book makes no assumptions about the reader's background, although some general knowledge of network and grid technologies is essential. After a general introduction to grid computing in the first chapter, chapter 2 discusses the main security issues related to computer systems, and chapter 3 provides a comprehensive taxonomy of grid security issues. Chapter 4 describes a security standard effort called grid security infrastructure. Chapter 5 looks at authorization and access-control mechanisms. Chapter 6 covers service-level security, including denial-of-service attacks. Chapter 7 examines how to protect the data in hosts from malicious code.

Chapter 8 covers the use of firewalls, virtual private networks, and secure routing or multicasting, while chapter 9 focuses on grid credential management systems. Finally, chapter 10 is devoted to the management of trust in the grid, and chapter 11 covers grid monitoring concepts and tools. An appendix on Web services-related technology, a bibliography of almost 300 references, and a short index conclude Chakrabarti's excellent work.

This book succeeds in introducing a complex topic to a heterogeneous audience, although some background in the field is required to take full advantage of it. It is extremely well edited, following Springer's high standards. This book is a must-have for readers with some background in network protocols who want to understand the implications of grid security. —Diego R. Llanos

Beginning POJOs: From Novice to Professional

Brian Sam-Bodden, Apress, 2006, \$39.99,
ISBN: 1590595963.

Beginning POJOs (plain old Java objects) is a well-written book that exposes a large set of open-source resources for the Java Enterprise platform development. Author Brian Sam-Bodden uses the following open-source tools: Eclipse, JBoss, MySQL, Spring, Hibernate, AspectJ, XOM, DBUnit, TestNG, DynaDTO, Informa, and Jakarta Commons, to name a few. He has consolidated these open-source technologies around Java Enterprise applications.

The first chapter provides perspective on the Java Enterprise platform and offers a good introduction to enterprise architecture. The Eclipse environment is covered in chapter 2, though not exhaustively.

Chapter 3 discusses Ant, another open-source technology that is very close to the heart of software developers. The build process with Ant has always been a nightmare for novices, but Sam-Bodden makes it easy to understand through screen shots.

Chapter 4 concerns Hibernate, while chapter 5 is dedicated to the application server JBoss. Again, this is not an exhaustive review, but it is nonetheless interesting.

In chapter 6, Sam-Bodden addresses Spring and explains the relevant technologies, such as EJB (Enterprise JavaBeans), J2EE (Java 2 Platform, Enterprise Edition) container, and POJO adoption. Chapter 7 covers Tapestry, which is another Java application framework. The technology is nicely introduced with an example time application that includes HTML and Java code.

Chapters 8 and 9 are on testing and integration, respectively. General approaches are discussed here, which help the reader understand the topics. AspectJ is discussed in chapter 10.

This book provides comprehensive coverage on the role of open-source technologies in enterprise solutions. The best practice and note boxes are terse and to the point. Throughout the book, illustrative screen shots and scripts are presented aptly and generously. Every chapter starts with a good introduction to the tool or technology that is about to be discussed. Overall, this book would be useful to both developers and libraries. —S. Balaraman