CHAPTER 6

Extending SAP to the Web
IN THE LAST TWO CHAPTERS, you looked at building Java applications for SAP that deployed directly to the end user's desktop. Although this gives your end users a break from navigating the SAP GUI, it does not really make life easier for the Information Technologies (IT) department. This is because every time the application is updated, whether through a bug fix or functional enhancement, your IT group has to manually reinstall or update the code on each machine. Thankfully, the company intranet provides an easier way to deploy and maintain these Java-based applications.

This chapter focuses on building applications that can be run within a Java application server and accessed via a standard Web browser. In using such applications, you not only wield the flexibility of a single desktop interface, but you also centralize the application logic to guarantee that your end users have the most current version of your code.

This chapter looks at the following:

- Basic application server concepts
- Installing the Tomcat application server
- Building a sample Web application

Looking at the Application Server

The introduction of client/server technology in the 1980s was a huge step forward from the dumb terminal/mainframe model. The client/server model allowed you to move much of the computing load off the mainframe server and into more readily available and less expensive desktop computers. However, this came at the price of decentralizing the store of application logic into discrete units represented as a single end user on the network. Although this may have made sense from a purely hardware economic perspective, the move inadvertently created and required two entirely new company departments: Information Systems and Desktop Support.

As the cost of centralized server hardware and software has rapidly diminished over time, companies have begun to reevaluate their purpose and place within the corporate infrastructure. Of course, there can be no stemming the tide of powerful desktop machines and notebook computers, which allow users to process text, spreadsheets, and presentation documents at unprecedented speeds. But for key business processes and mission critical applications, companies have grown more and more leery of relying on the vagaries of assuming that each user's software version is current or even running at any given moment.

Enter the application server. Many of you are apt to be familiar with the concept of an application server, and if you are SAP users, than everything you do requires an application server. The R/3 architecture uses a three-tier model, which calls for a database system to house information, an application server to