Chapter 5

The Technology Architecture of BPM

In This Chapter

- Looking at the architectural design principles underlying BPM
- Understanding the role of SOA in BPM's technology architecture
- Defining how BPM better aligns IT architecture with business strategy

BPM provides the most comprehensive and flexible process-centric approach to operational business infrastructure ever devised. The technology architecture compliments the business, process, and management architectures (see Chapter 4) to meet business needs and goals.

The technology architecture of BPM includes the set of component technologies that combine to support the functional goals and business drivers. Specifically, the architecture:

- Cost-effectively supports rapid change and continuous innovation
- Continuously aligns IT resources with business objectives
- Allows existing IT assets to be managed as a portfolio for maximum efficiency and productivity
- Allows shared responsibility for the creation and change of process-centric applications between the business and IT

BPM Technology Architecture

The major components of the technical architecture include:

Developing processes

Process design tools reveal all the important technical details you need to implement process steps using existing services that have been built and hosted in the ESB or standard Web Services environment. Developers build processes working from the same process model defined by the business people, using the corresponding documentation they provide. Developers edit the model or expand on steps to build them out as complete sub-processes. They add in other technical details, such as information on services, data formats, transformation, mapping, logging, security, and availability.

Defining business rules

Business rules are the policies and procedures that automate decision points within a business process. Historically, business rules were built into the logic and code of applications like ERP. This made accessing and changing them difficult, because the business manager responsible for the rule couldn't do it without time-consuming and extensive IT support. A compelling and valuable part of BPM is that these rules are *externalized* out of the application code and managed separately in *rules engines* using interfaces that are accessible to the business managers.

BPM technology makes extensive use of rules. Rules govern workflow routing and alert managers of events. For example:

> If average order volume trends up by more than two standard deviations, send an alert to the VP of Finance.

Business rules can also make decisions automatically:

> If the loan applicant is an existing customer, and their credit score is above 760 and loan amount is less than $20,000, then automatically approve the loan.

Authorized users can change process rules in two ways: They can directly edit the rules within a production environment, or edit rules within a development environment and then promote them through the normal release cycle. This agility