Chapter VIII

Service Deployment Execution and Management

Introduction

This chapter is concerned with concepts, technologies, and standards for deploying, executing, and managing services. In previous chapters, we have argued that the design of the service must strive for a balance between offering to customers what they want and creating potential for developing additional revenue generating services. We have already established that, although not all possible types of services can be delivered to the consumers in an electronic form, information needed for the coordination and mobilization of the core service resources can be digitized and offered as a support service. In Chapter II, we explained that support services which attach to a core business service are information-based in the sense that they help the consumer locate, evaluate, and access the offered service. Effectively, such services add value to the main business service.

The Internet allows us to deliver services in a cost-effective manner. Even if the core business service cannot be delivered through electronic channels, most of its supporting (information-based) services can. Supporting services are used to assist
the consumer in locating, evaluating, and consuming the core service, according to the service life cycle shown in Chapter II. In this chapter, however, we will examine service technologies and standards, which mainly use the Internet to deploy and manage services for the consumers. Such standards refer primarily to Web services, as this is the prevalent technology for implementing e-services.

**Environments for Consumption and Provision of Services**

Increasingly, service execution environments deal not only with the provision, production, and management but also with the consumption of services. Although consumption and provision of services are separate (and loosely coupled, by the definition of services), Web services increase the integration between the two. Today, most consumption of e-services is via portals accessed using Web browsers; but rich clients (which are programs that have capabilities beyond simple browsing) are also growing in popularity. Rich-client consumers of e-services often use portals as the glue that brings together the management of the resultant environment. Leading services platforms include technologies and architectures that provide value in bringing together consumption with the provision of e-services, while maintaining the benefits of loose coupling (Smith, Abrams, Sholler, Plummer, & Cantara, 2005).

With the ubiquity of the Internet and the Word Wide Web, delivering services electronically has numerous advantages for providers and consumers alike. The power of the Internet and the Web for reaching customers has been proven in every business function from marketing to after-sales support and in every business domain. Providing an e-service to consumers over the Web traditionally has meant the following things:

- A Web site containing HTML pages with service information and metainformation. Metainformation is effectively a directory of services available on the Web site and instructions on how to access them, such as the UDDI discussed in Chapter III. The Web site is hosted by a Web server which is an application that serves clients (typically Web browsers) with the Web pages they request using standard communication protocols (typically the HTTP protocol)
- A Web browser used by the consumer to access the pages of the service provider’s Web site
- The ability of the Web server and the Web browser to communicate by exchanging messages that are transmitted using the standard Internet protocols (typically HTTP over TCP/IP).
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