

# PORTALS: PUTTING A FACE ON SOA

Perceptive IT organizations have begun to focus their attention on service oriented architectures (SOAs). **That's because SOAs make it easier, faster and less expensive** than before to deliver vital information to employees, partners and customers. Rather than requiring the development of entire new applications whenever a company enters a new line of business or must comply with a new regulation, SOAs make "services" (such as the user interface or the logic to process orders) available to users across the network.

**S**OAs rely on Web standards such as XML and SOAP that allow clients, servers and other resources (such as databases) from various vendors to perform functions in response to messages passed among them. Assuming the creators of the various "services" have relied on open, accepted standards, the services can communicate more easily and share information more readily than can traditional, standalone applications.

However, the inner workings of an SOA are of little interest to a knowledge worker or even a power user. These employees want the information and the flexible access to business processes provided by an SOA without understanding the details of how it works. They need to see, in concrete and easy-to-understand ways, the business benefits of an SOA.

Those benefits can be seen through a portal—a central Web site that gives users access to the data and the business processes delivered by the SOA. Portals help employees deliver better customer service, develop new products, process orders or comply with regulations more effectively and efficiently than ever before.

## Portals Today

Many companies already use enterprise portals, but they are often hard-coded, presenting information that specific users need. A portal for a field technician, for example, might include links to parts databases, online service manuals, a scheduling

application, a map of the company's service area and a billing application. A salesperson would use a separate portal to access customers' credit and payment histories, past purchases and records of support and inquiry calls to determine which other products or services they might want to buy.

Portals are built on portlets, which are specialized software components within the portal that allows it to communicate to an internal information resource (such as a parts database or customer relationship management application) or to an external resource (such as a Web-based credit reporting service or mapping database).

There's a downside to portlets, however, which limits their flexibility. Each requires different code to be downloaded to the client and the server so the portlet can correctly present information to the user. Adding a new portlet (and thus a new information source) to a portal requires programming and administrative work for the IT staff and higher costs for the enterprise. It also means lower productivity while users wait for the information they need, and a competitive disadvantage because it takes longer for the organization to respond to changing business requirements.

Ideally, portal users should be able to quickly and easily create new "composite applications" within the portal containing exactly the information they need when a new business requirement emerges. To do this, they need flexible portals.

## Next: Flexible Portals

To create flexible portals that maximize the business value of SOAs, organizations need standards-based development tools and middleware that reduce the time, cost and effort of adding new information sources to portals.

One such standard is Web Services for Remote Portlets (WSRP), which divides the work of presenting content between the client and server rather than relying only on client-side code. WSRP eliminates the need to download and install custom code to each client for each new portlet, allowing users to easily add new portlets and new information sources to portals without involving IT staff.

### PORTAL + SOA: TOP 5 BUSINESS BENEFITS

- 1** Faster response to changing business needs
- 2** Increased productivity through improved access to information
- 3** Less time and cost required to integrate information sources within portals
- 4** Faster return on investment in SOAs
- 5** Lower application development, maintenance costs

Another standard is JSR (Java Specification Request) 168, which reduces the administrative burden for developers by eliminating the need to deploy pluggable components locally to every server. Instead, portal administrators can browse a registry of WSRP services to which they can bind and display the content of those services to users. This also makes it easier for users to access new services and aggregate new content to form their composite applications.

These standards cut the time, effort and cost of creating new composite applications to meet new business challenges. An auditor, for example, can easily add the financial systems of a newly acquired company to the list of systems he monitors to assure regulatory compliance. A sales rep who has just been given a new product to sell, or a new territory to service, can link to the new product information or customer database without waiting for help from IT.

A portal combined with an SOA creates greater business agility, lowers costs, and improves employee productivity.

### Solution: Standards-Based Portal

Oracle Portal, part of the Oracle Fusion Middleware platform,

provides a standards-compliant interface to SOAs. Oracle Portal supports both the WSRP and JSR 168 standards and can leverage services originating both inside and outside the enterprise firewall.

Oracle Portal and Oracle Fusion Middleware support standards-based portlets as a key development interface for creating new composite applications, giving users more control and making it easier for network and system administrators to maintain these applications. Oracle Portal functioning in the context of the Oracle Fusion Middleware platform provides the following critical functions:

- Service aggregation, or the ability to combine multiple services to create new composite applications, allows the business to more quickly and easily enter new markets, create new products and comply with new regulations.
- Integration of business processes and service management so administrators can maintain and manage services based on the business processes they support. This business-level view allows IT staff to focus on the most important business processes, which lowers costs while maximizing productivity.
- Creation and exposure of application data, business logic, and user interfaces in the form of presentation-oriented services that can easily be combined in composite applications. By allowing users to create their own composite applications, IT costs can be reduced and employee productivity increased.
- Creation of views, dashboards and business alerts to quickly notify business users of problems (such as sales or production functions that fail to meet established targets) that require their attention. Finding and resolving problems sooner reduces costs and increases profits.
- Personalization of portals through the creation of unique users and roles. This means users get all the information they need to do their jobs. This results in higher employee productivity, improved customer service, lower customer support costs and increased revenue through improved cross-sell and up-sell opportunities.
- Single sign-on and authentication for all services using Oracle Identity Management provides the security needed for regulatory and governance requirements without investing in a standalone single sign-on and authentication product.

### Portal + SOA = Business Benefit

In today's fast-moving global economy, an organization's product lines, supply chains, distribution channels and entire business model can change overnight. The knowledge workers at the competitive front lines need new and different information to cope with each new merger or acquisition, outsourcing initiative, customer segment or government regulation.

The next generation of flexible enterprise portals—powered by an underlying service-oriented architecture—will allow users to create composite applications that give them the information they need when they need it, while holding down application creation and maintenance costs.