

Get Ready for Fourth-Generation Portal Technology

Gene Phifer

Fourth-generation portals will open doors to greater interoperability. Enterprises should prepare for adoption now.

ANALYSIS

The evolving portal market has given users new capabilities with each iteration. In the next round, generation-four portals will provide the unifying technology that disparate portals and users need to achieve new levels of "connectedness." Today's portals offer content management, content aggregation, personalization, search and categorization, collaborative features and universal access. The portal technology that emerges in 2004 will enable the "federation" of portals by which the earlier three generations of technology can be integrated.

Enterprises that have successfully implemented portals still need to achieve federation. Generation-three portal products represent the current state of portal technology. Once an enterprise has achieved a degree of unification under one or more portal frameworks, a significant challenge remains: integrating internal portals and then extending that integration to portals outside the enterprise. Generation-four functionality seeks to enable communication and interaction between multiple portals in a way that extends the unification that users achieved with generation-three portal technology (see "Gen-4 Portal Functionality: From Unification to Federation").

Facilities for Federation

Developments with portal standards and the evolution of vendor strategies indicate that the next generation of portal capabilities will provide the facilities for federating multiple, disparate portals. These generation-four functional attributes will come from new product offerings, including features traditionally offered by portal frameworks. Instead of evaluating generation-four portal products, enterprises will evaluate the generation-four portal functionality of smart enterprise suites and application platform suites (APSs).

In this world of the future, the average user will deal with multiple portals. For example, in addition to using the portal(s) in their own place of employment, users will be able to apply their personalization preferences to consumer, banking, travel and government (local, state/regional and national) portals. They will also be able to apply their user attributes and common authentication parameters to various portals regardless of the method of access (car, wireless device or phone). Portals with generation-four functionality will integrate content and information across disparate networks to multiple devices to provide a single user interaction, leading to the "portal fabric," where the user is the center of his or her portal universe (see "Future Portal Clients Will Be Multichannel, Offline and Rich").

Enterprises that have sought to manage multiple portals have struggled with the lack of interoperability standards. The emergence of portlet standards — Web Services for Remote Portlets (WSRP) and Java Specification Request 168 (JSR168) — in 2H03 will provide a key component of generation-four portal functionality, but won't immediately provide the required level of interoperability (see "The JSR168 Standard: Underpowered vs. Just Right"). Until a more-complete set of interoperability standards emerges to allow seamless portal federation, a tactical approach must be taken.

A common tactical model for portal interoperability is the "uberportal." German for "over," uber implies a high-level, overarching portal. The uberportal is essentially the entry point, or home portal, in a multiportal deployment. It will be where users spend most of their time and the tool that aggregates most of their content and applications (see "The 'Uberportal': An Answer to the Multiple Portal Problem").

More From Generation Four

In addition to greater interoperability, the next generation of portal technology will serve as a deployment platform for composite applications — a technology that has struggled to gain traction due to a lack of enabling technologies. Now that prerequisites (such as the common user interface provided by enterprise portals, and the application integration included in portal products or APSs) are in place, and Web services standards and technologies are being finalized, enterprises can start to build composite applications at tactical speeds with a minimum of coding (see "Composite Applications Built on a Portal Foundation"). Generation-four portals also can provision Web services by acting as Web services provider platforms and supporting Web services choreography, a key requirement of composite applications.

Microportals are another application to which generation-four portal functionality can be applied. Microportal features will allow portals to provide a consolidation platform through which to deliver multiple services to different audiences. This brings us to today's "microportal conundrum": Is a single portal platform flexible enough to accommodate multiple microportals, each with its own unique identity, target audience and governance requirements? (see "Introducing Microportals: One Portal, Multiple Personalities").

At What Cost?

Larger, longer portal rollouts come with their own set of trade-offs. Generally speaking, Gartner cautions against "big bang" portal deployments in which a six-month requirement phase is followed by an implementation phase of more than a year, then a launch and descent into "maintenance mode." These kinds of projects are almost guaranteed to fail because it is nearly impossible for a large enterprise to establish detailed portal requirements that will persist over a multiyear period. Costs will escalate as the enterprise adjusts to meet complex and changing requirements.

Portals are best implemented in an incremental fashion (see "Narrowing the Broad Spectrum of Portal Costs"). In addition, total cost of ownership (TCO) varies across portal products. Some portal products can be installed in two days, while others take weeks or months. Some portal products have a long list of off-the-shelf portlets, enabling rapid integration to applications and content, while others have a relatively short portlet list. Finally, some portal products have a robust development framework, while others have relatively lightweight development tools. All these factors, and more, can affect the TCO of a portal deployment.

Features

"Gen-4 Portal Functionality: From Unification to Federation" — Generation-four functionality will enable enterprises to fix the multiple portal problems and integrate their portals with their partners' portals. **By David Gootzit and Gene Phifer**

"Future Portal Clients Will Be Multichannel, Offline and Rich" — Enterprises should start asking their vendors about support for portals on non-PC devices. **By Gene Phifer and Waldir Arevalo**

"The JSR168 Standard: Underpowered vs. Just Right" — JSR168 holds great appeal in terms of its potential ability to heal fragmentation in the portal market. **By Ray Valdes**

"The 'Uberportal': An Answer to the Multiple Portal Problem" — Enterprises should consider the "uberportal" as a tactical means toward the interoperability of multiple portals. **By Gene Phifer**

"Composite Applications Built on a Portal Foundation" — Enterprise portals provide the common user interface framework needed for delivering composite applications. **By Ray Valdes and Gene Phifer**

"Introducing Microportals: One Portal, Multiple Personalities" — Microportals are an effective technology to generate on-demand portals. **By Nikos Drakos**

"Narrowing the Broad Spectrum of Portal Costs" — Portals should be deployed incrementally because rigid, long-term deployments can be expensive, and can complicate a company's ability to meet changing business requirements. **By Ray Valdes**

This research is part of a set of related research pieces. See "Generation-Four Technology to Unite Portals in 2004" for an overview.

REGIONAL HEADQUARTERS

Corporate Headquarters
56 Top Gallant Road
Stamford, CT 06902-7700
U.S.A.
+1 203 964 0096

European Headquarters
Tamesis
The Glanty
Egham
Surrey, TW20 9AW
UNITED KINGDOM
+44 1784 431611

Asia/Pacific Headquarters
Level 7, 40 Miller Street
North Sydney
New South Wales 2060
AUSTRALIA
+61 2 9459 4600

Latin America Headquarters
Av. das Nações Unidas 12.551
9 andar—WTC
04578-903 São Paulo SP
BRAZIL
+55 11 3443 1509