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Oracle WebCenter Portal: Intuitive User Experiences for Enterprise Applications

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Executive Overview

Web 2.0 and social technologies have already transformed the ways customers, employees, partners, and suppliers communicate and stay informed. Forward-thinking organizations today need the necessary technology and infrastructure to help them advance to the next level and integrate social activities with business applications to deliver an unprecedented level of organizational awareness. As they acquire these capabilities, organizations need to move from the concept of a single "uber-portal" that encompasses all the necessary features to an open, modular, component-based concept for composite applications. The ultimate end result will be rich, participatory enterprise portals and applications that combine the concepts of Web sites, composite applications, content management and social communities, all delivered via a seamlessly integrated and open modern user experience.

Oracle WebCenter Portal is a portal and composite applications solution that delivers intuitive user experiences for the enterprise that is seamlessly integrated with your enterprise applications. This complete, open and integrated user experience solution enables the development and deployment of internal and external portals and Web sites, composite applications and mash-ups with integrated social and collaboration services and enterprise content management capabilities. Oracle WebCenter Portal delivers social and collaborative services to help optimize connections between people, information and applications, provides business activity streams so users can navigate, discover and access content in context, and offers dynamic personalization of applications, portals and sites so users have a customized experience. Oracle WebCenter Portal builds on the best user experience capabilities from a significant portfolio of leading portal products and related technologies and provides the foundation for delivering the next-generation user experience for Oracle Fusion Middleware, Oracle Fusion Applications and your existing applications.

Introduction

In today's dynamic global economy, organizations are bombarded with the pressures of hyper-competitive markets. They can no longer take a "wait and see" approach. Rather they need the ability to innovate faster and react quicker to stay one step ahead of the competition. In order to remain competitive, organizations must address three key challenges in order to succeed in today's economy. First, they need to make it easy for users to access and interact with all of the information sources and applications they need to be productive. Second, they need to be able to enhance their portals and enterprise applications with rich Web 2.0 services to present a more comprehensive view across business processes. Finally, organizations need IT departments to deliver upgrades, customizations and new applications faster, as well as give users the ability to customize and personalize applications on their own in order to respond faster to the dynamic market.

Traditional enterprise portal technology addresses certain aspects of these challenges; however, they lack the speed, flexibility, integrated social services, and user-driven application customization that businesses need to remain competitive in today's dynamic economy. What organizations need is a single, unified enterprise portal solution that is flexible enough to build any type of portal, Web site or composite application, includes integrated, enterprise-ready Web 2.0 services, and has the capabilities that empower business users to build their own social networks and applications as well as customize and personalize existing applications without the assistance of IT.

Oracle WebCenter Portal effectively addresses these challenges by providing intuitive user experiences for the enterprise that is seamlessly integrated with your enterprise applications.

Engage Users with Intuitive User Experiences

Bridging different data and systems is essential for an agile and intelligent business. However, traditional technologies that bridge these various systems do not go far enough. The impact of Web 2.0 technologies in consumer-facing Web sites, such as blogs, wikis, tags or social networking, has led organizations to realize that these technologies can add significant value to the business. Instead of deploying another “island” or silo of information, what organizations need is enterprise-class, Web 2.0 technologies that integrate directly into existing applications and systems and also meet their security and availability requirements. To deliver richer connections and become a more agile and intelligent business, organizations will need an enterprise portal solution that contains pre-integrated, standards-based social services. These social services need to be easily accessed, integrated and utilized by users. By giving users the ability to use and integrate social services such as tags, links, wikis, activities, blogs or social networking directly with their portals and applications, they are empowered to make richer connections, optimize their productivity, and ultimately increase the value of their applications.

Intuitive User Experiences for Enterprise Applications

Oracle WebCenter Portal is a portal and composite applications solution that delivers intuitive user experiences for the enterprise that are seamlessly integrated with your enterprise applications. Oracle WebCenter Portal enables the development and deployment of internal and external portals and Web sites, composite applications and mash-ups with integrated social and collaboration services and enterprise content management capabilities.

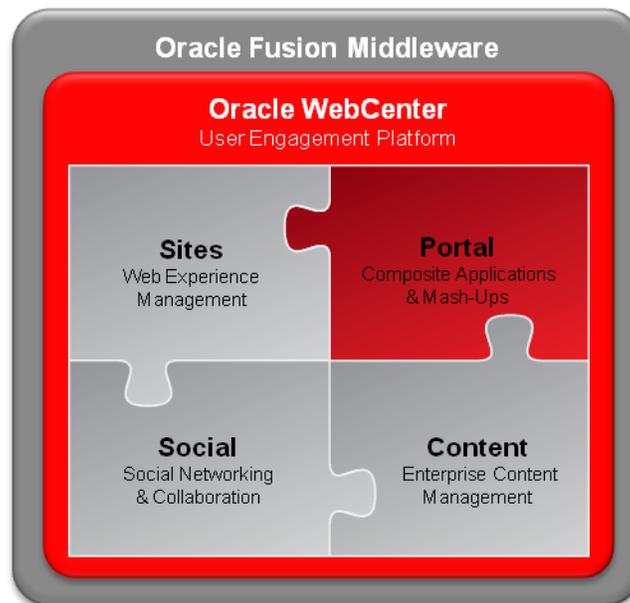


Figure 1: Oracle WebCenter Portal – Intuitive User Experiences for Enterprise Applications

Oracle WebCenter Portal provides a comprehensive set of portal-specific components that help organizations build enterprise-scale transactional and composite applications. With Oracle WebCenter Portal, organizations can rapidly deliver highly performant applications and Web sites. Oracle WebCenter Portal is 100% based on the open Java EE standard, providing organizations with maximum flexibility in their needs to design and develop modern user experiences specifically targeted to the unique user requirements for the internet or extranet.

For those looking to deliver quick wins via configurable unified intelligent workspaces, organizations can benefit from **Oracle WebCenter Portal: spaces** – a ready-to-use application within Oracle WebCenter Portal that delivers dynamic business communities with all the rich social services to empower teams to quickly and efficiently manage their information, applications, projects, and people without requiring IT assistance. It brings together the latest technology around social computing, communities, personal productivity, and ad-hoc team interactions without any development effort. Spaces allows users to work more effectively with project teams and work groups, including teams that span multiple geographies, and even include external members. It eliminates or reduces duplication of efforts and content inconsistencies, and it enables the sharing and collaboration on team content, focusing an organization's valuable resources on solving business problems, tapping into new ideas, and reducing time-to-market.

By providing a dynamic foundation for users to work together in teams and aggregate relevant information, Spaces helps your enterprise address many challenges, such as:

- Inefficient communication across geographically dispersed teams
- Error prone manual business processes that slow the progress and completion of projects
- Relevant information locked away on individual desktops and inaccessible by others
- Overusing email for collective content authoring, resulting in version control issues
- Distributing business intelligence and analytics in a time-sensitive manner
- Accessing Enterprise Applications in-context of business processes

On the other hand, most organizations likely have ungoverned and disparate Web applications already deployed, and the lack of integration with these applications will adversely impact the productivity and value of the portal. To address this problem, Oracle WebCenter Portal provides comprehensive Web integration strategy to integrate the widest range of Web applications into a portal.

Enhance Applications and Portals with Social Computing Services

Oracle WebCenter Portal includes **services** – a comprehensive set of standards-based components that enrich existing portals and Web sites with the industry's most complete and open set of social capabilities. These services include wikis, blogs, discussions, online awareness and communications, content collaboration and social networks. Services works with all Oracle portal offerings, enabling organizations to enhance their existing enterprise portals and Web sites, and empowering users with social services that work with their existing information systems. The services are integrated so that business users can also use them together (for example, you can add an Instant Messaging and

Presence link to a discussion forum to talk with a product expert directly from a forum topic), manage them effectively, and even model relationships between users and information to find new experts, create richer connections, and discover new ways to improve your organization's performance.

At the heart of Oracle WebCenter Portal is the concept of group participation and social computing, linking users and services together with enterprise data and systems in useful ways. For example:

- Sales people can contribute to reports and planning documents linked to a customer relationship management record.
- Managers can bring together data from enterprise systems with documents in Microsoft Office and securely share the results with customers and colleagues.
- Users can manage documents and projects in a group space, create and edit project documents in a wiki, and send related announcements to group members.

Easily Assemble Composite Applications with A Common User Experience Architecture

As Web-based computing exploded in the 1990s, most organizations made significant investments in building Web sites and portals to serve a wide variety of constituencies. Given the newness of the technology and the pace at which it changed, most organizations developed early portals to meet tactical business needs and to serve particular audiences. As a result, many enterprises today are struggling with mish-mash Web architectures that are costly and inefficient to maintain. This complexity and heterogeneity also inhibits IT's ability to meet emerging business demands efficiently.

Similarly, user experience suffers. While portals and the Web have empowered users with self-service options, most users today have to use too many portals and sites to accomplish their goals. To be effective, portals must be designed from the end-user perspective, enabling the user to accomplish as many tasks as possible while visiting the fewest number of portals. This requires rethinking the way that portals are built, moving from a functional business unit perspective to a user-focused, process-oriented point of view.

Common User Experience Architecture

Oracle WebCenter Portal provides a comprehensive user experience (UI) architecture foundation for highly scalable custom composite portal solutions. Its key capabilities include a full set of Web and enterprise UI integration tooling, flexible deployment options, federated architecture, and support for transactional composite applications and rich Internet applications. By way of Oracle WebCenter Portal being the core of Oracle's common user experience architecture, a single, streamlined portal environment can be utilized to assemble composites from a multitude of enterprise resources ranging from content, to service-oriented architecture (SOA), to Business Intelligence (BI). This architecture is flexible enough to ensure that diverse business and user needs are still met in a consolidated fashion, while IT is able to be more agile.

Unified View of Enterprise Information via Composite Applications

The lack of a unified view of enterprise information, inconsistent user interface, no unified security, and little re-use and code sharing are common pain points that drive consolidation towards a common user experience architecture. The difficulty of obtaining a consistent, unified view of enterprise information hinders usability for internal and external users who complain that the services and information they need are spread across too many different Web sites and portals. Without starting to work from a common platform and set of architectural components, new service delivery generally requires the development of new applications or portals. Oracle WebCenter Portal is designed to allow organizations to seamlessly present a unified view of enterprise information tailored to a particular user's role and preferences.

Oracle WebCenter Portal provides a common user experience architecture that in essence becomes the system of access. This architecture provides the best practices, design patterns and delivery mechanism for myriad services, applications, and data sources. In order to serve as a primary system of access, Oracle WebCenter Portal also provides access to unstructured content and to other users via integrated search, service-oriented artifacts, content management, and collaboration tools.

A portal can provide users with a unified view of information only if it leverages a common set of platform components that allow for integration of the necessary systems and data sources. Oracle WebCenter Portal leverages the common technology foundations from Oracle Fusion Middleware to create a tightly integrated user experience that can provide users with a truly functional, unified view across systems and services. It is also the same common development framework (WebCenter / ADF) for all Fusion Middleware user interfaces and Fusion Applications, allowing Oracle Applications customers to easily extend existing Applications and Fusion Applications with reusable, standards-based components from Oracle WebCenter Portal.

Consistent & Dynamic User Interface

The need for a consistent user interface is a business requirement and is also a key component of improved usability. Business owners are looking for standardized branding across all Web properties. This can be a difficult, manual, and time-consuming objective when these different sites and portals are running on different products, platforms, and architectures. Similarly, users are perplexed by the myriad interfaces they encounter as they move from portal to portal.

Using Oracle WebCenter Portal as the primary delivery mechanism for new services allows IT to deliver services more quickly as they don't have to develop UI components again and again; the portal provides the presentation for new services. This makes IT more responsive and also avoids the costs associated with duplicative UI development. Oracle WebCenter Portal provides the framework to centrally control the look-and-feel of one or multiple sites. UI elements such as skins and templates are imposed at the highest portal level, and then inherited down to sub-portals and pages and portlets. However, departmental or business owners of sub-portals and pages can be given the right to override the master UI framework, so that individual pages or page elements can have a totally different look and feel from the master portal. As a result of these degrees of flexibility, Oracle WebCenter Portal enables central control while still being flexible enough to meet distinct departmental or business unit

demands. The portal solution allows for a common UI across sites or for the interface to be highly customized so that different user groups see entirely different portals, even though they're really being served from a common set of components and content.

Because the common user experience architecture provides a unified view of disparate information and data, it also helps to improve the overall user interface experience. Rather than forcing users to go to different Web sites that all have different interfaces, Oracle SOA, Business Process Management (BPM), BI, WebCenter Content, and WebCenter Social pre-integrate process and unstructured data from underlying systems before these functions are surfaced within the single, consistent UI of the portal. Integration happens before data gets to the presentation layer, alleviating the need for users to do ad-hoc "integration" by viewing two portlets that are next to each other, or worse yet, having to go to different sites to find related information or processes.

Increase Code Re-Use and Sharing

Re-use of portal and application components in new initiatives can be nearly impossible in heterogeneous architectural environments. IT spends significant amounts of time integrating existing systems and developing code for functions that exist in other applications, but are not reusable. Increasing re-use and reducing the amount of new development that is required for the delivery of new services is a primary benefit offered by a common user experience architecture.

Oracle WebCenter Portal provides a standardized framework through which services can be delivered. These services are able to re-use common components provided by this framework, eliminating the need to redevelop these components for each new application. Presentation layer and security services are two good examples of services that the portal provides which can be reused again and again for each new service that is created. Entirely eliminating the need to develop these components for new applications is a huge cost and time-saver.

Create a More Agile and Responsive Business

Business users traditionally depend heavily on their IT organization for application or portal customizations. However, in today's hyper-competitive business environment, speed is essential to success. Organizations can no longer afford to wait long periods of time for IT to fulfill application enhancements or customization requests. Additionally, with the resource constraints facing many IT organizations today, it doesn't make good business sense to use precious IT resources on simple customization requests from the business. What organizations need is a proper set of customization and personalization capabilities that are simple enough for the business user to use, yet powerful enough to create the enhancements they require.

Place Customization in the Hands of Users

To successfully place customization capabilities in users' hands, organizations will need to provide an integrated set of capabilities that allow users to customize applications and portals completely on their own. It needs to be easy and intuitive. First, the different enterprise resources that a user can use to

customize their application should be neatly displayed based on the user's role. Second, they need a powerful, yet user-friendly capability that allows them to customize their application or portal with a few simple mouse clicks. Finally, user created personalization and customizations need to persist throughout the lifecycle of the application or portal.

User-driven Customization and Personalization

Business users can customize or personalize any page using Oracle WebCenter Portal's composer on-the-fly visual page editing features. Users access and select different resource components available in Oracle WebCenter Portal's business dictionary in order to add new content to the page. The business dictionary provides a role-based view of available components or resources, and these components can include information from a variety of enterprise resources such as enterprise applications, managed content, rich media, business processes, or business intelligence systems. Together, composer and business dictionary give users access to a powerful, yet easy to use, set of tools to personalize and extend their Oracle WebCenter Portal without involving IT.

User Customizations Persist Throughout the Portal Lifecycle

Customizations change everyone's view of an application or portal and are typically required to "brand" a delivered application or portal for a specific customer or purpose. Customizations include simple changes such as inserting a logo or altering the colors to match those of your organization. They can also involve adding items to a page, changing the layout of a page, altering a supplied process, and specifically tailoring the delivered application or portal to meet any business need. Oracle WebCenter Portal's composer provides a flexible model for effectively storing these customizations through Oracle Metadata Services (MDS). Traditionally, these customizations are stored as part of the application, and are lost when a patch or upgrade to the base application is deployed. With Oracle WebCenter Portal and Oracle MDS, all base application definitions, customizations, and personalizations are stored in the Oracle MDS repository as a layer on top of the base application. The benefit to business users is their customizations and personalizations are maintained throughout the lifecycle of the application. With Oracle WebCenter Portal, IT can develop and deploy new versions of applications without losing customizations or personalizations that were added over the life of the product by business users. The result is better IT responsiveness and a more agile and intelligent business.

"My Page" Views with Personalizations

Personalizations made with Oracle WebCenter Portal's composer and business dictionary change a user's view—and only their view—of a portal or application page. Other users are not affected by the changes a user makes to a page. Many Web sites and social services on the Internet today provide a means for users to create their own "personal" page. Users can decide what is important to them and organize information so that it is quick and easy to find. Composer enables personalizations by displaying information from Oracle WebCenter Portal's business dictionary in a role-based view, so that users see only resource components relevant to them. For example, to personalize a page, a sales representative might select a list of current customers, a list of current leads or sales opportunities, and

a list of past customers and products up for renewal. A customer support representative might see only a subset of these components in his or her view of the Resource Catalog. The important point is that individuals can tailor the page to add any combination of components to their pages whenever they want or need them, without affecting everyone else's view of the page.

Composer is also leveraged extensively inside Spaces to enable users to customize and personalize Personal and Group Spaces. The Spaces application provides a working example of how end users can take an active role in managing and altering their work environment to match their specific needs and requirements, creating a more agile and intelligent business.

Conclusion

The hyper-competitive economy and resource constraints facing organizations today require them to find ways to make their applications, portals and Web sites more agile and intelligent and their knowledge workers more productive. Organizations need to provide faster access to relevant information and resources, enhance existing applications and business processes with rich social services, and place customization capabilities directly into the hands of their business users. Oracle WebCenter portal successfully meets these challenges by providing intuitive user experiences for the enterprise that is seamlessly integrated with your enterprise applications.



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