Oracle Portal 10*g* Release 2 (10.1.4) Product Overview

An Oracle White Paper
May 2006

Oracle Portal 10*g* Release 2 (10.1.4) Product Overview

EXECUTIVE SUMMARY

Today's enterprises are gaining competitive advantage and realizing increased productivity by deploying an enterprise portal within their IT infrastructure. Enterprise portals are specifically designed to be the single source of interaction with corporate information and the focal point for conducting day-to-day business. Oracle Portal - a component of Oracle Application Server - is a complete and integrated solution for building, deploying, and maintaining a world-class enterprise portal.

INTRODUCTION

Oracle Portal combines a rich, declarative environment for creating a portal Web interface, publishing and managing information, accessing dynamic data, and customizing the portal experience, with an extensible framework for J2EE-based application access. Using Oracle Portal, e-businesses have the power to connect employees, partners, and suppliers with the information they need and the flexibility to create views tailored to each community.

BUILD AND MAINTAIN YOUR PORTAL WITH EASE

Oracle Portal's wizard-driven interface allows portal stakeholders, with varying degrees of technical knowledge, to create, evolve, and manage your portal – all from a Web browser. Tasks that typically bottleneck IT such as user/group management, page and template design, and content publishing are easily delegated to line of business users. With Oracle Portal, business users are empowered to:

- **Configure the Portal Rapidly and Securely.** Page design and development features within Oracle Portal give administrators, page designers, and end users a powerful environment to create content-rich, secure, portal pages. An editing dashboard provides browser-based controls and multiple views for adding portlets and content to the page and updating page properties. An integrated style manager allows designers to define color and font schemes that can be applied to a portal page or page region. No knowledge of HTML, coding, or editing of configuration files is required!

- **Customize Pages and Portlets for a Tailored Experience.** Page designers and administrators can control the level of page and portlet customization available to users - from simple hide/show/rearrange portlet privileges to full page building privileges. End users can easily personalize portlet content and format, including the ability to collapse infrequently used portlets.

- **Enjoy Self-Service Content Publishing, Management, and Access**. A simple wizard guides the user through the steps for uploading a business document, setting attributes, and publishing to a page. Virtually any type of content can be published, including files, simple text, hypertext links, and server-side scripting. A supplied Rich Text Editor supports the authoring of content directly in the browser - no knowledge of HTML is required. Page and page region properties set by the page designer automatically format and display the content on the page with the proper color, font, location, alignment, and so on. The pages themselves can be created in an ad hoc fashion or within carefully controlled content taxonomies.

- **Publish Content from the Desktop.** File-type content can also be published to Oracle Portal via the Web-based Distributed Authoring and Versioning (WebDAV) protocol. Users can simply drag and drop content, files, and folders between portal pages and the desktop. File-type items can also be opened, edited, and saved directly from WebDAV desktop applications like MS Office 2000. Using Oracle's desktop client - Oracle Drive – a full set of content management operations can be performed directly from the desktop using custom, right click menu options.

- **Classify and Manage Content.** Portal administrators set the policies for how content, content attributes and attribute values are managed. Additional features such as draft mode/preview, content routing and approval, item version control, check-in/check-out, automated publish and expiration dates, and automatic indexing support collaborative document creation, streamline content management tasks, and makes finding published items easy. A content-centric editing mode supports bulk operations on multiple documents.

- **Create Pixel Perfect User Interfaces.** Page designers can use page skins and HTML-based content layouts to develop highly dynamic user interfaces that use complex javascript and Flash animation. Portal templates, navigation pages, and smart links make it easy to build standard user interface features such as navigation bars and banners. In addition, portal pages can be configured to support in-place display of HTML file content.

- **Search Structured and Unstructured Content.** Advanced searching capabilities are directly integrated within the portal environment. Documents and content managed within Oracle Portal's repository are full text indexed. End users initiating ad hoc searches from supplied portlets can scope their search using content attributes. Search results include public and protected content, however only content that the user is authorized to access is returned. In addition, external data sources such as remote Oracle databases, IMAP mail servers, Web sites, and file systems are accessible via integration with Oracle UltraSearch.

- **Deploy to a Multilingual Community**. All text appearing in wizards, dialog boxes, messages, and help topics has been translated into 29 languages. Content owners can load multiple translations of their content items.

DELIVER ESSENTIAL APPLICATIONS AND CONTENT IN ONE INTERFACE

Oracle Application Server includes a complete set of services, all of which may be deployed via the portal environment as part of a complete solution. With Oracle Portal, enterprise class portals can be easily configured to:

- **Benefit from Built-in Business Intelligence**. Integration with Oracle Business Intelligence supports configuration of powerful business dashboards and key performance indicators on enterprise data. Worklist and workbook components can easily be exposed in your portal as portlets and support extensive end user customization including charting, reporting, drill down and pivot.

- **Integrate Enterprise Applications**. Data managed within enterprise applications including Oracle eBusiness Suite, PeopleSoft, JD Edwards, Siebel, and SAP can be surfaced to portal users in the form of a portlet. Integration options include out-of-the-box portlets, portlets defined within a browser-based wizard, and custom developed portlets built using Oracle JDeveloper, and Oracle Portlet Factory.

- **Surface and Interact with Business Processes.** Portal users can interact with and participate in running business processes via pre-defined worklist, task analysis, and reporting portlets. The processes themselves can be defined and managed within Oracle BPEL Process Manager or within Oracle Portal's native content routing and approval feature set.

- **Publish Data from External Systems.** Using Oracle Omniportlet, Oracle's browser-based portlet development tool, business users can easily connect to a variety of data sources including Web services, XML, SQL, web page and spreadsheet, define rules and filtering conditions, apply a visualization, and publish in the form of a portlet. Business users can also use the wizard driven Web Clipping Portlet to visually capture and section content and functionality from existing Web sites for presentation in portlets.

- **Enable Portlet to Portlet Communication.** Portlets can be connected together (using a parameter passing and event service) to produce simple composite applications that integrate data from disparate systems. By wiring portlets together, data from one data source can be used to drive the content and display of other portlets and pages.

- **Develop Custom Portlets with the Oracle Portal Developer Kit.** Using the Oracle Portal Developer Kit (PDK), developers can build custom portlets that surface data within custom applications. The PDK and portlet container support the development of portlets in Java that conform to JSR-168 standard and for making these portlets accessible via WSRP – the Web Services standard for portlet interoperability. In addition, a portlet wizard is available for

use with Oracle JDeveloper for accelerating the development and deployment of portlets.

- **Enable Wireless Support.** Pages may be configured to transform page structure and content into MobileXML for use by mobile and wireless devices. A distinct portal structure for wireless users can also be constructed using a complementary set of page design tools.

- **Select From the Growing Catalog of Partner Applications.** Oracle's Partner Network (OPN) includes over 120 partners who offer complementary applications or value added services for Oracle Portal customers. OPN's Solutions Catalog provides an easy to use interface for accessing information about each partner and over 400 available portlets. See **http://solutions.oracle.com** for additional information on the Oracle Partner Network and to access the Solutions Catalog.

ENSURE INTEROPERABILITY WITH AN OPEN ARCHITECTURE

Oracle Portal provides open and easy access to all types of information through adherence to open standards, integration capabilities with 3rd party applications, and utilization of partner technologies and services. With Oracle Portal, interoperability is made easy by:

- **Build on an Open Framework - Portlets and Provider Architecture.** Oracle Portal provides an extensible framework for integrating Web-based resources such as Web pages, applications, business intelligence reports, and syndicated content feeds, within standardized, reusable information components: portlets. The portal also includes additional services, including single sign-on, content classification, enterprise search, directory integration, and access control.

- **Protect Your Investments with a Standards Based Solution.** Oracle Portal supports integration of remote applications by supporting open Internet standards such as HTTP, XML, and SOAP. Oracle Portal supports consumption of portlets published via WSRP producers. In addition, you can incorporate Web Services and J2EE- based components like Java Server Pages (JSPs), Java Servlets, and Enterprise JavaBeans (EJBs) into the portal as portlets, without writing additional code.

- **Deploy on a Wide Variety of Platforms.** Oracle Application Server is available on Linux, Windows, and all of the most popular UNIX platforms, including Solaris, HP-UX, AIX, and Compaq Tru64.

- **Extend with a Complete set of APIs and Event Framework**. Oracle Portal includes a full set of security, content management, portal page, and search application programming interfaces (APIs) and an event framework that allows application-level integration and extension of Oracle Portal's content repository.

- **Federate Portals with Hosting Support.** Oracle Portal provides a cost-effective and manageable solution for hosting multiple organizations that provides all the benefits of a shared instance model - without compromising

organizational security. Oracle Portal also provides hosting support as a platform for Application Service Providers (ASPs).

SCALE TO MEET CHANGING PERFORMANCE REQUIREMENTS

Because the portal leverages the infrastructure of the application server, Oracle Portal scales to support user communities ranging from small departments to large corporate sites running on the Internet, intranets, and extranets. Oracle Portal's scalable architecture enables to you to:

- **Run on a High Performance Java Container.** The portal architecture includes a highly tuned, multi-threaded servlet engine to retrieve content from the portal repository, manage caching, assemble portal pages, and deliver completed pages - all in parallel. Because the parallel page engine is deployed on Oracle's J2EE Server - Oracle's highly scalable, award winning J2EE framework - performance is truly maximized, and you immediately benefit from the grid capabilities built into the platform.

- **Boost Performance With Patented Web Caching.** A fully integrated, intelligent cache enables the highest level of performance by minimizing unnecessary re-generation of portal pages and portlet content. Oracle Portal takes full advantage of Oracle Web Cache, Oracle's patented, in-memory caching technology.

- **Reduce Hardware Costs with Flexible Deployment**. By leveraging the grid capabilities of the Oracle Application Server, Oracle Portal can capitalize on the full range of available hardware resources. Portal administrators can choose the best platform for each portal component (Single Sign-On, portal repository, middle tier, etc.), thus optimizing both performance and total cost of ownership.

SIMPLIFY ADMINISTRATION WITH A FLEXIBLE MANAGEMENT MODEL

Oracle Portal's management features make it easy for a single administrator or a group of administrators, each with specific responsibilities, to:

- **Administer the Portal Through Managed Delegation.** The portal environment is administered and managed through built-in portlets on pre-defined administration pages. By applying privileges to page-level security, portal administration tasks can be delegated without compromising overall portal security.

- **Streamline User Management with Single Sign-On.** Reduce IT support costs and improve security with single sign-on (SSO) and centralized user provisioning while complying with Java standards. Centralized user provisioning ensures a single definition of users, roles, groups and access rights instead of a patchwork of security with unknown gaps. Third party LDAP directories can be synchronized with Oracle Internet Directory using built-in metadirectory capabilities.

- **Monitor Portal Services with Oracle Enterprise Manager (OEM).** Integration with Oracle Enterprise manager (OEM) allows an administrator to manage the services underlying a portal installation from a single administration console. Through the OEM user interface, an administrator can monitor data and events, maintain mid-tier and portal configuration files, and monitor the components used in the portal environment, including Oracle HTTP services, mod_PL/SQL services, Web Cache services, the servlet engine, the portal database, SSO, and portlet providers.

CONCLUSION

While many options and product solutions exist for customers seeking to build an enterprise portal solution, very few offer the right combination of features, technology and integration capabilities that are needed for a successful deployment. A careful examination of Oracle Portal will show that it incorporates a feature set that is well suited for portal deployments of all types, sizes, and architectures. In summary, no other portal product or platform provides a more productive, complete, or open portal solution. For additional information on Oracle Portal, see the Portal Center website at http://portalcenter.oracle.com or http://www.oracle.com/portal

ORACLE FUSION MIDDLEWARE

Oracle Portal Overview
June 2006
Author: Pascal Gibert, Bill Lankenau

Oracle Corporation
World Headquarters
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

Worldwide Inquiries:
Phone: +1.650.506.7000
Fax: +1.650.506.7200
oracle.com