

Unbreakable Content Management

An Oracle and Documentum Business White Paper
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Unbreakable Content Management with Oracle and Documentum

THE CONTENT MANAGEMENT CHALLENGE

Leveraging Content to Achieve Maximum Business Advantage

Today's businesses increasingly compete on their ability to collectively create, process, share and distribute content. Content has become both your company's public image and the way you do business. Content includes your company's press releases, product descriptions, data sheets, and repair manuals; it's your customers' financial information, health records, purchase history; it's the catalog of goods and services your company offers. And whether it's available on the Internet, company intranets, through B2B or enterprise portals, or in marketing brochures, content can create new opportunities and enhance (or adversely affect) customer loyalty and employee productivity.

Content also speeds the exchange of goods, matches buyers and sellers, and determines customer satisfaction. It's the basis for a new business model in which the creation, approval, and release of content must be as predictable and controllable as any manufacturing process. For all these reasons, the content you publish must be accurate and trusted, and made available across the extended enterprise. And the systems you employ to deliver trusted content must address these questions:

- Is your content integrated and aligned with your business processes, enabling all users within and beyond the enterprise to contribute and access trusted content?
- Has your company learned to manage the growing volumes of content throughout your organization and to bring it online rapidly and efficiently?
- Does your company derive maximum value from your Web site and portals by serving up dynamic, multilingual content tailored to individual users anywhere in the world?
- In short, can you ensure that the right piece of content surfaces at the right time – and that it's delivered consistently to the right person?

Enterprise Content Management

To address these many challenges, businesses must rely on a complete and integrated Enterprise Content Management (ECM) solution.

- Such a solution must let technical and non-technical users alike easily create, share, and access content using a browser or their familiar productivity tools.
- It must seamlessly integrate with an Enterprise Portal that gives every business user personalized yet secure access to all of their company's Web-based resources.
- It must offer full support for end-user maintained Web sites and eliminate 'Webmaster' bottlenecks.
- It must 'add intelligence' to content with rich metadata, and offer support for complex content management workflows and processes.
- It must let content-rich applications run on a scalable, reliable and secure J2EE compliant application server.

DOCUMENTUM & ORACLE: UNBREAKABLE CONTENT MANAGEMENT

Oracle and Documentum have joined forces to bring to market an advanced Enterprise Content Management solution. Oracle brings its J2EE application server and portal expertise while Documentum contributes its proven content management leadership. The joint solution spans development, deployment and management of advanced content management applications.

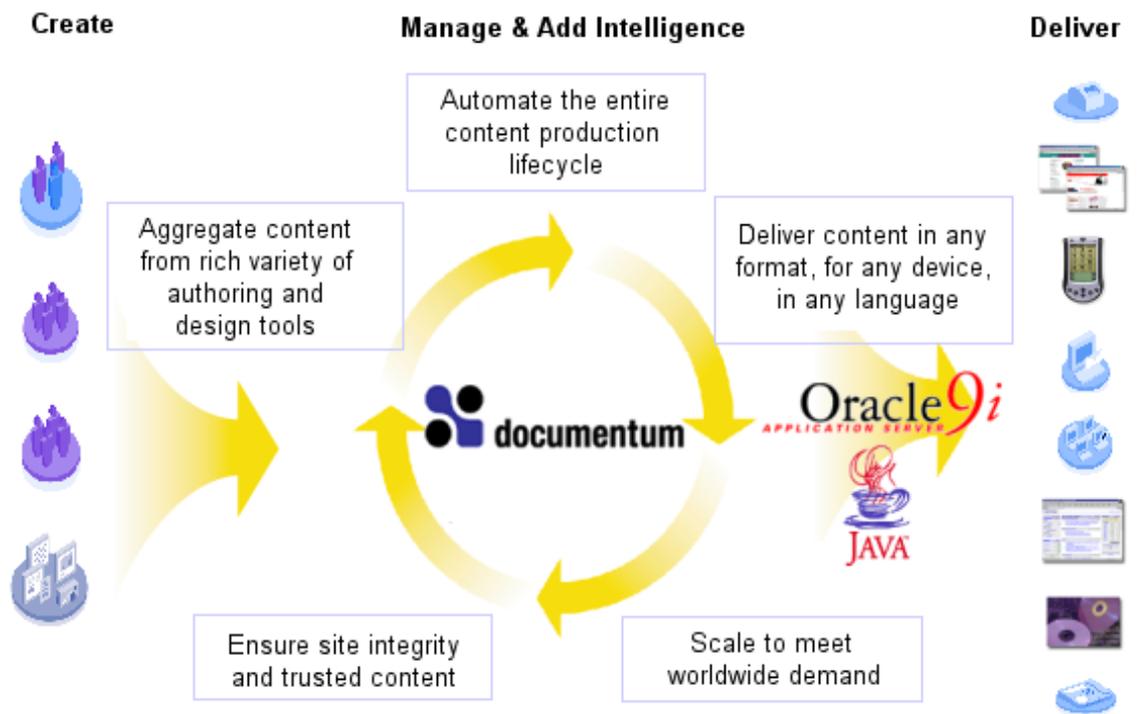


Figure 1: Create, Manage, Add Intelligence and Deliver Content with Oracle9i/AS and Documentum ECM

The joint solution:

- Allows end-users to conveniently author, share, and publish content from their company portal powered by Oracle9i Application Server.
- Lets businesses rapidly develop powerful J2EE-based Web applications that leverage the advanced content management features of the Documentum ECM platform.
- Lets businesses deploy these applications on Oracle9i Application Server's scalable, secure and high performance Containers for J2EE

“(Documentum) provides an open, scalable, and reliable platform for building and deploying business-to-business solutions, powering collaborative portals, meeting regulatory requirements, and enabling dynamic, global Web sites.”

Documentum has the strong foundations of its solutions and its presence in the market to build on to ensure that it flourishes while competitors may wither and disappear.”

– Butler Group

DOCUMENTUM ECM PLATFORM

The Documentum ECM platform enables content creation, content management and the application of “content intelligence”, and together with Oracle9i Application Server, provides for dynamic, personalized content delivery to Web applications.

- **Content Creation.** Documentum ECM integrates with a rich variety of content creation and authoring tools and applications and includes the Documentum Web Publisher editor for template-based authoring by non-technical business contributors. Web Publisher is an easy-to-use, browser-based interface for Web site content creation and editing that empowers business users and eliminates the bottlenecks associated with Web content publishing.
- **Content Management/Add Intelligence.** When content is created and stored in the Documentum repository, it is sent through collaboration and approval workflows where intelligence is added by tagging content with metadata. Metadata can be added ad hoc or automatically.
- **Dynamic Content Delivery.** Content (and associated metadata) that is approved and ready to be published to the Web is then staged and automatically exported to a cached repository for high-speed access by applications and Web sites running on Oracle9i Application Server.

Industry Leading Content Management Features

Security

Documentum takes content integrity seriously and protects it through a combination of user- and role-based security, as well as extended permissions that control how content is accessed and modified. Documentum supports LDAP, along with SSL, digital certificates, and electronic signatures for approving and routing content and meeting regulatory requirements.

Business Continuity

Documentum provides a full set of capabilities for ensuring business continuity of mission-critical content applications. The capabilities of the Documentum ECM platform include backup and recovery, redundancy and fail over, and high availability (clustering).

Open Standards

Strict adherence to open standards allows seamless integration with existing e-business infrastructure, enterprise systems, authoring applications, and development tools. Documentum supports market-leading development tools and standards, such as XML, XSL, FTP, WebDAV, DOM, COM, SAX2, DTD, VB, ODMA, WfMC, J2EE, Java, HTML, C, and C++.

Business Process Automation

Documentum manages content over the entire lifecycle from content creation, testing, and staging, to approval, deployment, and archiving. Easy-to-use, graphical lifecycle and workflow services also promote content integrity and security with audit trails and sign-off capabilities.

Content Intelligence

Documentum provides powerful content tagging and categorization features that improve the relevance of delivered content. These features improve accuracy and consistency by automatically analyzing content for concepts and keywords, storing the results as tags, and organizing content in logical taxonomy structures.

Globalization

With Documentum, you can create and deploy content across geographic boundaries to keep customers, partners, and employees up-to-date with timely, accurate content delivered in native languages. Primary languages that are supported out-of-the-box include English, German, French, Japanese, Korean, Italian, and Spanish.

Rich Media Management

Documentum is the only truly “media aware” content management platform available, providing a single solution for managing all forms of unstructured content and rich media such as images, audio and video. Documentum includes specialized rich media capabilities such as intelligent media analysis, thumbnailing, image manipulations, Powerpoint assembly and audio/video streaming. These features improve efficiencies, decrease authoring and publishing time, and eliminate the time it takes to recreate media and brand assets.

Multi-Channel Delivery

Documentum leverages XML for content re-use, transformation and multi-channel delivery to any device, including cell phones, Web, print, CD, and wireless devices. By creating XML content once and leveraging it everywhere, you ensure message consistency and relevance across all channels of communication.

“Gartner has seen great potential around the convergence of electronic document management (EDM), web content management (WCM), digital asset management (DAM) and publishing technologies. We believe there’s great value and synergy between these technologies for the enterprise,” said Mark Gilbert, research director, Gartner Group. Documentum is the first company to have executed towards such a convergence.”
- (Gartner 2002)

Unlimited Content Formats

Out-of-the-box, Documentum supports more than 50 formats that can be extended, as needed, to support additional content types. For certain formats where unique services are needed, such as XML, Documentum provides specialized functionality.

Integration With Best-of-Breed Tools

Documentum integrates with popular application servers, portals, and delivery networks. In addition, business users can author content in familiar applications such as Microsoft Word, PowerPoint, Excel, Photoshop, or Quark. Documentum also supports Macromedia Dreamweaver, many ODMA, FTP, and WebDAV applications and CAD packages.

ORACLE9i APPLICATION SERVER – SIMPLIFY YOUR MIDDLEWARE

Content-rich J2EE applications and user-maintained Web sites and portals powered by the Documentum ECM platform must run on a highly scalable, secure, and high performance J2EE application server. The J2EE application server should be lightweight and enable high application throughput so as to run on minimal hardware. It should comply with the latest J2EE specification so as to simplify and accelerate development. Also, it should offer high availability features that provide application, hardware, and system failure resilience to the content management application. Finally, it should offer complete management features that simplify the day-to-day administration of the content management application.

Oracle9i Application Server (Oracle9iAS) meets all of these requirements and is a powerful J2EE application server on which to deploy Documentum powered Web applications.

Oracle9i AS offers the industry's fastest, most complete and integrated J2EE-certified application server. Oracle9iAS has revolutionized the fast-growing application server market by being first to integrate all the middleware functionality required to run Java applications, deploy enterprise portals, integrate supply chains and applications (B2B and EAI), support mobile users, and extract business intelligence – in a single product.

Oracle9i Application Server:

- Provides an integrated, standards-based platform to deploy all your J2EE, Web Services and Internet applications.
- Allows you to aggregate all your disparate Web sites into personalized, secure portal pages for all your users.
- Turbo-charges your Web site, portal or e-business application so you can support more users, with richer, personalized content.
- Allows you to make your Web sites and applications accessible from wireless devices and standard phones through voice interaction.
- Enables you to extract business intelligence and personalize your Web site.

"By adding more and more features to Oracle9iAS, Oracle can now offer a highly integrated solution that potentially saves IT managers from the headaches of struggling to get the low-value baseline infrastructure components to talk to each other." - IDC

- Provides productive tools to integrate your business processes, applications and data.
- Allows you to manage and secure your entire Web infrastructure within a single, comprehensive management framework.

Figure 2: Leverage the # 1 Content Management Platform, Documentum, in Your J2EE Applications



Highest Availability and Security

Oracle9i Application Server supports high availability features such as clustering, transparent failover, and load balancing that ensure content-rich applications stay up and running at all times. Extensive support for standards-based security, including encryption, authentication, and authorization, enable you to protect sensitive data as it travels over the network.

Lowest Management Cost

Oracle9i Application Server includes proven system management features to lower the cost and complexity of running your content-rich applications. Entirely browser-based, Oracle Enterprise Manager for Oracle9i Application Server allows you to manage data, applications, and users from a single comprehensive framework.

**“Over the long term Oracle is going to be tough to beat in the portal market, and the long term draws near.” – Hurwitz
TrendWatch**

PORTAL FEATURES OF ORACLE9i APPLICATION SERVER

Corporate employees rely on an increasingly vast set of Web resources and applications to do their job. To simplify their online workday, employees need an ‘Enterprise Portal’ that provides a central point of access into their Intranet.

Oracle9i Application Server offers comprehensive features to rapidly deploy such ‘Enterprise Portals’. Oracle9i Application Server lets you:

- Expose Web applications as modular Web page components (or ‘portlets’) that are dynamically assembled into full Web pages – letting users access a wide array of Web resources from a single page.
- Choose from a large catalog of over 250 pre-built portlets, to give you the fastest ‘time to portal’.
- Customize portals by categories of users, and let individual users customize their own portal.
- Distribute rich customized business intelligence reports to every employee, and empower decision makers with powerful ad-hoc querying tools.

With over 2,500 customers using its portal features, Oracle9i Application Server is the # 1 Portal. The portal features of Oracle9i Application Server are:

- Productive – They are designed to maximize the productivity of the IT professionals and business users who create and evolve the portal. This is accomplished through extensive use of development wizards that bring down hand coding requirements.
- Complete – They leverage core functionality of the Oracle9i Application Server including access to data sources, application integration, business intelligence and ad-hoc reporting, and multi-channel delivery to wireless devices and standard phones through voice recognition.
- Open – They are built on open Internet standards: HTTP, HTML, XML, SOAP, J2EE, WebDAV, etc.

THE ORACLE AND DOCUMENTUM SOLUTION

Oracle9i Application Server and Documentum have been integrated to enable the rapid deployment of Web applications and portals that run on Oracle9i Application Server and access the full power of the Documentum ECM platform.

- Documentum Web Development Kit (WDK) offers high-level J2EE APIs that allow you to rapidly develop J2EE based Web applications that leverage the full functionality of Documentum
- Documentum JDBC Services offer a fast way to establish connectivity between applications running on Oracle9iAS and content and metadata stored by Documentum
- Documentum Content Services for Oracle9i Application Server include a set of content management portlets that allow end-users to conveniently author, share,

and publish content from their company portal powered by Oracle9i Application Server.

DOCUMENTUM WEB DEVELOPMENT KIT (WDK)

Documentum Web Development Kit (WDK) gives Web application developers a powerful J2EE framework for the rapid development of content-rich applications. Thanks to Documentum Web Development Kit, you may deploy Web applications that fully leverage the leading content management platform, Documentum, and run alongside all your business applications on a highly scalable, secure, and high performance J2EE application server.

Documentum Web Development Kit:

- Offers more than 170 pre-built, JSP and Servlet based components that developers can utilize to provide out-of-the-box content management functionality to Web applications.
- Supports J2EE standards to reduce development, testing and maintenance costs, and expedite application time to market.
- Takes advantage of native XML capabilities within Documentum, including content chunking, link and component management.
- Integrates seamlessly with Oracle9i Application Server. This includes full support for Oracle9i Application Server's EJB, JSP, Servlet, Oracle Business Components for Java, Oracle HTTP Server powered by Apache, and Oracle9iAS Object Caching Service for Java.

Documentum JDBC Services

To further simplify the development of powerful Web based content management applications, Documentum offers powerful JDBC Services that enable fast and flexible access to the Documentum repository from J2EE applications. JDBC Services let applications perform fast queries in the Documentum repository, access the repository's metadata, as well as retrieve content and XML files from the repository. JDBC Services simplify Java-based applications that extract information from back-office systems and integrate it with other content at runtime.

Documentum Content Services for Oracle9i Application Server

One of the key requirements of an Enterprise Portal is to let business users easily contribute, share, and publish content. Documentum has created a broad set of out-of-the-box portlets for Oracle9i Application Server. These portlets allow businesses to quickly transform their Enterprise portals into dynamic hubs for content-driven business processes such as real-time contract negotiation, supply chain management, and global project management.

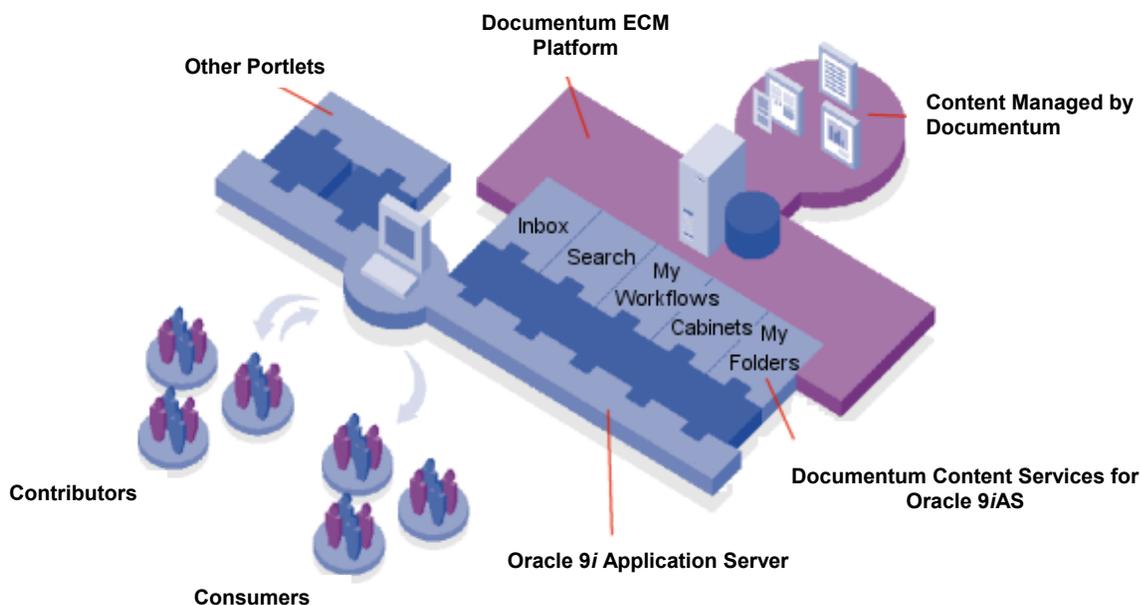


Figure 3: Let Users Share & Contribute Content from their Enterprise Portal

Portal end-users can use Documentum Content Services for Oracle 9i Application Server to do these things and more through the portal:

- Publish new content or update current content
- Locate and view existing content
- Perform sophisticated searches based on full-text indexing or attributes (metadata)
- Monitor content for revisions
- Participate in business processes and workflows

Documentum Content Services for Oracle9iAS include the following portlets:

- **Cabinets:** lets users check in/check out, contribute and version content, depending on permissions.

- **Inbox:** allows users to participate in workflow tasks and to view notifications. A workflow describes the business process that moves a decision step from person to person and defines the activities the recipient must perform. Workflow items appear in the Inbox when the user has been directed to perform an action on a set of content objects. The Inbox also contains notification messages sent by automated processes or based on user preferences.



- **My Documents:** provides a location for users to access critical business content. It includes a list of objects recently created, revised, or checked out, indicates object format and locked/checked out status, and enables users to contribute new content

- **My Folders:** establishes a working folder and displays content objects within that folder. Multiple “MyFolders” can be set up, each pointing to different areas of interest to the portal end-user; for example, one folder might refer to “Marketing Projects” while another might refer to “Expense Reports.”



- **My Subscriptions:** lists content and folders that a user wishes to track -- items in which they have a recurring interest -- over a selectable period of time. End users use this to access relevant information gathered in one location and monitor it for changes or revisions.
- **My Workarea:** lists the content objects that a user has checked out, and allows the user to view or edit the content
- **My Workflows:** displays a list of active workflows that the user has initiated and actions that can be taken on them. Users can quickly identify business processes that require their attention.

- **Search:** helps users quickly locate content with a sophisticated, single-field search combining full-text and content metadata (such as author, date, and format).

SUMMARY

With a content management solution powered by Oracle9iAS and Documentum, your content works for you. Business users within and beyond the enterprise gain the ability to contribute content through an intuitive, browser-based interface. Powerful repositories easily manage all forms of structured and unstructured content, pushing time-critical information to the Web faster and more efficiently. The full potential of your most precious asset – your content – is unleashed for sophisticated e-business.

ABOUT ORACLE

Oracle is the world's largest enterprise software company. For more information about Oracle, visit our Web site at www.oracle.com or call +1.650.506.7000

ABOUT DOCUMENTUM

Documentum provides enterprise content management software solutions to more than 1,400 of the largest businesses in the world. The company brings intelligence and automation to the creation, management, personalization, and distribution of vast quantities and types of content—documents, Web pages, XML files, rich media—in one common content platform and repository. The Documentum ECM platform makes it possible for companies to distribute content globally across all internal and external systems, applications, and user communities— all while maintaining brand and user experience. We put content to work by delivering the right content to the right user at the right time.

For more information about Documentum, visit www.documentum.com or call +1.925.600.6800.



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