

INFORMATION EMPOWERS

Build a Better Foundation for Business

Oracle Fusion Middleware





ORACLE IS THE INFORMATION COMPANY

Rethink How You Think About Middleware

Middleware. It must support your business, your people, your current IT landscape, and your vision for the future. Only Oracle Fusion Middleware delivers it all. Can you move ahead without it?

Your business is changing fast. Your leaders need to better manage performance in every area. Your workers need to increase their productivity and more easily access information to do their jobs. You need to preserve investments in existing systems and make choices that fit your business requirements now and in the future. Meanwhile, as the pace of business increases, so do the demands, complexity, and pressures you face.

However, rethinking your IT strategy and retooling your applications and infrastructure isn't an option. You need more from your business today. You need confidence in the scalability and reliability of the solutions you build and their ability to evolve over time. And you can't be worried about your partner being around next year—or your ability to find the right people to make it all work.

Middleware is rapidly becoming the foundation upon which businesses are built. The question is, whom do you trust to provide it? Your best choice is Oracle—with Oracle Fusion Middleware. We'd like to show you why.

Hot-pluggable is about more than just standards and interoperability—it means you can use Oracle Fusion Middleware with your existing application and technology investments from other vendors.



Oracle's Industry-Leading Products

Oracle Fusion Middleware products have received industry accolades and are acknowledged leaders in many middleware categories, including these:

- Application Infrastructure
- Application Server Platforms
- Business Intelligence Platforms
- Business Process Analysis Tools
- Enterprise Content Management
- Horizontal Portal Products
- SOA Platforms
- User Provisioning
- Web Access Management
- Web Platforms

The Foundation of Business Is Changing

Discrete applications—functionally complete and self-contained—continue to be an integral part of your business, supporting your finance organization, boosting sales by helping your representatives sell more effectively, driving your supply chain, and strengthening your customer relationships.

More and more, however, the ways in which you use, adapt, secure, and manage applications require middleware. The role middleware plays is becoming increasingly important to your business results. Your business users need information with much wider context, insight that comes from many more sources, and ways to interact more effectively within business processes and with one another. Today's organizations need cross-application business processes that let you innovate more quickly and provide new and better services to your customers. Every day, increasing customer demands, the threat of litigation and fines, and cost controls raise the stakes for your business—and for IT.

With a place at the executive table, CIOs can no longer focus only on tools, systems, and architecture. Now, business initiatives—differentiation, mitigating risk and cost savings, identifying and taking advantage of opportunities—don't just affect IT strategy, they also define the technology foundation, the middleware, you choose.

Oracle Fusion Middleware is the industry's most comprehensive and integrated middleware offering. Providing the business solutions you need when you need them, Oracle Fusion Middleware products are designed to work together and be hot-pluggable with your existing application and technology investments.

Fact: One of the earliest references to the term *middleware* was during a conference sponsored by the NATO Science Committee in Garmisch, Germany, in October 1968.

Fact: More than 75 percent of respondents to an Economist Intelligence Unit study said that one of the main advantages of flexibility is the ability to respond quickly to new business opportunities.

“This is the most comprehensive product on the market for developing and securing most SOAs.”

Oracle SOA Suite Product Review, *InfoWorld*, January 22, 2007



Oracle Fusion Middleware can help your organization

- Increase capacity for growth and change
- Improve business insight and manage performance
- Mitigate risk and secure corporate information
- Boost productivity and empower users

Take a closer look at the following four key challenges businesses face and see why the most successful organizations around the world are choosing Oracle Fusion Middleware solutions to address them.

Challenge No. 1: Keeping Up with Growth and Change

All lines of business are under pressure to change today. It's no surprise that sales and service organizations lead the charge as they try to identify better ways to strengthen and enhance customer relationships. In the quest for efficiency and differentiation, however, even more established lines of business such as HR, finance, and manufacturing are reevaluating how they do business.

What do these changes mean for IT? Growth and business change increase IT system complexity and alter business processes dramatically. A merger or acquisition, for example, can bring change practically overnight. Yet disruption to business operations is not an option. How do you prepare for the future and avoid expensive delays, downtime, or decreases in your service levels?

Boost Efficiency with Service-Oriented Architecture

The need for more-flexible and responsive information systems is driving companies to adopt service-oriented architecture (SOA) as a foundation for their software development initiatives. SOA frameworks use Web services and other open standards to define reusable business functions—all with minimal custom code. This makes it easier to accommodate business changes and to share information with business partners.

Business Process Execution Language (BPEL) provides a standards-based, repeatable way for IT to orchestrate business processes. BPEL, in concert with other standards, provides the cornerstone for SOA development and deployment.

Fact: In the Goldman Sachs 2007 IT Spending Survey, Fortune 1000 companies ranked Oracle as the most important service-oriented architecture (SOA) partner among all the top-tier software and middleware vendors. (Goldman Sachs, *IT Spending Survey: Mapping 2007*, December 5, 2006)



Middleware and the Top IT Challenge

Regardless of your industry or IT landscape, delivering “IT-enabled business innovation”¹ remains the biggest CIO challenge. Successful CIOs are working with Oracle Fusion Middleware to get the job done. More than 50,000 organizations around the world rely on Oracle Fusion Middleware to reach their goals while extending the life and effectiveness of their existing investments—and that number is increasing every day.

¹ “State of the CIO Survey,” *CIO Magazine*, 2006. *CIO Magazine* surveyed nearly 600 IT executives to assess the business climate and measure the CIO agenda for 2007.

Build on Existing Investments with Service-Oriented Architecture

Service-oriented architecture (SOA) has arrived. In fact, even the most established application suites, such as enterprise resource planning (ERP), customer relationship management (CRM), and supply chain management, are incorporating SOA. Based on connecting business processes and exchanging information through loosely coupled software components, SOA-based operations help accelerate development cycles, lower costs, and quicken your response to changing market conditions. But without the right foundation, getting to SOA can be complicated.

Oracle SOA Suite delivers the most comprehensive foundation for SOA to give you what you need—when you need it. Independently evaluated and tested to be easy to use, Oracle SOA Suite provides intuitive development, security, process orchestration, management, and security capabilities for SOA. From systems and process-level integration to business rules and business-level monitoring, Oracle SOA Suite is the leading platform for SOA—whether you’re linking CRM to ERP in order to service-enable the order-to-cash process or creating composite applications.

Manage Processes at the Speed of Business

To align business realities with IT execution and give your company control over its entire business process lifecycle, consider Oracle’s business process management solution, which combines Oracle SOA Suite and Oracle Business Process Analysis Suite. The open, standards-based Oracle Fusion Middleware components let you model, execute, manage, and optimize your business process across applications. Business user-friendly and best in its class, Oracle Business Process Analysis Suite documents and enables the simulation of processes at the business level. IT gets a clear picture of business-level changes, ensuring swift and accurate implementation that reduces costs of process implementation even as it makes your business more efficient.



Oracle's reliance on standards helps protect and extend your technology investments, reducing the need for additional capital spending. The ability to reuse standardized skill sets also reduces the ongoing cost of recruiting, staffing, and training.

Challenge No. 2: Delivering a BI and Performance Management Strategy

With Oracle SOA Suite, Oracle Business Process Analysis Suite, and your existing applications, you gain an agile and flexible platform that allows your business to keep up with growth and change. But what about all the decisions that must be made and the people who must make them?

A major shift from a task-based workforce to a decision-based workforce is taking place in business today. More people are making decisions, more information is required to make them, and the speed at which they must be made is increasing. Yet most workers are trapped in organizational silos, so getting the right information to do their jobs well is difficult, if not impossible. You know the drill: More IT resources are required to meet mounting requests for custom reporting and analysis, while fewer resources and time are available for innovation and more-strategic work.

In short, your IT organization is being pressed to deliver a 360-degree view of the business, requiring communication between business intelligence software and many other sources of information, but you face many barriers to reaching this goal. Oracle can help you bring historical, real-time, and predictive decision-making capabilities to those who need them.

The New Middleware

The definition and scope of middleware has evolved significantly. Once focused on development tools, integration tasks, and runtime engines for applications, middleware now includes portals, business intelligence tools and applications, content management, identity management, and systems management. While these technologies were once viewed as discrete technologies for developers in IT, today sales, service, manufacturing, finance, and HR organizations are increasingly relying on middleware to extend enterprise resource planning, customer relationship management, supply chain, and other application functionality to workers, partners, and customers.

Fact: Companies that use an ad hoc approach to compliance may spend between six and ten times more than companies that take a proactive approach to managing all their regulatory requirements.



Who's Using Oracle Fusion Middleware?

- 90 of the Fortune 100
- 29 of the Dow Jones 30
- 88 of the Fortune Global 100
- 338 of the Fortune 500
- 376 of the Fortune Global 500
- 342 of the S&P 500

Enterprisewide Analysis for True Business Insight

Workers need comprehensive insight into strategic and operational information. This insight must be pervasive both in terms of the people who can access and use it (from senior management to front-line workers) and in terms of the data sources accessed to deliver it. Oracle Business Intelligence Suite Enterprise Edition Plus offers you a unified foundation for building enterprise business intelligence (BI) solutions using data from heterogeneous sources, including Oracle and non-Oracle systems. Highly popular user features such as dashboards and reporting, alerts and workflows, real-time decision-making capabilities, and mobile delivery accelerate the speed of decisions.

Oracle also offers complementary BI solutions that benefit both business and IT staff in any organization, regardless of size. Oracle Data Integrator's unique extract, load, transform capabilities speed the delivery and maintain the integrity of information from any application or data source. And Oracle BI Publisher's reporting, formatting, and publishing options can be used with familiar, business-friendly desktop tools—empowering business users and freeing up IT staff for more-strategic assignments.

Prebuilt Business Intelligence

Time-to-solution is a recurring BI challenge. Your business needs information now, and IT must provide insight across both historical and real-time information—for example, the last three quarters' sales results *and* up-to-date sales pipeline information. Prebuilt to deliver on best-practice BI requirements for the line of business, Oracle Business Intelligence applications are designed for core strategic and operational functions such as HR, supply chain, and call center. They give your IT organization a significant time-to-solution advantage in delivering information from a range of datasources, including Oracle E-Business Suite, Oracle's PeopleSoft Enterprise, Oracle's Siebel Customer Relationship Management, and other systems such as SAP.



Fact: A large financial services organization could create up to 300 million instant messages per year and might have to retain those messages for up to three years.

Pervasive business intelligence provides role-based insight across an organization—from front-line employees to senior management—from a diverse number of information sources.

Real-Time Visibility to Monitor Business Activities

Constant visibility is critical to certain industries and job functions—especially when action may be required at a moment's notice. Oracle Business Activity Monitoring delivers real-time visibility into any business or technical event anywhere in your processes and organizations. Built for business users, this software includes rich visualizations and interactive online dashboards so workers can monitor and take action from within any process.

Challenge No. 3: Mitigate Risks and Comply with Regulations

The increasing demand for IT flexibility and information availability to support decision-making can come at a price, especially when information isn't managed proactively. How do you mitigate the daily risks, which can range from system downtime to unauthorized access?

Bridging business and IT—and the challenges of both—the CIO often comes under scrutiny when systems go down, IT projects overrun budget projections, or compliance reporting and deadlines aren't met. Board-level discussions heat up when customers, revenue, and opportunities are lost. Possible legal actions and costly litigation are equally serious repercussions, but CIOs *can* meet these challenges. Having a clear view of business and IT processes as well as system capabilities is the first step to mitigating risk. Equally important for reports to internal auditors and regulatory agencies, you must control access and content, including tasks, actions, decisions, documents, and other forms of communications—and you must retain documents and reports per regulations, country to country.

Take Business Information One Step Further

For enterprises seeking to better leverage their information, business activity monitoring and business intelligence aren't either/or propositions. Business activity monitoring can provide real-time, actionable information that makes operations-level workers more productive and strategic decisions more effective.

Implementing a single identity management strategy across the business can help large organizations mitigate security risks and ease compliance pains. This same strategy can benefit growth and expansion strategies for midsize firms, as they add more applications and users on a daily basis.



The Content Management Challenge

- 80 percent of information is unstructured, residing in business documents, e-mails, and multimedia files
- 42 percent of transactions are still paper-based
- 79 percent of companies have more than two content repositories
- 25 percent of companies have more than 15 content repositories

How do you control and comply? You can invest more resources and money in the problem, but this can increase cost and complexity for both IT and users. Proactive identification and management of all risk factors can mean the difference between business success and finger-pointing in the executive suite.

A Comprehensive Security Foundation

Although applications have their own access and security policies, a comprehensive plan for security and compliance is critical to reducing risk. Oracle Identity Management, the security backbone of Oracle Fusion Middleware, provides a comprehensive range of security capabilities that balance IT security with user effectiveness and trust—across customers, employees, and partners.

You can provide single-sign-on access to relevant applications, ranging from ERP and custom applications to CRM and even .NET applications, giving users a single way to access the systems they need. For both IT and HR managers, a single security framework cuts down on IT help desk calls and accelerates the on- and off-boarding process as workers join, move within, and leave an organization.

For varied compliance needs ranging from “who has access to what” reports to segregation of duties, Oracle Identity and Access Management Suite provides comprehensive capabilities to establish, enforce, and report on compliance requirements. In addition to hot-pluggable interoperability with your existing database, applications, and middleware investments, it maximizes Oracle Database security features and leverages new database products such as Oracle Audit Vault, which helps organizations address regulatory requirements and insider threat concerns, and Oracle Database Vault, which enforces preventive controls to help meet compliance requirements by restricting powerful users, such as database administrators, from unauthorized access to specific information.

Fact: Using identity management, an organization can save an average of US\$420 per user, per year by reducing the volume and frequency of IT help desk calls.

“40 percent of the IT professionals in a recent *InformationWeek* Research survey called Oracle their preferred business intelligence vendor.”

InformationWeek, March 17, 2007



Universal Records Management and Document Security

In addition to managing transactions within human capital management, financial management, and CRM systems, IT must also manage an explosion of e-mail, memos, instant messages, and other digital content that may be requested for an audit or discovery proceedings. Oracle Content Management, a component of Oracle Fusion Middleware, lets you apply your records management policies and practices to content across file and content management systems, and even allows you to secure and track sensitive documents and e-mail beyond your own network.

Uptime, Management, and Project Management

In addition to security and compliance concerns, growing too fast without a scalability plan creates points of risk everywhere in the business—and responsibility for IT budget overruns, system outages, and IT project delays lies at the door of IT.

Oracle Fusion Middleware, in conjunction with Oracle Enterprise Manager, delivers scalability and reliability for mission-critical applications and helps to proactively manage people and IT resources. The only management software that provides a complete management and monitoring solution for your business applications, Oracle Enterprise Manager uses a unique top-down approach that gives you better business results, lowers the cost of data center management, and helps you stay competitive. It features wide-ranging management functionality for your applications, deep diagnostics and out-of-the-box remediation across applications, and built-in grid automation capabilities that let IT respond proactively and implement new services quickly. And because all components of Oracle Fusion Middleware are preintegrated, project management teams spend less time installing and configuring discrete middleware products. The bottom line is that Oracle Fusion Middleware helps your business thrive and stay competitive.

Fact: Time spent looking for information can reduce worker productivity by 10 to 20 percent.



Challenge No. 4: Increase Productivity and Process Efficiency

When it comes to daily worker, customer, and partner interactions, the decisions made by CIOs have a huge impact on productivity. The right technology can significantly improve how people work and interact with your organization. Even with the leading ERP and CRM solutions, users have to log in and out of multiple applications, visit numerous internal and external Web sites, switch back and forth to and from e-mail, leave voice mail for coworkers in other time zones, and submit paper forms and documents in order to get their work done. The internal result: lost productivity. The external result is lost opportunity. How does Oracle help you meet this challenge?

Empowerment: Bringing Web 2.0 to the Enterprise

Providing a central place for workers, customers, and partners to find information is critical. Earlier portals accomplished this task on a departmental level—Oracle Fusion Middleware offers you these same time-saving functions with Oracle WebCenter.

In addition, Oracle WebCenter takes the principle of a portal and applies the latest Web 2.0 technologies such as instant messaging, group spaces, wikis, and blogs for department, project, and even cross-enterprise collaboration. You gain a standards-based, SOA-enabled Web interface from which users can access a wide range of enterprise services, content, business intelligence, and productivity tools.



Web 2.0 technologies such as blogs, RSS feeds, wikis, and instant messaging are now being used by businesses to enhance collaboration within and across organizations.

Workers gain one-click access to information and business processes, as well as a cause-effect context for making decisions and taking action. For example, a regional sales manager can see the performance of a promotion, view the group space and campaign-specific wiki to get details on that promotion, review Excel or PDF reports from previous promotions, view sales pipeline targets in CRM, see that the local field marketing person is online right now, and place a Voice over IP call to discuss plans to optimize future campaigns.

Oracle WebCenter opportunities are not limited to internal use. The same capabilities can be applied to create external customer communities and accelerate collaborative selling with your channel partners.

Turning Content into Productivity

Given the importance of the Web in today's business, building Web sites and keeping them current—while providing a consistent look and message—is vital. On any given day, new developments, updates, and global distribution can overwhelm a Web team. Oracle Web Content Management provides industry-leading features that enable the rapid development of new internal or external sites, empower content owners to update sites, and quickly translate Web site languages.

For organizations and government agencies seeking to harness the explosion of digital content and streamline manual, paper-based documents and reports, Oracle Content Management features leading capabilities to image-enable enterprise applications, such as Oracle E-Business Suite, PeopleSoft Enterprise, Oracle's JD Edwards EnterpriseOne, and even SAP. And Oracle offers the only integrated system to categorize, share, and create renditions of digital assets.

Oracle Fusion Middleware empowers business users by delivering precise, context-specific information to the right place at the right time in the right format—so employees can make decisions, understand correlating events, and take immediate action.



Middleware and Oracle Applications Unlimited

Oracle Applications Unlimited enables applications customers to continue running their businesses with their current application investments. Oracle Fusion Middleware enables customers running Oracle Applications—including Oracle E-Business Suite, PeopleSoft, Siebel, and JD Edwards applications—to extend the business functionality of their current release and develop skill sets and pilot projects using Oracle Fusion technologies today.

The Oracle Application Difference

You gain a unique advantage when you choose Oracle. Oracle's position as the leader in middleware and the provider of Oracle Applications—the most complete, innovative, and fastest-growing enterprise application offerings in the market—gives you access to a broad portfolio of middleware business solutions that are preintegrated with one another and certified with your CRM, ERP, or industry applications. And by selecting and developing skill-sets around Oracle Fusion Middleware today, you take the first steps toward working with the foundation of Oracle Fusion Applications.

Working with Oracle Fusion Middleware is a strategy that makes sense whether you're continuing with an existing investment in Oracle E-Business Suite, PeopleSoft, JD Edwards, or other Oracle applications under Oracle Applications Unlimited—or are looking ahead to Oracle Fusion Applications. Not only do you gain

tremendous business value and strategic advantage today, you protect your future technology investments. You'll gain faster time-to-solution and encounter fewer risks for individual projects, now and over time.

We urge you to join the successful companies around the globe that are using Oracle Fusion Middleware today. Start increasing your capacity for growth and change. Gain deeper insight into your business operations. Improve performance, mitigate risk, and drive compliance. And securely connect your customers, partners, and workers for greater productivity. Oracle Fusion Middleware—it's the right choice to move your business ahead.

CONTACT US

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