ORACLE FUSION MIDDLEWARE

Whether your business focus is on products, services, people or government, middleware application infrastructure is a strategic imperative. This infrastructure is the key to maximizing the processes and applications that drive your business and enable you to innovate at the worker, team, department or organization-level. Oracle Fusion Middleware delivers a foundation for both business and IT innovation across social, mobile, and Cloud technologies. This foundation empowers you to differentiate and succeed throughout dynamic and unpredictable market conditions, while maintaining efficiencies and controlling costs.

Unique Design Principles for Your Advantage

Leading private and public sector organizations benefit from Oracle Fusion Middleware’s unique design advantage. This advantage is based on four key principles that extend across all products in the #1 middleware family:

- **Complete** – Work with a single, strategic partner for all middleware requirements
- **Integrated** – Increase confidence and lower costs through certifications and integrations with Oracle Applications, Oracle Database, Oracle Hardware and other Oracle products
- **Open** – Enhance your existing infrastructure and applications with interoperability that goes beyond industry standards
- **Best-of-Breed** – Choose from best-of-breed offerings across every product line

By using Oracle Fusion Middleware software, we believe our customers can better adapt to business changes rapidly, reduce their risks related to security and compliance, increase user productivity and drive better business decisions. Specifically, Oracle Fusion Middleware software is designed to enable customers to integrate heterogeneous business applications, automate business processes, scale applications to meet customer demand, simplify security and compliance, manage lifecycles of documents and get actionable, targeted business intelligence; all while continuing to utilize their existing IT systems. In addition, Oracle Fusion Middleware software supports multiple development languages and tools, which enables developers to build and deploy web services, websites, portals and web-based applications.

Oracle Fusion Middleware software is used to integrate, extend, rapidly configure, and secure enterprise applications. Oracle Fusion Middleware integrates to Oracle Applications as well as other 3rd party applications, or applications in the Cloud. The same complete, open, and integrated middleware technologies are also the core foundation for Oracle Fusion Applications – giving customer greater benefits from a unified application platform. Oracle Fusion Middleware software is available in various software products and suites, including the following functional areas:
• Application Server and Cloud Application Foundation
• Service-Oriented Architecture and Business Process Management
• Business Intelligence
• Identity and Access Management
• Data Integration
• Web Experience Management, Portals, Content Management and Social Networks
• Development Tools

Application Server and Cloud Application Foundation and Exalogic

The foundation of Oracle Fusion Middleware software is Oracle WebLogic Server—an application server that is compliant with the Java Enterprise Edition specification. Oracle WebLogic Server incorporates clustering and caching technology, which increases application reliability, performance, security and scalability. In addition to Oracle WebLogic, Oracle combines cloud infrastructure components into the Oracle cloud application foundation, including: Oracle Virtual Assembly Builder, Oracle Coherence, and Tuxedo:

Oracle Virtual Assembly Builder works with Oracle WebLogic Server to increase the efficiency of application virtualization. By packaging multiple software components into a single assembly—a self-contained virtualized unit—Oracle Virtual Assembly Builder allows users to quickly and easily design and deploy multi-tier applications to virtualized environments, both conventional and cloud. Oracle Coherence is an in-memory data grid solution, enabling organizations to predictably scale applications by providing fast and reliable access to frequently used data. With support for Java, .NET, C++, and REST clients, Coherence provides data caching, data replication, and distributed computing services. It relieves overloaded data sources, simplifying management and improving performance for queries, transactions, and events. Oracle JRockit is a high performance Java Virtual Machine designed to run Java applications on multi-core processors with higher and more predictable performance.

In addition, we offer Oracle Tuxedo, which runs legacy, mainframe, and non-Java applications written in the C, C++, and COBOL languages that have transaction reliability, scalability and performance requirements. Oracle GlassFish Server enhances the value of Oracle Fusion Middleware software for developers by accelerating development practices and decreasing application time-to-market.

Oracle Exalogic Elastic Cloud is an engineered system that combines Oracle Fusion Middleware software with our hardware to more effectively run Java and non-Java applications and provide customers with an applications platform for cloud computing. Oracle Exalogic Elastic Cloud improves the performance of applications that run on it and enables customers to consolidate multiple applications onto a single system designed to be scalable, reliable and secure. As an integrated system, Oracle Exalogic Elastic Cloud simplifies routine maintenance, such as software patching, by providing a single solution that covers the entire system.

Service-Oriented Architecture and Business Process Management

Service-Oriented Architecture (SOA) is a software development and architecture methodology that creates a modular, re-usable approach to applications development; makes it easier to integrate systems with each other; and reduces the need for costly custom development. Oracle SOA Suite is a suite of middleware software products used to create, deploy, and manage applications on a Service-Oriented Architecture including Oracle JDeveloper, Oracle BPEL Process Manager, Oracle Web Services Manager, Oracle Business Rules, Oracle Business Activity Monitoring, and Oracle Service Bus. Oracle Business Process Management Suite is a suite of software designed to enable business and IT professionals to design, implement, automate, and evolve business processes and workflow within and across
organizations. Oracle SOA Governance is designed to maintain the security and integrity of our customers’ SOA deployments.

Business Intelligence
Oracle Business Intelligence (BI) is a comprehensive set of analytic software products designed to provide customers with the information they need to make better business decisions. Oracle’s software Business Intelligence products include Oracle BI Suite Enterprise Edition, a comprehensive query and analysis server; Oracle Essbase, an online analytical processing (OLAP) server; Oracle BI Publisher, a self-service production and operational reporting tool; and Oracle Real-Time Decisions, a real-time data classification and optimization solution. Users can access these tools from a variety of user interfaces including browser-based interactive dashboards; ad hoc query and analysis; proactive detection and alerts integrated with e-mail; Microsoft Office integration including support for Excel, Word, and PowerPoint; and mobile analytics for mobile and smart phones.

Identity and Access Management
Oracle’s identity and access management software products are designed to enable customers to manage internal and external users, secure corporate information from potential software threats and streamline compliance initiatives while lowering the total cost of their security and compliance initiatives. These software products include a lightweight directory access protocol (LDAP) directory service to store and manage user identities and policies; identity provisioning to provision users and roles in multiple enterprise applications and systems; access management to manage access control and entitlements for customers, partners, and employees; and identity analytics products to audit and identify users attempting to access systems for which they are not authorized.

Data Integration
Oracle’s data integration offerings consist of Oracle GoldenGate, Oracle Data Integrator, and Oracle Enterprise Data Quality products. Oracle GoldenGate is a high performance data movement and continuous availability solution designed to capture transaction records on one system and to move and apply them to other systems with low impact on system and network performance. Oracle Data Integrator is an extract-transform-load (ETL) solution that enables users to extract data from one system, transform it from the source system’s format to a target system’s format, and load it into the target system (such as a data warehouse). Oracle Data Integrator also includes big data capabilities to transform and load unstructured data from NoSQL or Hadoop environments into Oracle Database or Oracle Exadata. Finally, Oracle Enterprise Data Quality enables users to profile any type of data (customer or product-oriented) and to clean it using a variety of automated matching and cleansing rules making the data more reliable and more accurate.

User Engagement: Web Experience Management, Portals, Content Management and Social Networks
Oracle WebCenter delivers a complete user engagement platform for social business, connecting people and information. It brings together the most complete portfolio of portal, web experience management, content, social and collaboration technologies into a single product suite. Oracle WebCenter improves customer loyalty and sales by helping marketing-driven organizations deliver contextual and targeted web experiences to users and gives employees anytime, anywhere access to information and applications in context of an interaction and business process through portals and composite applications. Oracle WebCenter helps people work together more efficiently through contextual collaboration tools that optimize connections between people, information and applications while ensuring users
have access to the right information in the context of the business process they are engaged in.

**Development Tools**

Oracle JDeveloper is an integrated software environment that is designed to facilitate rapid development of a variety of different types of applications using Oracle Fusion Middleware software and popular open source technologies. Oracle JDeveloper software provides support for developing Java applications; web services, composite SOA applications and business processes; rich user interfaces using AJAX/DHTML and Flash technologies; and websites using popular scripting languages. Oracle JDeveloper software also provides comprehensive application lifecycle management facilities including modeling, building, debugging, unit testing, profiling, and optimizing applications and is integrated with the Oracle Application Development Framework software, which provides a declarative framework for building business applications, and popular open source tools, including Eclipse and NetBeans.

**LEARN MORE**

To learn more about Oracle Fusion Middleware products visit oracle.com/middleware.

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**Contact Us**

For more information about Fusion Middleware, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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**Hardware and Software, Engineered to Work Together**