Why Oracle Fusion Middleware is the Best Middleware for JD Edwards EnterpriseOne
JD Edwards EnterpriseOne: Better with Oracle Fusion Middleware

Introduction

The JD Edwards product line has enjoyed over 30 years of success, equipping its customers with the best applications and technology to solve business problems in virtually every industry and every geography. Those loyal customers have witnessed many generations of innovation from the JD Edwards product line, from midrange computer applications, to a flexible client/server architecture, to pure web-based deployments. Today, as a member of Oracle's broad portfolio of enterprise software, JD Edwards EnterpriseOne has inherited a windfall of the industry’s best technology and continues to translate that technology into business value for its customers.

Oracle’s complete family of application infrastructure products—from the #1 Java application server to SOA and enterprise portals—are integrated with Oracle’s JD Edwards EnterpriseOne to speed implementation and lower the cost of management and change. Best-of-breed offerings and unique hot-pluggable capabilities provide a foundation for innovation and extend the business value of existing investments.

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 enterprise-level. Oracle Fusion Middleware 11g delivers a foundation for both business and IT innovation. This foundation empowers you to differentiate and succeed throughout dynamic and unpredictable market conditions, while maintaining efficiencies and controlling costs.

With these products and technologies, Oracle provides a complete stack of infrastructure, middleware, and applications to fulfill the broad requirements of enterprises regardless of size, industry, or geography. Components of Oracle Fusion Middleware provide the foundation for JD Edwards EnterpriseOne at virtually all layers of its architecture including:

- JD Edwards EnterpriseOne HTML Server
- Service Oriented Architecture
- Business Intelligence
- Identity Management
- Enterprise 2.0, including user interaction and portals
This paper describes how JD Edwards EnterpriseOne running on a foundation of Oracle Fusion Middleware helps customers build a platform for innovation to address ever-changing business challenges.

The Benefits of Running JD Edwards EnterpriseOne on a Complete Oracle Stack

Regardless of industry, company size, geography, or which of the JD Edwards EnterpriseOne applications are implemented, all customers share a common goal: to maximize the value of their investment in JD Edwards EnterpriseOne while minimizing inefficiencies in people, processes, and systems.

JD Edwards EnterpriseOne offers its customers a broad array of platform choices on which to build an implementation. But as Oracle’s portfolio of platform, database, middleware, and application solutions continues to broaden, a compelling choice emerges for JD Edwards EnterpriseOne customers: to run JD Edwards EnterpriseOne on a complete Oracle stack.

Some reasons to consider this strategy include:

- Every Oracle technology product holds a leadership position in its field
- Of all the many possible configurations, Oracle has certified its own components to interoperate together as a reference configuration
- A single-vendor strategy simplifies the process of acquiring and supporting a broad solution of technology and applications

The stack of Oracle technology is quite comprehensive. This white paper focuses on one layer of that stack: Oracle Fusion Middleware.
Oracle Fusion Middleware is a pre-integrated portfolio of software for applications infrastructure, development tools and business intelligence.

Oracle Fusion Middleware
Oracle Fusion Middleware is a comprehensive and cohesive application platform suite built with a pre-integrated portfolio of software spanning portals and process managers to application infrastructure, developer tools, and business intelligence. It includes industry-leading, open-standards middleware products such as a highly-scalable messaging and transaction processing platform, the leading application server, a comprehensive business process management suite, service-oriented architecture (SOA) infrastructure, and an Enterprise 2.0 user interaction environment. Oracle Fusion Middleware’s “hot-pluggable” capability lets customers “drop and deploy” products into their existing IT environments. Since its launch over 10 years ago, Fusion Middleware has garnered over 90,000 customers.
Since its inception, the JD Edwards EnterpriseOne architecture has continually evolved to remain current and to capitalize on the best technology available. Today, JD Edwards EnterpriseOne architecture is an open-platform, standards-based, service-oriented architecture fully aligned with Oracle Database and Oracle Fusion Middleware technology.
As Oracle strengthens its leadership position in enterprise software through innovation and acquisition, the JD Edwards EnterpriseOne product line strengthens its architecture by adopting Oracle Fusion Architecture and certifying components of Oracle Fusion Middleware. The following sections describe how JD Edwards EnterpriseOne has adopted Oracle Fusion Middleware at each layer of its architecture.

**JD Edwards EnterpriseOne HTML Server**

JD Edwards EnterpriseOne has delivered major new functionality as its architecture has evolved during recent tools releases. A good deal of this additional functionality is deployed on the Java platform. A fundamental component of the JD Edwards EnterpriseOne architecture that is based on Java technology is the JDE E1 HTML Server (also known as the JAS server), which provides the web interface to all JD Edwards EnterpriseOne end-user applications. Being such an essential component, a Java EE server, such as Oracle WebLogic Server or Oracle Internet Application Server, is a prerequisite to all JD Edwards EnterpriseOne implementations.
In alignment with the strategic direction for Oracle Fusion Middleware the Oracle WebLogic Server, including the JRockit Java virtual machine, is certified as a Java EE application server for the JD Edwards EnterpriseOne HTML Server. Oracle Internet Application Server continues to be supported according to the Oracle Lifetime Support Policy, and Oracle intends to continue support for Oracle Internet Application Server with JD Edwards EnterpriseOne according to that policy.

The Business Value: Oracle WebLogic Server, running with the JRockit Java virtual machine, provides a scalable, high performance platform for running the JD Edwards EnterpriseOne HTML Server. Running on x86-64 hardware it provides an excellent price/performance ratio.

Use Case: Scalable Deployment of JD Edwards EnterpriseOne via Web Clients

In this most common and essential use case, Oracle WebLogic Server and the JRockit Java virtual machine provide the Java EE container for running the JD Edwards EnterpriseOne HTML server. The web client allows browser-based access to all JD Edwards EnterpriseOne application modules with zero administration on the user's desktop. This architecture is applicable to customers of all sizes, user counts, and geographies.

Architecture

Service Oriented Architecture

In modern enterprises, a single system rarely operates in quarantine. Virtually every system needs to interoperable and exchange data with other systems at some point. A primary tenet in Oracle Fusion Architecture is that modern enterprise applications must be enabled to participate in service-oriented interoperability. Service-oriented architecture provides a standards-based, loose, and resilient coupling among the business applications that comprise an end-to-end business process. In a service-
oriented architecture the interoperability among components in a business process is more tolerant of upgrades, platforms, and even wholesale replacement of components, than if the integrations were hard-coded as point-to-point solutions.

Oracle Fusion Middleware provides a number of technology components, many of which are bundled within the Oracle SOA suite offering, that are fundamental building blocks of a service-oriented architecture, including:

- **Oracle JDeveloper** – A complete development environment for Service-Oriented Architecture (SOA) and Java development. As part of Oracle Fusion Middleware 11g, JDeveloper 11g is "hot-pluggable" with Oracle and non-Oracle environments, supporting all major Java EE application servers and databases.

- **Oracle BPEL Process Manager** – Enables enterprises to orchestrate disparate applications and Web services into business processes. The ability to quickly build and deploy these processes in a standards-based manner delivers critical functionality for developing a Service-Oriented Architecture (SOA).

- **Oracle Service Bus** - A proven, lightweight and scalable SOA integration platform that delivers low-cost, standards-based integration for high-volume, mission critical SOA environments. It is designed to connect, mediate, and manage interactions between heterogeneous services, legacy applications, packaged applications and multiple enterprise service bus (ESB) instances across an enterprise-wide service network.

- **Oracle Business Process Management Suite** simplifies process management by delivering both process modeling tools and a process execution platform, providing a complete solution to facilitate collaboration between business stakeholders and IT practitioners. Oracle BPM 11g allows customers to craft solutions using visual business processes – processes which business users can understand and change themselves. Process management is simplified via a process engine and pre-integration of process subsystems. User-centric design facilitates process modeling and interaction. Social BPM interaction simplifies and extends collaboration by providing new ways to communicate and simplify work.

These products help to model and orchestrate processes, route and transform data, and monitor and manage the entire SOA infrastructure. Many of these products are already certified and in production use with JD Edwards EnterpriseOne implementations.

In addition, Oracle Mobile Platform leverages Oracle Fusion Middleware infrastructure to expose enterprise applications and data as web services and restful API’s that allow easy integration between mobile apps and
back-end systems. This means that the same platform that you use to develop and maintain your enterprise applications can now be extended to develop, integrate, secure, deploy, and manage your mobile applications.

The mobile platform provides a robust, high performance and highly scalable architecture that can run both web and mobile apps, meeting the 24/7 requirements of mobile access with consistent management throughout the application lifecycle. Apps created with Oracle Mobile Platform integrate easily with each other as well as with third party applications based on Java and other industry-standard languages and protocols. This platform also protects API’s to uphold corporate security and compliance policies, with comprehensive capabilities for mobile identity management and mobile application management.

Oracle Mobile Platform also supports a multi-channel, multi-device framework that allows you to build apps once and deploy them to iOS, Android and other platforms with web, native and hybrid delivery.

This whitepaper has additional details on how you can simplify enterprise mobility using the Oracle mobile platform.

Business Services

One of the most significant recent enhancements to the JD Edwards EnterpriseOne architecture was the addition of Business Services, which enables JD Edwards EnterpriseOne to participate in a service-oriented architecture (SOA), including implementations that leverage Oracle SOA Suite and Oracle’s Application Integration Architecture (AIA).

For example, Oracle has verified the interoperability between JD Edwards EnterpriseOne Business Services and Oracle BPEL Process Manager and Oracle Service Bus. This interoperability allows customers to expose JD Edwards EnterpriseOne Business Services via standard web services and to build them into business processes using Oracle BPEL Process Manager and Oracle Service Bus.
Use Case: Reducing Banking Processes from Hours to Minutes

In this use case a real estate and theater management company employed JD Edwards EnterpriseOne Business Services, Oracle SOA Suite, and Web Services to automate banking transactions. The Oracle SOA Suite components—Oracle Service Bus, Web Services Manager, and BPEL Process Manager—facilitate web-service interoperability between JD Edwards EnterpriseOne and the customer’s bank, where automated clearing house processes quickly and accurately validate the transactions. A process that used to take hours per day is reduced to less than one minute.

Read the case study

Architecture

Transaction Server

The JD Edwards EnterpriseOne Transaction Server (sometimes known as the Real Time Events Server) provides inbound and outbound interoperability between JD Edwards EnterpriseOne and external systems based on transaction events.

The JD Edwards EnterpriseOne Transaction Server satisfies an integration paradigm different than that of Business Services. Often customers want to trigger activities in other systems based on events that originated in JD Edwards EnterpriseOne. For example, completion of a sales order in JD Edwards EnterpriseOne might need to trigger some transaction in a third-party system. The Transaction Server satisfies this use case by publishing an event, in the form of an XML document, to a Java Messaging Service (JMS) queue.

Oracle has certified the interoperability between the JD Edwards EnterpriseOne Transaction Server and Oracle Service Bus and Oracle BPEL Process Manager to facilitate event-driven integrations between JD Edwards EnterpriseOne and external systems. As customers expand their use of JD Edwards EnterpriseOne in a service-oriented architecture they will see increasing benefit from the adoption of SOA-enabling components.
Oracle’s Application Integration Architecture

Oracle Application Integration Architecture (AIA) delivers prebuilt content, templates, and a methodology for orchestrating agile user-centric business processes across enterprise applications. Oracle enables best-in-class applications—Oracle and non-Oracle—to work together seamlessly, leveraging industry best practices and open standards to reduce costs and increase business flexibility. Built on Fusion Middleware’s Service Oriented Architecture (SOA) and BPM products, Oracle AIA transforms rigid IT systems into flexible, integrated environments that can adapt and scale to business needs.

Oracle currently offers AIA-based integrations between JD Edwards EnterpriseOne and the following four Oracle products:

- Oracle Value Chain Planning
- Oracle Primavera P6
- Oracle Agile Product Lifecycle Management
- Oracle CRM On Demand

Business Intelligence

What users of ERP systems often call “reporting”—pulling data from transaction tables and printing it in tabular format—is no longer sufficient for real-time, information-driven enterprises. The realm of business intelligence can be seen as a continuum of technologies that enable users to interact with information. Each spot on the continuum addresses some particular use case or business activity to address, from reporting what happened to analyzing why it happened to forecasting what will happen next.

Oracle Business Intelligence provides products at every point along the business intelligence continuum to address every type of user and the broadest range of use cases. JD Edwards EnterpriseOne customers can take advantage of Oracle’s rich portfolio of business intelligence products to augment their implementation.

Oracle Business Intelligence comprises a highly scalable BI foundation that is hot pluggable with the Fusion Middleware stack. Based on an integrated, scalable, web services architecture, the open Oracle Business Intelligence foundation can reduce your cost of ownership and provide pervasive BI through efficient self-service access to diverse data sources, and a common information model with multichannel information delivery. This integrated platform, together with Oracle’s market-leading prepackaged analytics—Oracle BI Applications—provide role-based insight into operational performance, processes, and customers to whoever needs it, whenever they need it. Oracle Business Intelligence foundation enables you to maximize the value of your existing IT investments and resources. It allows you to leverage your investment in Oracle’s Siebel, Oracle’s
PeopleSoft, Oracle’s JD Edwards, SAP, and other transactional applications using certified adapters and extraction, transformation, and loading (ETL) mappings.

Figure 4. Oracle Business Intelligence

<table>
<thead>
<tr>
<th>Reporting &amp; Publishing</th>
<th>Ad-hoc Analysis</th>
<th>Interactive Dashboards</th>
<th>Essbase</th>
<th>Desktop Gadgets</th>
<th>Proactive Detection and Alerts</th>
<th>Disconnected &amp; Mobile Analytics</th>
<th>MS Office &amp; Outlook Integration</th>
</tr>
</thead>
</table>

Common Enterprise Information Model

Integrated Security, User Management, Personalization Multidimensional Calculation and Integration Engine Intelligent Request Generation and Optimized Data Access Services

OLTP & ODS Systems Data Warehouse Data Mart OLA SAP, Oracle PeopleSoft, Siebel, JDE, Custom Apps Files Excel XML Business Process

Oracle Business Intelligence Enterprise Edition Plus and Oracle Business Intelligence Applications

Oracle offers a portfolio of Business Intelligence products that address the need for insightful analysis of enterprise data. Oracle Business Intelligence Suite Enterprise Edition Plus (Oracle BI EE Plus) is a comprehensive suite of enterprise BI products that delivers a full range of analysis and reporting capabilities. Featuring a unified, highly scalable, modern architecture, Oracle BI EE Plus provides intelligence and analytics from data spanning enterprise sources and applications—empowering the largest communities with complete and relevant insight.

Complementing Oracle BI EE Plus, Oracle Business Intelligence (BI) Applications are complete, prebuilt BI solutions that deliver intuitive, role-based intelligence throughout an organization. These solutions enable organizations to gain more insight and greater value from a range of data sources and applications including Oracle E Business Suite, PeopleSoft, JD Edwards, Siebel, and third party systems such as SAP. Oracle BI Applications are built on the Oracle BI Suite Enterprise Edition, a comprehensive and market leading BI platform. This enables organizations to realize the value of a packaged BI application, such as rapid deployment,
lower TCO, and built-in best practices, or to build custom BI applications—all on one common BI foundation.

Oracle Business Intelligence Applications for Oracle’s JD Edwards EnterpriseOne are powerful, prebuilt solutions that enable organizations to implement and integrate more quickly, with less risk, and at a fraction of the cost required to build traditional BI solutions. Users have prebuilt dashboards and metrics for JD Edwards EnterpriseOne along with a powerful set of self-service BI tools. Simultaneously, IT benefits from packaged extract, transform, and load (ETL) adapters and business logic built specifically for JD Edwards EnterpriseOne, reducing the risk and cost to deploy BI. The BI applications can be run as stand-alone applications independently of JD Edwards EnterpriseOne applications, or they can be embedded into the JD Edwards EnterpriseOne applications user interface to enhance the user’s insight and experience while executing transactions.

**Figure 5. Oracle BI Applications Embedded in the JD Edwards EnterpriseOne Applications Enhance the User’s Experience**

Oracle Business Intelligence Publisher

Oracle Business Intelligence Publisher, which is a component of Oracle Business Intelligence Enterprise Edition Plus, is an enterprise reporting solution for authoring, managing, and delivering all your highly formatted documents, such as operational reports, electronic funds transfer documents, government PDF forms, shipping labels, checks, sales and marketing letters, and much more. Reports can be designed using familiar desktop products and viewed online or scheduled for delivery to a wide range of destinations.
Oracle offers a direct integration between JD Edwards EnterpriseOne and BI Publisher, which augments EnterpriseOne’s native report formatting capabilities. Users can create richly formatted report templates using familiar desktop tools such as Microsoft Word and Adobe Acrobat, so the learning curve is short. Then the data from JD Edwards EnterpriseOne is mapped to the templates to produce output in common formats like PDF, XML, EDI and RTF.

The reporting process can be initiated from a typical JD Edwards EnterpriseOne batch application, in which the BI Publisher template simply augments the final formatting and distribution of the report output. Many customers have been able to retire third-party solutions in favor of this integrated BI Publisher solution. Or the process can be initiated from a BI Publisher desktop client, in which a custom-built JDBC driver provides secured access into the JD Edwards EnterpriseOne data.

There are no limits to the design and variety of reports—your business determines its report needs and output format, you select your design tool, and with BI Publisher you configure the appearance and content as needed to satisfy the needs of your internal and external customers.
Use Case: Streamline the production of external-facing documents

In this use case a real estate, mineral, and fiber resources company uses Oracle Business Intelligence Publisher to extract data from JD Edwards EnterpriseOne transaction tables and generate external-facing documents such as invoices to customers and checks to suppliers. Without the need for a large consulting engagement, this customer used familiar desktop tools to design templates and associate the templates with JD Edwards EnterpriseOne report types. This project streamlined the production of thousands of documents per month and eliminated the use of third-party products.

Read the case study

Identity Management

Enterprise applications must be secure, but the price of security cannot come with an undue burden of manageability. The primary requirements of identity management—secure user access, authentication, role-based authorizations, single sign-on, password rules, provisioning of new users, auditing, compliance, and reporting—often escalate the burden put on system administrators, security officers, and auditors. Oracle Fusion Middleware provides a complete suite of identity management products that address all security requirements while minimizing the administration burden.

JD Edwards EnterpriseOne has adopted a number of the components within the Oracle Identity Management suite to augment its native security features.

- **Oracle Internet Directory** – JD Edwards EnterpriseOne supports the use of Oracle Internet Directory as a Lightweight Directory Access Protocol (LDAP) repository for JD Edwards EnterpriseOne user, role, and password data. The content in the repository can be synchronized with other data stores.

- **Oracle Access Manager** – JD Edwards EnterpriseOne is integrated with Oracle Access Manager to give users a single sign-on experience among applications. Using Oracle Internet Directory as a common repository for user credentials, this integration enables single sign-on between Oracle WebCenter Spaces and JD Edwards EnterpriseOne applications. This enables users to seamlessly invoke Oracle WebCenter Spaces, JD Edwards EnterpriseOne applications, and any other Oracle or third-party application that is enabled with Oracle Access Manager. A similar integration exists with the Oracle Single Sign-On (OSSO) feature of Oracle Internet Application Server.

The Business Value: Oracle Identity Management products simplify access and account administration among JD Edwards EnterpriseOne and other Oracle applications. Saving a few minutes per day, times hundreds or thousands of users, adds up to increased productivity, fewer headaches, and better auditability.
Oracle Identity Manager (OIM) – Oracle provides a connector between JD Edwards EnterpriseOne and Oracle Identity Manager to simplify account provisioning and account reconciliation tasks. Leveraging OIM, a security administrator can use a centralized console to provision new users into the correct applications while assuring that user’s privileges adhere to the overall organization’s governance policies. Furthermore, OIM provides self-service capabilities for users to reset their passwords. By providing users with a mechanism to reset their own password, IT departments can lower costs while providing a high level of service.

Figure 7. Oracle Identity Manager Connector for JD Edwards EnterpriseOne
Use Case 1: Rapid User Account Provisioning

ACME’s business is seasonal. During peak times, they need to on-board employees quickly and provide access to multiple systems such as JD Edwards EnterpriseOne, Siebel applications, and some internally developed systems. Oracle Identity Manager allows ACME’s security administration team to create the necessary IDs, roles, and passwords once from a central console and broadcast the account requests to the other systems where they are automatically created. At the end of the seasonal employment, Oracle Identity Manager facilitates the reverse process of revoking the accounts of the temporary employees.

Use Case 2: Self-Service Password Reset

A user changes his password before going on vacation. Upon returning from a week in Hawaii, he can’t remember his new password. Using the self-service password reset feature of Oracle Identity Manager he can retrieve a new password without requesting Help Desk assistance or any other human intervention.

Enterprise 2.0: JD Edwards EnterpriseOne Portal and Collaboration Solutions

In the modern enterprise—sometimes termed “Enterprise 2.0”—the paradigm of a worker being completely productive within a single transactional system is simply insufficient. Increasingly, workers are required to navigate several systems to fulfill complex business processes. They often require concurrent, seamless, and immediate access to multiple systems to succeed. And seldom do these workers complete their tasks completely independently, but require real-time and asynchronous collaboration with multiple, perhaps many, colleagues who may be local or geographically dispersed.

Oracle WebCenter Suite is the industry’s only complete, open, and manageable portal platform that integrates Enterprise 2.0 capabilities into business processes and custom and packaged enterprise applications to create richer connections and deliver faster time-to-value.

JD Edwards EnterpriseOne offers a rich set of portlet applications, such as Employee Self-Service and Supplier Self-Service. Beginning with JD Edwards EnterpriseOne 8.11 and Tools 8.95, all portlets that are written using JD Edwards EnterpriseOne Tools Form Design Aid run in the Oracle Portal 10g. This support applies to any portlets delivered with JD Edwards EnterpriseOne Applications 8.11 and later, as well as any custom portlets developed with JD Edwards EnterpriseOne Tools 8.95 and later.

Beginning with JD Edwards EnterpriseOne Tools 8.98, the portlets are compliant with the Web Services for Remote Portlets (WSRP) standard. The JD Edwards EnterpriseOne lifecycle management tools deploy these portlets to the WSRP producer where they run in a Java EE container. The
JD Edwards EnterpriseOne HTML server can act as the portlet producer, and a portal server such as Oracle WebCenter Portal, acts as the portlet consumer. This method of deploying portlets greatly simplifies the administration of both Oracle-delivered and customer-created portlets.

Oracle WebCenter Framework has been established as the strategic portal technology for the converged portal platform for Oracle Fusion Middleware. In alignment with that strategy, Oracle has certified WebCenter Spaces for use as a WSRP portal consumer for JD Edwards EnterpriseOne portlets beginning with JD Edwards EnterpriseOne Tools 8.98 Update 3.3

**Figure 8. JD Edwards EnterpriseOne Portlets Hosted in Oracle WebCenter Spaces or Oracle Portal 10g**

<table>
<thead>
<tr>
<th>WSRP Consumer</th>
<th>WSRP Producer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Portal</td>
<td>WebCenter Spaces</td>
</tr>
<tr>
<td>Oracle iAS Portlets</td>
<td>JD Edwards EnterpriseOne</td>
</tr>
</tbody>
</table>

**Enriching the User Experience to Enhance Collaboration and Productivity**

A portal framework is one way to aggregate a user’s interaction with multiple systems. A recent enhancement to the JD Edwards EnterpriseOne user interface, called the Related Information Application Framework, provides an alternative mechanism from directly within JD Edwards EnterpriseOne forms. A new drop-down region of the user interface allows the user to “host” other external applications, such as Oracle WebCenter Group Spaces or Oracle Business Intelligence applications. The content of these external applications is contextually linked with the transactional data on the JD Edwards EnterpriseOne form. For example, a customer number on a JD Edwards EnterpriseOne form is linked to a WebCenter work space that tracks all contact with that customer. Furthermore, the contextual linking between JD Edwards EnterpriseOne applications and the external systems can be accomplished by the end-users themselves; intervention of the IT organization is not required.

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3 Refer to the Minimum Technical Requirements documents posted at My Oracle Support for detailed platform certification information.
Enterprise Management

A fundamental tenet of Oracle Fusion architecture is a consolidated, top-down management of applications and their underlying infrastructure. The key challenges for managing applications and their underlying infrastructure include:

- Ensuring performance and availability
- Resolving problems quickly to minimize impact
- Containing on-going costs associated with managing applications
- Aligning IT and line-of-business priorities so the resources are applied to activities that generate the most business benefits

Oracle Enterprise Manager provides a comprehensive, integrated management solution that helps businesses achieve high levels of performance and availability, and reduce the costs of managing applications and the infrastructure on which they run. Enterprise Manager provides the tools that help organizations achieve the required application performance and availability, improve management productivity, better utilize resources, and drive down costs.

Beginning with JD Edwards EnterpriseOne Tools 8.98.1 and applications 8.12, customers can utilize the Oracle Enterprise Manager Application
Management Pack for JD Edwards. This Application Management Pack enables customers to use Oracle Enterprise Manager in conjunction with Server Manager for JD Edwards EnterpriseOne to gain complete visibility and control of all JD Edwards EnterpriseOne servers and components as well as non-JD Edwards servers. Furthermore, the Enterprise Manager Application Pack allows IT and the business to establish service level agreements that are based on objective, measurable metrics that meet the needs of the business.

Figure 10. Oracle Enterprise Manager Application Management Pack for JD Edwards EnterpriseOne
Putting It All Together

Component-by-component, Oracle Fusion Middleware offers a broad portfolio of technology that can be used to augment and extend a JD Edwards EnterpriseOne implementation. Individually, any of these components can produce a solid return on investment. However, these benefits are compounded, and the return on investment accelerated, when several components are used in harmony to solve tough business problems. Utilizing a single component of Oracle Fusion Middleware certainly can be considered an improvement, possibly even a “reengineering” of an existing JD Edwards EnterpriseOne implementation. But the application of several components—employing the right technology to do the right job—can bring on an entire rethinking of old architectures, and with it rapid returns that affect every individual from “C” level to end user.

Use Case: Real estate management company streamlines the process to close financial periods and produce reports for its clients.

Pursuing the maximum benefit from Oracle Fusion Middleware, a real estate management company employed several components of Oracle Fusion Middleware to gain process efficiencies, increase visibility for management, eliminate tedious and error-prone human tasks, and increase service level to its customers.

- Oracle BPEL Process Manager orchestrates the month-end close process, enhances collaboration between accounting staff and property managers, and gives management visibility into the process
- Oracle Enterprise Service Bus facilitates the transfer of data between JD Edwards EnterpriseOne and external systems to keep JD Edwards EnterpriseOne as the “single source of truth” for the financial data
- Oracle Business Intelligence Publisher automates the production of customized month-end reports for each client.
- Oracle WebCenter provides clients with timely, web-based access to their reports interactively.
- JD Edwards EnterpriseOne is running on a complete Oracle technology stack, including Oracle VM, Oracle Enterprise Linux, Oracle Database 10g, and Oracle Fusion Middleware.

Read the case study
Conclusion

The JD Edwards EnterpriseOne architecture has proven to be open, flexible, and resilient as it has continually adopted the best trends in the IT industry. Oracle’s leadership position in the enterprise software market brings many benefits to JD Edwards EnterpriseOne customers as it is aligned with Oracle’s Fusion Middleware strategy and inherits the benefits of Oracle’s best-in-class technology stack.

Where to Go for More Information

For more in-depth information about maximizing the value of your JD Edwards EnterpriseOne implementation with Oracle Fusion Middleware, please refer to the following sources:

- Some of the capabilities described in this document depend on specific releases of JD Edwards EnterpriseOne Tools and Applications. Refer to the Minimum Technical Requirements for details on supported versions, patches, and platforms: https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=745831.1
- Search the archives of conferences, such as Oracle OpenWorld and Quest Collaborate, where customers share their success stories.
Appendix A: Oracle Fusion Middleware Products Certified with JD Edwards EnterpriseOne

This appendix provides a summary of the certification status between several Oracle Fusion Middleware 11g components and JD Edwards EnterpriseOne. For detailed information about certification, versions, and required patches, refer to the JD Edwards EnterpriseOne Minimum Technical Requirements documents published on My Oracle Support:

https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=745831.1

<table>
<thead>
<tr>
<th>Key to Statuses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Integrated. The Fusion Middleware component has been engineered to function with JD Edwards EnterpriseOne in a tightly integrated fashion.</td>
</tr>
<tr>
<td>C</td>
<td>Certified. The Fusion Middleware component has been tested to interoperate with JD Edwards EnterpriseOne.</td>
</tr>
<tr>
<td>S</td>
<td>Supported. There is no engineered integration, but Oracle will assist customers who use the Fusion Middleware component with JD Edwards EnterpriseOne in accordance with the published documentation for both products.</td>
</tr>
</tbody>
</table>

Table 1 – Certification Status of Oracle Fusion Middleware with JD Edwards EnterpriseOne

<table>
<thead>
<tr>
<th>Oracle Fusion Middleware 11g Component</th>
<th>Status with JDE E1</th>
<th>Notes / Advice to Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Internet Application Server 10g R3 - Oracle Containers for J2EE (OC4J)</td>
<td>I</td>
<td>Customers with existing implementations of Oracle Internet Application Server will continue to be supported according to Oracle’s Lifetime Support Policy. Customers beginning new implementations should consider Oracle WebLogic Server.</td>
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<tr>
<td>Oracle WebLogic Server 11g</td>
<td>I</td>
<td>Integration with the JDE E1 HTML Server on Linux 5 begins with JDE E1 Tools 8.98 Update 2. Integration with the JDE E1 Business Services Server and Transaction Server, and certification on Windows and UNIX begins with JDE E1 Tools 8.98 Update 3. Use of the Oracle JRockit JVM is encouraged.</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Component</td>
<td>Status with JDE E1</td>
<td>Notes / Advice to Customers</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Oracle Portal 10g R3</td>
<td>I</td>
<td>Customers with existing implementations of Oracle Portal will continue to be supported according to Oracle’s Lifetime Support Policy. Customers beginning new implementations should consider Oracle WebCenter Spaces.</td>
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<tr>
<td>Oracle WebCenter Framework and Spaces 11g</td>
<td>I</td>
<td>Certified for the use cases of hosting the JDE E1 application portlets begins with JDE E1 Tools 8.98 Update 3. Supported only as a WSRP portlet consumer with Oracle Internet Application Server 10g R3 as the portlet producer.</td>
</tr>
<tr>
<td>Oracle WebCenter Services</td>
<td>I</td>
<td>Certified for the use case of integrating with JDE E1 via the Related Information Application Framework beginning with JDE E1 Tools 8.98.3 Update 3.</td>
</tr>
<tr>
<td>Oracle WebCenter Composer</td>
<td>S</td>
<td>Use in conjunction with JDE E1 business services to orchestrate business processes in a service-oriented architecture.</td>
</tr>
<tr>
<td>Oracle BPEL Process Manager 11g</td>
<td>C</td>
<td>Use in conjunction with JDE E1 business services to orchestrate business processes in a service-oriented architecture.</td>
</tr>
<tr>
<td>Oracle Business Activity Monitoring</td>
<td>S</td>
<td>New implementations should use Oracle Service Bus.</td>
</tr>
<tr>
<td>Oracle Service Bus 11g</td>
<td>C</td>
<td>The Enterprise Service Bus continues to be supported according to Oracle’s Lifetime Support Policy.</td>
</tr>
<tr>
<td>Oracle Fusion Middleware 11g Component</td>
<td>Status with JDE E1</td>
<td>Notes / Advice to Customers</td>
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<tr>
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<tr>
<td>Oracle Web Services Manager 11g</td>
<td>I</td>
<td>Integrated for the use case of single sign-on between Oracle WebCenter Spaces and the JDE E1 Related Information Application Framework.</td>
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<td>Oracle Access Manager 11g</td>
<td>I</td>
<td>Integrated for the use case of single sign-on between Oracle WebCenter and JDE E1</td>
</tr>
<tr>
<td>Oracle Identity Manager 11g</td>
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