



# ***SOA WITH FUSION/BEA? IT'S ALL STACKED UP!***

**Paper 723**

presented by

**John Jay King**

King Training Resources  
john@kingtraining.com

**Download this paper from:**  
<http://www.kingtraining.com>

Copyright @ 2009, John Jay King



- Learn how Oracle’s acquisition of BEA impacts development projects
- Become familiar with the “new” Oracle Fusion SOA stack
- Understand how SOA stack tools interact



- John King – Partner, King Training Resources
- Providing training to Oracle and IT world for over 20 years
  - Databases: Oracle, DB2, SQL Server, more...
  - Languages: PL/SQL, Java, C#, COBOL, PL/I, more...
  - Operating Systems: Linux, Unix, Windows, z/OS
  - Tools: XML, HTML, JavaScript, more...
- Leader in Service Oriented Architecture (SOA) design and implementation
- Home is Centennial, Colorado (Denver) – I like to hike and drive in the mountains
- I do not now nor have I ever worked for Oracle and I have absolutely no authority to speak for Oracle or Oracle's plans except via personal observation and conjecture...



- Oracle's SOA direction with Fusion has been well-mapped for years
- BEA had many tools corresponding to the Oracle Fusion stack and others that added new features
- Acquisition of BEA and its host of tools:
  - Oracle “cherry-picked” the best from BEA
  - Combined some BEA tools with existing Fusion tools
  - Made the Fusion SOA stack better



- Oracle uses the title "Fusion" to
  - Unify its SOA-directed offerings
  - Highlight the integration features of the SOA approach
- Two major legs of Oracle Fusion Architecture:
  - Oracle Fusion Middleware
  - Oracle Fusion Applications



- Oracle Fusion Applications are the:
  - Next generation of Oracle's Applications products
  - Answer to “What is Oracle going to do with all of those Enterprise Application products (and other companies) it bought?”



- Oracle started with Oracle E-Business Suite and acquired: JD Edwards, PeopleSoft, Siebel, and Retek
- Installing and migrating Enterprise Application products can be expensive and fraught with difficulty
- Fusion represents an elegant solution
  - Existing customers keep what they have
  - Curious customers may add parts of other application suites
  - Customers seeking “best of all worlds” install Fusion Applications





- Oracle has several Enterprise Application products
- Rather than “stitching them together”; Fusion uses SOA to make various functions available:
  - “Oracle Applications Unlimited” promises that existing customers may continue to use the products they have unchanged and includes important updates
  - “Oracle Application Integration Architecture” provides selected "best-of-breed" functionality as reusable services and pre-integrated "packs"
  - “Oracle Fusion Applications” is Oracle's chosen "best-of-breed" functionality in an integrated SOA package using modern technology and providing a strategic future direction





- Oracle's Fusion Middleware stack has many mature tools
  - Some earlier products were not world-class
  - Not everything fit together as well as it should
- Oracle's BEA acquisition helps complete the SOA picture
- When combining existing Fusion Middleware products with BEA's offerings; various products have been classified as:
  - “Strategic”
  - “Continue & converge”
  - “Maintenance”



- "Strategic" products are the tools that Oracle will focus on in the future and that can be expected to be improved over time to build the Fusion Applications
- "Continue and Converge" products are tools that will be continued and improved with an eye toward "converging" or merging them at some later date
- "Maintenance" products are those that will continue to be supported but will probably not receive any non-bug-related updates



- Oracle has separated middleware and SOA offerings into families:
  - Development Tools
  - Application Server and Transaction Processing
  - Service Oriented Architecture (SOA)
  - SOA Governance
  - Business Process Manager
  - Enterprise 2.0 & Portals
  - Identity Management
  - System Management



- Strategic:
  - Oracle JDeveloper
  - Oracle ADF
  - Oracle Enterprise Pack for Eclipse
- Continue Converge:
  - Oracle Forms
  - Oracle Reports
  - BEA Workshop
- Maintenance:
  - BEA Beehive (NOT the same as Oracle Beehive!)



- Strategic:
  - BEA WebLogic Server
  - BEA JRockit
  - BEA Tuxedo
  - Oracle TopLink
  - Oracle Coherence
- Continue Converge:
  - Oracle Application Server (OAS)
  - OC4J



- Strategic:
  - Oracle Service Bus (AquaLogic Service Bus & Oracle ESB)
  - Oracle BPEL Process Manager
  - Oracle Complex Event Processing
  - Oracle Data Integrator
  - Oracle Business Activity Monitoring (BAM)
- Continue Converge:
  - BEA WebLogic Integration
- Maintenance:
  - BEA Cyclone & BEA RFID Server



- Strategic:
  - BEA AquaLogic Enterprise Registry/Repository
  - Oracle Service Registry
  - Oracle Web Services Manager
  - Oracle Enterprise Manager SOA Pack
  - Oracle Service Level Management Pack
- Maintenance:
  - BEA AquaLogic Services Manager





- Strategic and/or Continue Converge:
  - Oracle BPM (BEA AquaLogic BPM & Oracle BPEL)
  - Oracle Business Activity Monitoring (BAM)
  - Oracle WebCenter
  - Oracle Business Rules
  - BEA AquaLogic BPM Designer
  - Oracle BPA Designer
  - Oracle Document Capture & Imaging



- Strategic:
  - Oracle WebCenter Framework
  - Oracle WebCenter Spaces & Suite
  - Oracle Universal Content Management
  - BEA Ensemble & Pathways
- Continue Converge:
  - BEA WebLogic Portal
  - BEA AquaLogic User Interaction
- Maintenance:
  - Commerce Services and Collabra



- Strategic:
  - Oracle Directory Services
  - Oracle Identity Manager
  - Oracle Role Manager
  - Oracle Access Manager
  - Oracle Adaptive Access Manager
  - BEA AquaLogic Enterprise Security
  - Oracle Identify Federation



- Strategic:
  - Oracle Enterprise Manager Management Pack for SOA Suite
  - Oracle Enterprise Manager Management Pack for Identity Management
  - Oracle Enterprise Manager Management Pack for Business Intelligence
  - Oracle Enterprise Manager Configuration Pack
  - Oracle Enterprise Manager Provisioning Pack
  - Oracle Enterprise Manager Diagnostics Pack



- SOA Suite provides most Oracle Fusion Middleware tools:
  - BAM (Business Activity Monitoring) for real-time performance info
  - BPEL (Business Process Execution Language) Process Manager to define and execute business processes
  - Business Rules Engine to manage business rules
  - Web Services Manager for security and management
  - ESB (Enterprise Service Bus) to provide routing and messaging
  - CEP (Complex Event Processing)
  - Oracle Web Center, brings AJAX to Oracle Middleware
  - Connectivity tools including: WSIF bindings & adapters
  - JDeveloper provides support for a unified SOA toolset



- Oracle SOA Suite works with any Java EE Application Server including:
  - Oracle WebLogic Application Server
  - Oracle Application Server and OC4J
- Oracle SOA Suite will work on any Java EE Application Server (might need licensing fees):
  - IBM WebSphere
  - JBOSS
  - Tomcat
  - others



- Oracle Fusion Applications:
  - Created largely with Oracle Fusion Middleware tools
  - Rely heavily on Oracle Fusion Middleware components
- Oracle Fusion Middleware:
  - An organization may use Oracle Middleware and its wide array of tools even if Oracle Fusion Applications are not installed
  - Oracle Middleware's reliance on industry standards (like Java, SOAP, WSDL, and UDDI) and SOA makes it an excellent choice no matter how applications are supported in an organization





- Oracle Fusion Middleware is already good, but will get better and better since it is the lynchpin toolset that thousands of Oracle's developers are using to build Oracle Fusion Applications
- Oracle will continue to improve and support the Oracle Fusion Middleware stack so that Oracle Fusion Applications can be successfully brought to market



- Rather than customizing applications, business process modeling may be used to orchestrate existing functions to handle issues not addressed by current applications  
(builds upon a foundation of work first begun at PeopleSoft)
- As Oracle Applications products move forward they want to take advantage of the best features of each environment, making future products better



- Oracle is relying on SOA to develop the next generation of Oracle applications
  - SOA provides a standard method of integrating and evolving business application functionality from the Oracle E-Business Suite, PeopleSoft, JD Edwards, and other Oracle application products
  - Industry-standard nature of SOA will allow third-parties to extend Oracle Fusion Applications adding new functionality or customized services
  - The Oracle Fusion Middleware stack enables the creation and operation of this industry-standard approach



- Contrary to some industry pundits I think the Oracle Fusion Architecture is coherent and well thought out
  - My thinking is that Oracle chose the “Fusion” name to highlight the synergy of components developed by Oracle and others
  - Oracle Fusion Middleware is key to the success of Oracle Fusion Applications
  - Many Oracle Fusion Middleware components are based upon requirements from the teams developing Oracle Fusion Applications
  - Oracle Fusion Middleware can be used without Oracle Fusion Applications



**Training Days 2010**

**Save the dates!**

**February 17-18 2010!**



**Save the Date: April 18-22 2010**

**Las Vegas, Nevada!**



# ODTUG 2009 KALEIDOSCOPE

- Web Architecture
- Oracle Tools
- Professional Development
- Web and Java
- Essbase
- Application Express
- Web and Not Java
- Hyperion
- Business Intelligence and Data Warehousing
- Database Server
- BEA
- Best Practices
- Third Party Tools

**Monterey, CA**  
**June 21–25, 2009**

**SPOTLIGHT ON  
DEVELOPERS**

[www.odtugkaleidoscope.com](http://www.odtugkaleidoscope.com)





## *SOA with Fusion/BEA? It's All Stacked Up!*

### **Paper 723**

To contact the author:

**John King**

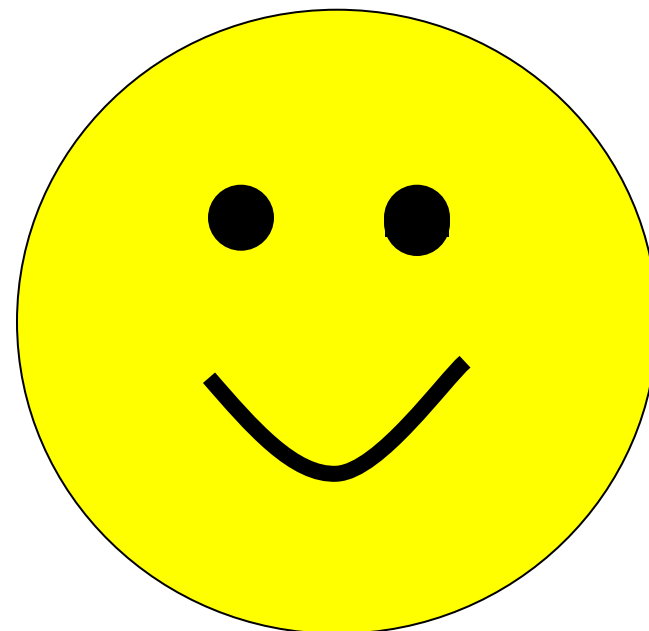
**King Training Resources**

6341 South Williams Street

Littleton, CO 80121-2627 USA

1.800.252.0652 - 1.303.798.5727

Email: [john@kingtraining.com](mailto:john@kingtraining.com)



**Thanks for your attention!**

Today's slides are on the web:

<http://www.kingtraining.com>