Oracle Application Server 10g ESB

Overview
OracleAS Integration provides the complete web services infrastructure for building, deploying and managing distributed applications based on open systems standards. Oracle’s Enterprise Service Bus (ESB) is designed to implement your Service Oriented Architecture (SOA) and Event Driven Architecture (EDA) providing a responsive, low cost, high impact framework for matching technology needs to your business problems.

Product Overview
Oracle’s ESB is the foundation for delivering services utilizing an SOA and EDA. At its core, it is a loosely coupled application framework that provides businesses with increased flexibility, reusability and overall responsiveness in a distributed, heterogeneous, message-oriented environment.

Integrated Platform
Oracle AS Integration consists of four important solution components: (i) ESB, (ii) BPEL PM, (iii) B2B and (iv) BAM. Oracle provides the total one-stop platform for enterprise integration. It is fully integrated with the Oracle AS OC4J J2EE, Oracle 10g RDBMS, Oracle JDeveloper’s integrated DVE and Oracle BI. It leverages Oracle infrastructure and GRID features such as security, high availability and scalability.

Reliable Multi-Transport Bus
Provides flexible real-time enterprise backbone supporting multiple protocols with special in-memory optimization for service calls within the same virtual machine. Features complete messaging infrastructure for managing fast, scalable, guaranteed once and only once QOS for point-to-point and publish/subscribe patterns. Supports Oracle OC4J JMS, Oracle JMS for Advanced Queues (AQ) on the Oracle Database and many 3rd party JMS products.
**Complex Business Data Transformations**

Utilizes standards based data mapper functionality within JDeveloper to create transformation templates in the XSLT language for reuse across the enterprise. The auto-mapping feature remembers and reuses common mappings from previous transformations. Cross system referencing and domain value mappings are included for multi system index lookups.

**Pervasive Enterprise System Connectivity**

Oracle AS Adapters provide bi-directional, real-time connectivity and support open standards such as JCA, XML, JMS, Web Services and WSIF. The Packaged Application and technology protocol adapters provide access to over 200 data sources with tight integration to Oracle Applications. All adapters conform to the J2EE Connector Architecture (JCA) open standard adopted by all major integration vendors.

**Flexible Content Based Routing**

Oracle ESB exposes routing rules using design time deployment descriptor definitions that can be modified at runtime to adjust application efficiency. It supports a variety of rules engines including Oracle AS Java Business Rules and external providers. Content filtering can be implemented in messaging systems such as JMS using configurable filter based subscriptions and message selectors. CBR services can be deployed with Oracle JDeveloper using Java, PL/SQL or Oracle BPEL PM.

**Integrated Modeling Environment**

Oracle JDeveloper provides a comprehensive, easy to use design time graphical interface for building and deploying ESB services. The diagrammer tool enables visually linking services and single click deployment. It includes a WSDL editor, integrated XSLT mapper, and wizards for building messaging and adapter services.

**Comprehensive Manageability**

Distributed ESB services are centrally managed with Oracle Enterprise Manager (EM) and the ESB Monitor. The ESB Topology Viewer allows you to graph dependency charts or impact analysis for proposed changes to your systems. The viewer includes ESB wide search and browse functionality to locate specific ESB service instances. Built-in Oracle AS BAM support enables application alerting, reporting and organizational SLA monitoring.

**Summary**

Oracle’s integration solution and ESB provide a complete, productive, open, extensible, and mission-critical integration platform that is best in class for value and functionality. Regardless of your organization’s size, the complexity of your IT infrastructure, or the increasing demands of your business, Oracle Integration and Oracle ESB can provide the edge you need in today’s competitive business environment.