

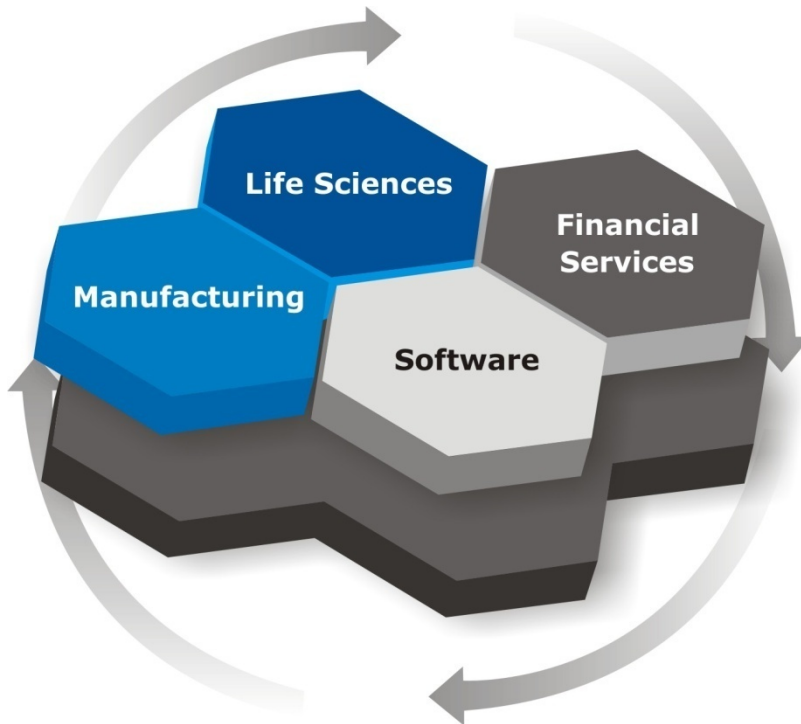
Integrating Business Process Across Oracle E-Business Suite, PeopleSoft, Siebel and Agile

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Sierra Atlantic Inc

Agenda

- Corporate Overview
- Business Need
- Available Technology Interfaces
 - Oracle E-Business Suite
 - PeopleSoft
 - Siebel
 - Agile
- Cross Application Integration using Fusion Middleware – BPEL PM, ESB & ODI
- Oracle Application Integration Architecture (AIA)
- Demonstration
- Q&A

Corporate Overview



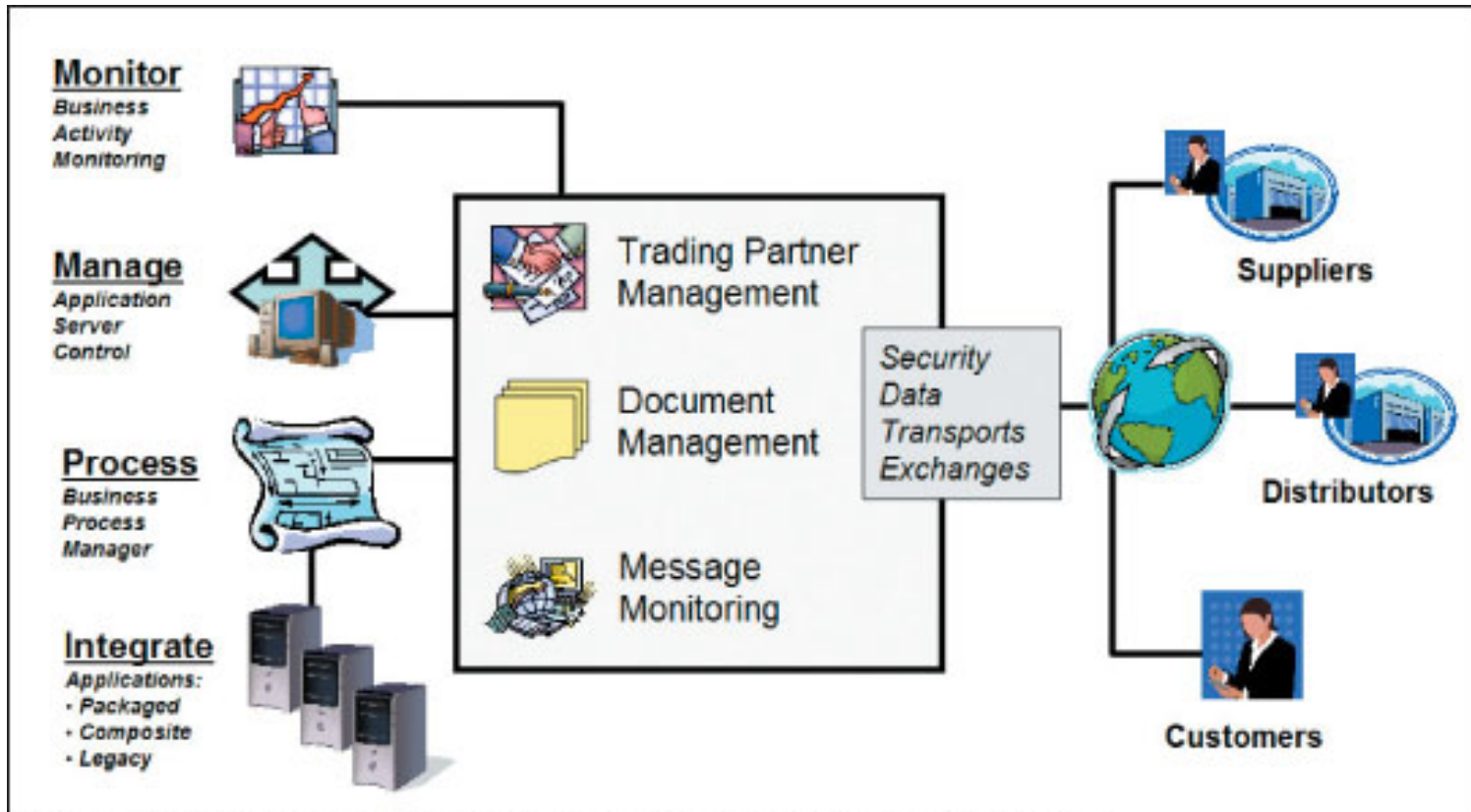
- World class global delivery model for IT services
- Deep focus in enterprise applications, business process integration and outsourced product development since inception
- 1800+ employees worldwide
- Over 200 active customers across 20 countries
- Superior process maturity: SEI CMM Level 5, ISO 9001, ISO 27001 & SAS70



Why Integrate?

- Integration is a major hurdle in the way enterprise applications deliver the intended business benefits
 - Critical business information such as customer and product is spread over multiple applications. The quality and integrity of that information is a major concern
 - Business process span multiple applications
 - No single application system typically automates end-to-end business process

Requirements for Internal & External Integration



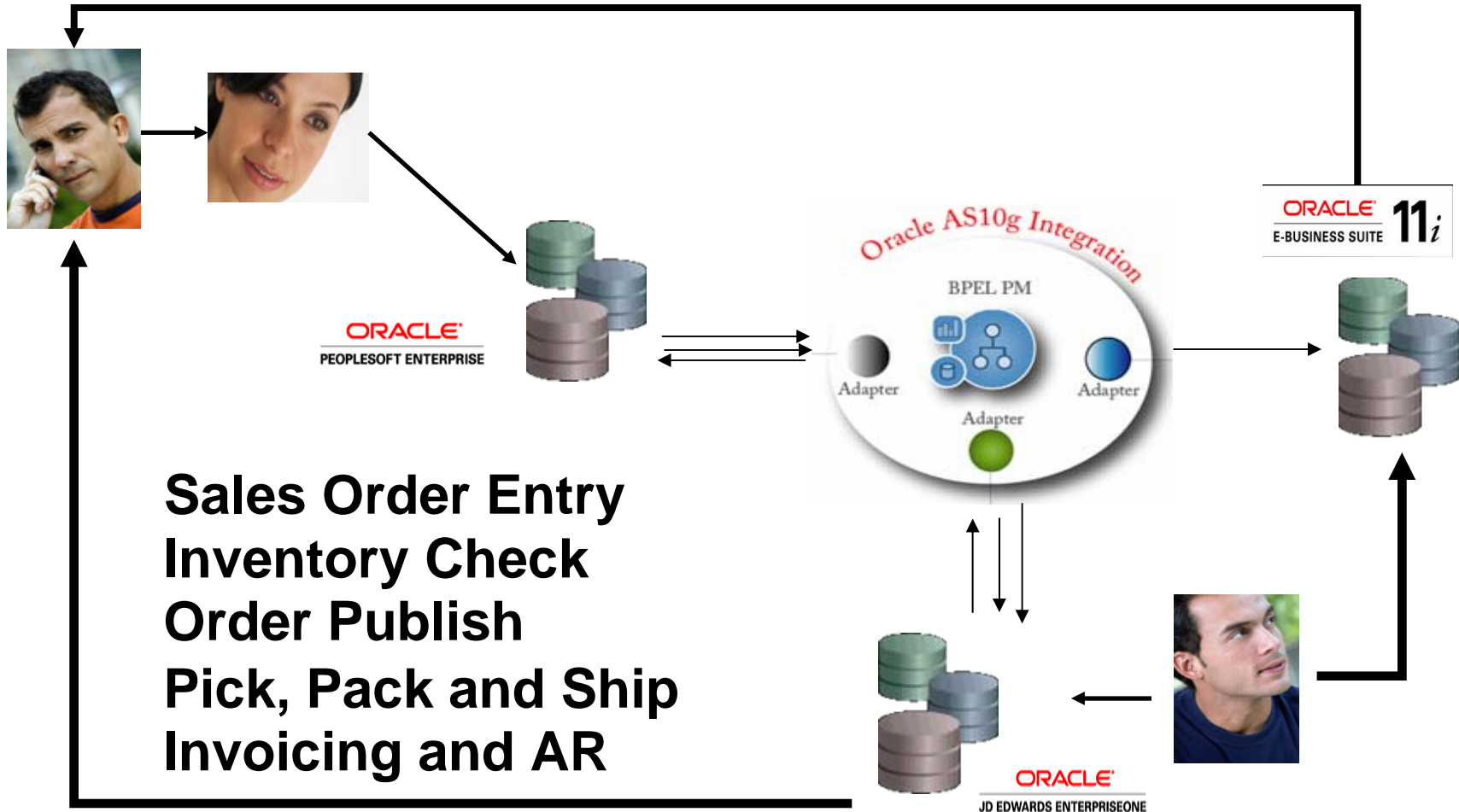
Why is Integration so hard?

- Application Knowledge
- Application APIs
- Transport / Delivery
- Transformation Mapping
- Error Handling
- XML standards to choose
- Robust and scalable integration architecture

Integration Types

- Synchronous Integrations
- Asynchronous Integrations
- Batch Integrations
- Process Oriented Integrations

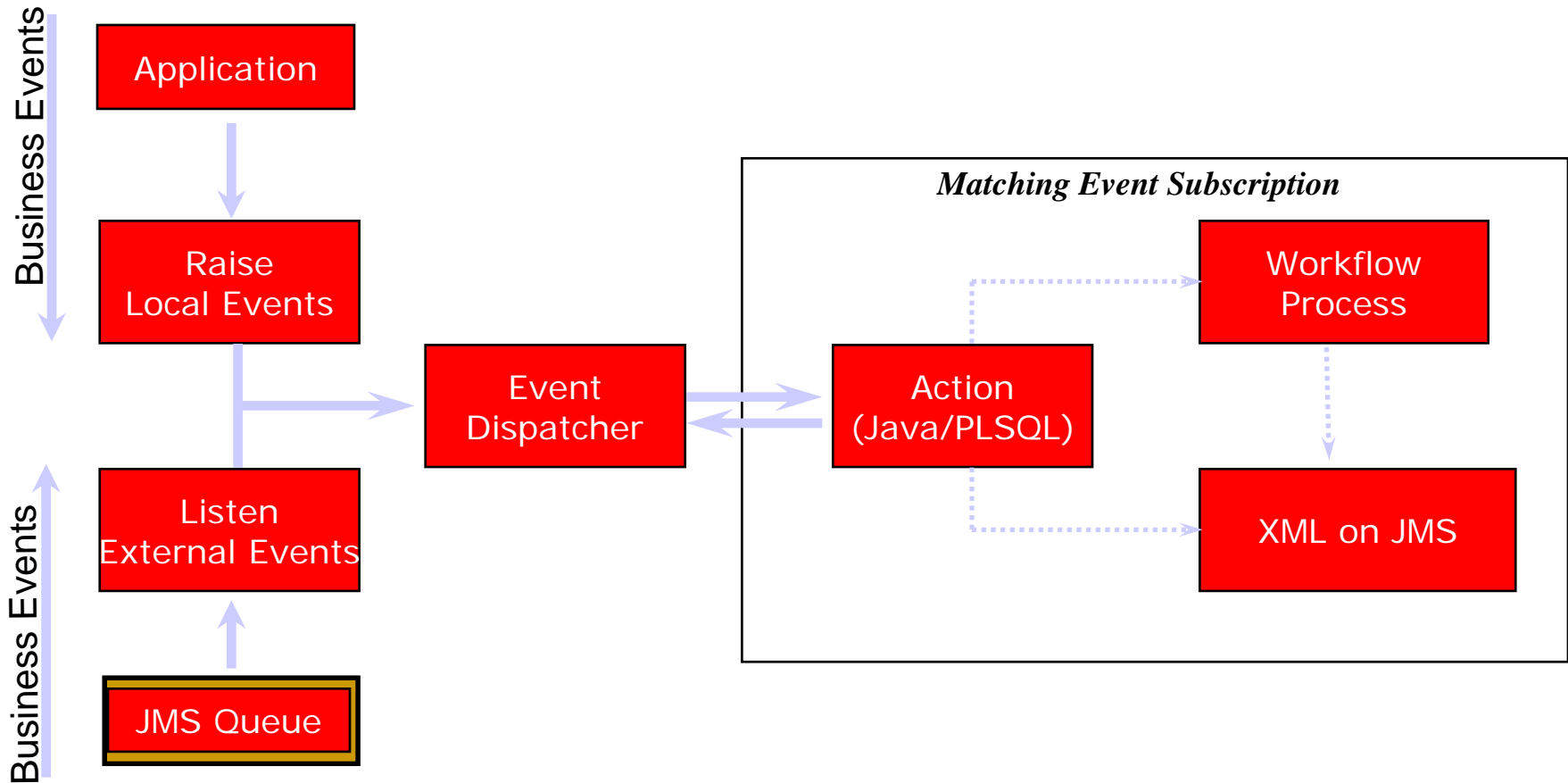
Sample Process - Order to Invoice Process Flow



Oracle E-Business Suite

- Business Event System
- XML Gateway
- Oracle e-Commerce / EDI Gateway
- Concurrent Program / Interface Tables
- PL/SQL API

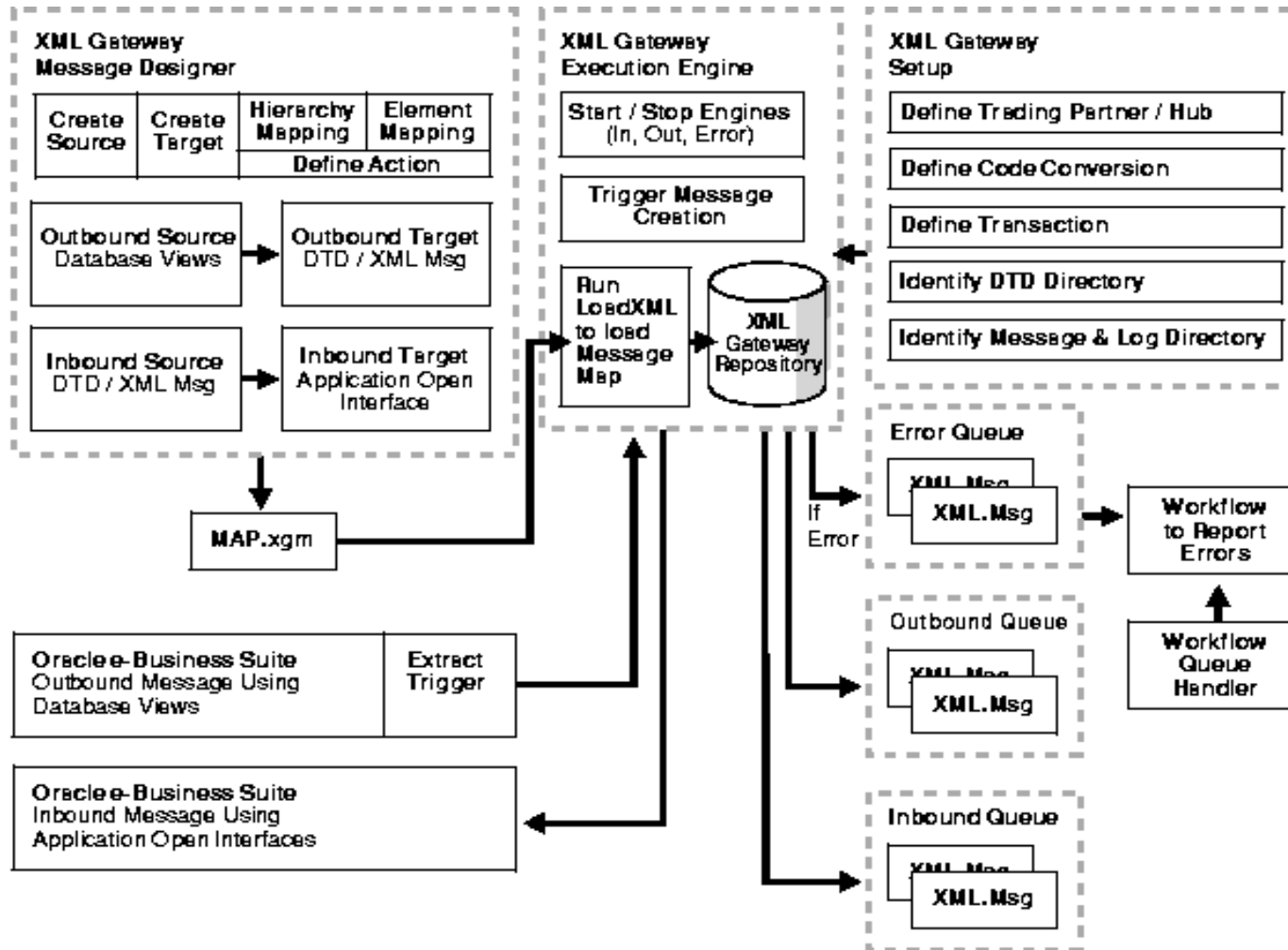
Business Event System Architecture



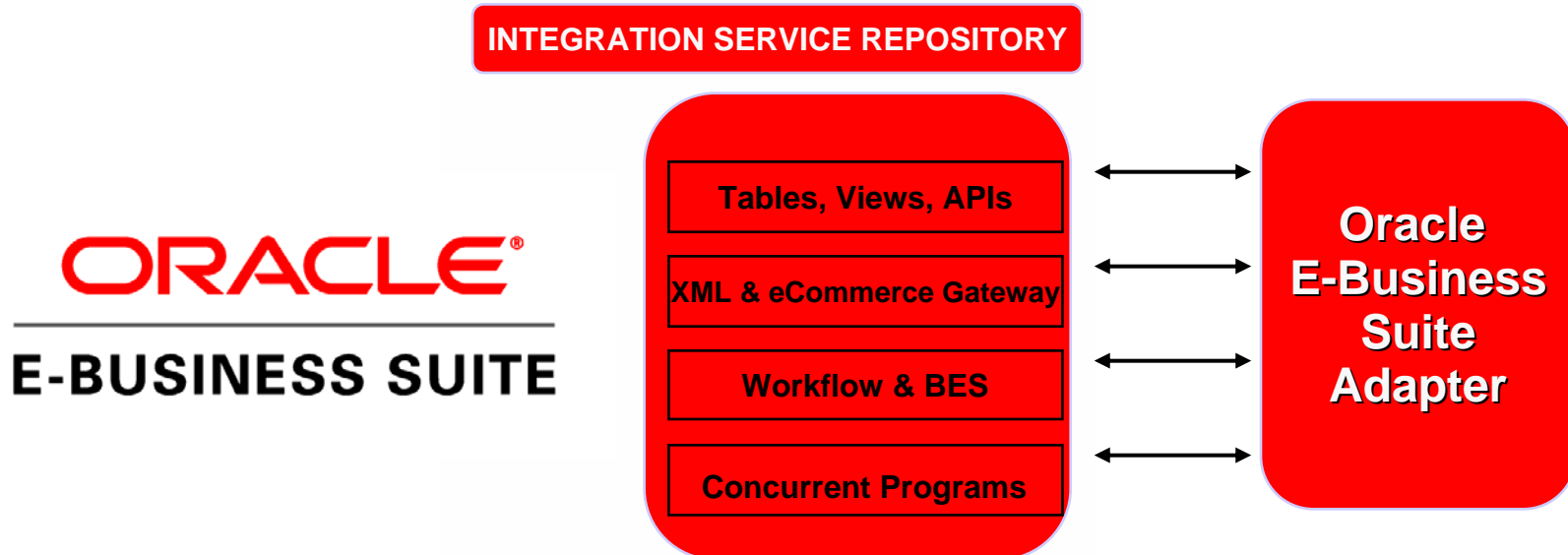
XML Gateway

- Provides a common way to extract data out of or import data into the Oracle e-Business Suite that is
 - Based on published XML standards
 - Available as a Web Service
 - Propagated to another instance or transported to a Trading Partner
 - Initiated by an application Business Event
 - Managed by a workflow process

XML Gateway



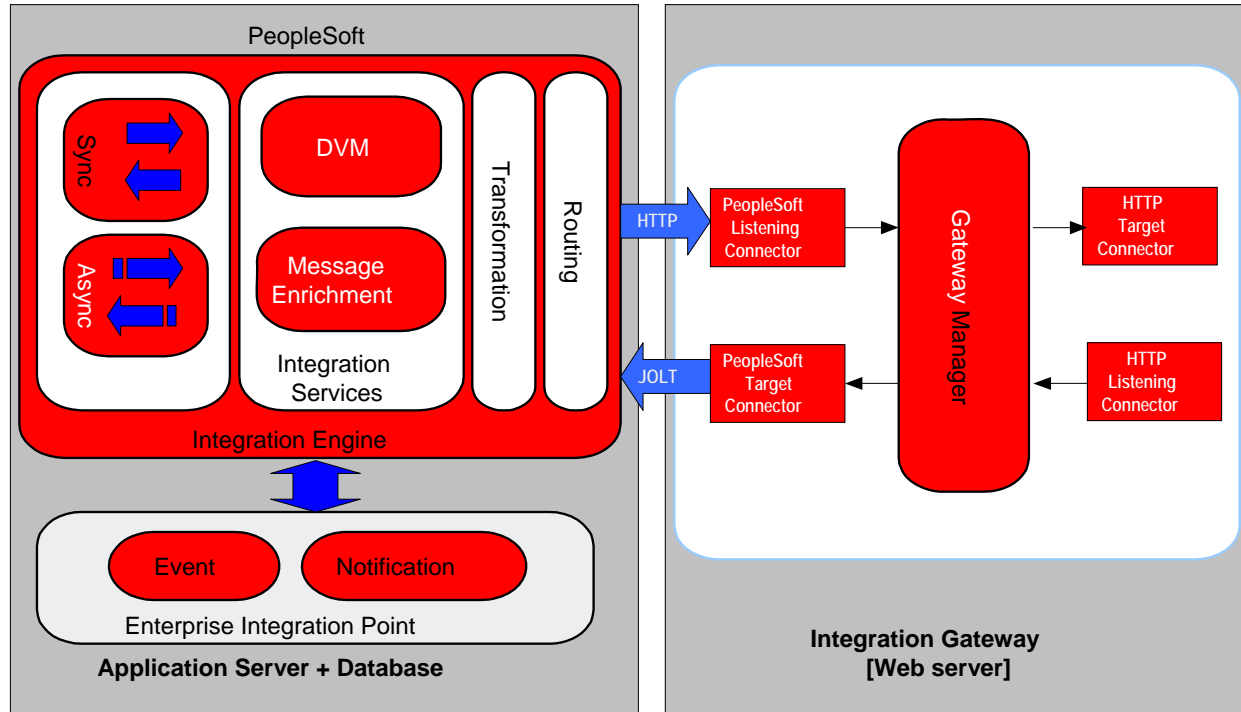
Oracle E-Business Suite Integration



PeopleSoft Integration Tools

- Integration Broker
- People Tools
- Component / Service Interface – APIs
- Application Message
- File Layout

Integration Broker Architecture



Siebel

- EAI Transports
- Service framework
- Object Interfaces
- Database Level Interfacing
- Java Data Bean

Service Framework

- EAI Java business service is a service framework.
- Allows custom business services to be implemented in JAVA
- Works by creating JVM in-process with Siebel application
- Invokes JAVA implementation using JNI

Other Interfaces

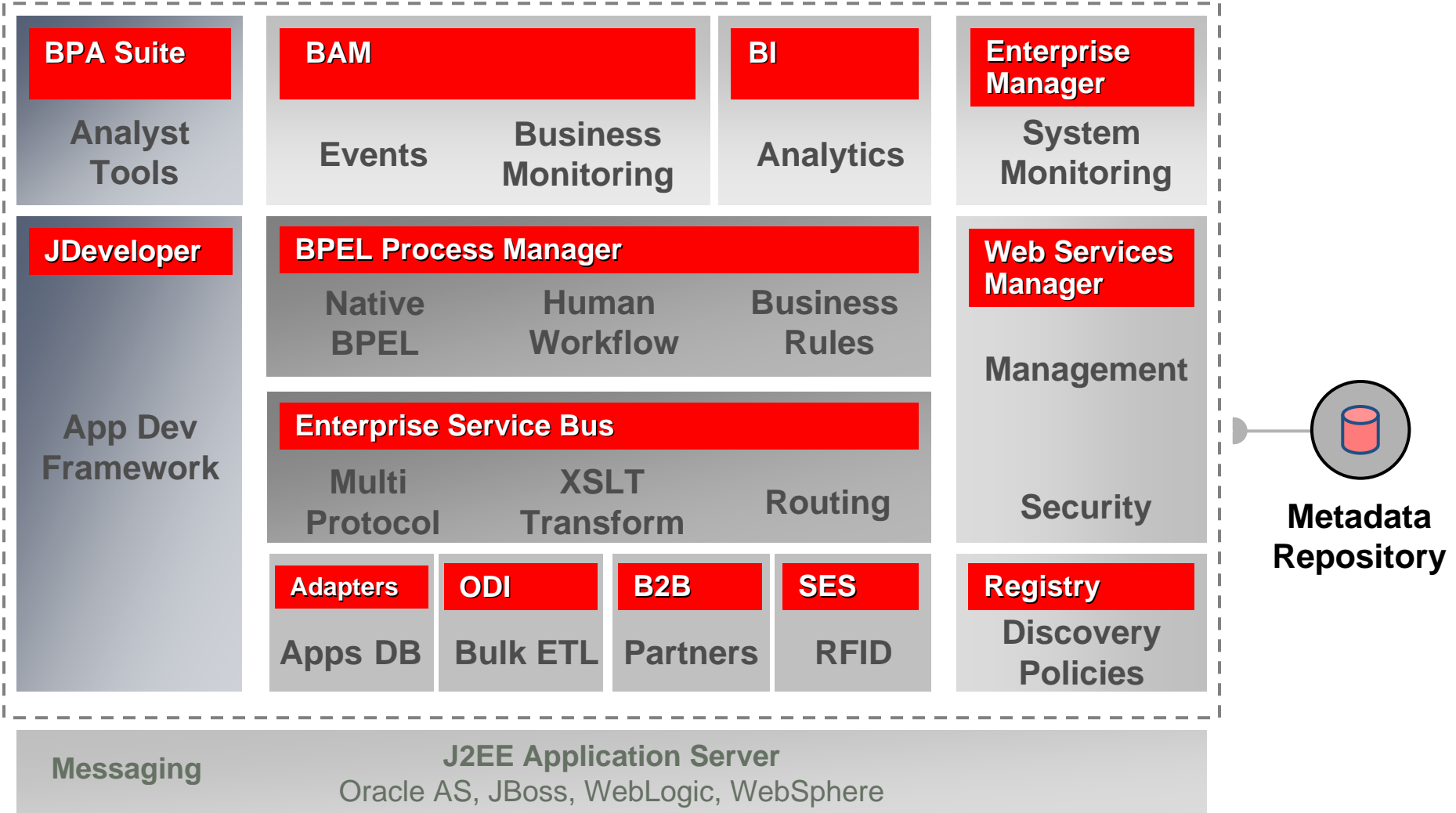
- Database Level interfacing
 - Enterprise Integration Manager
 - Batch Loading
 - High Volume Data exchange
- JAVA Data Beans
 - Business Objects & business components
 - Business Services & Property Sets
 - Integration Objects

Agile Integration Framework

- Agile Content Server (ACS) & ChangeCAST
- SDK
- Process Extensions
- Export
- Import



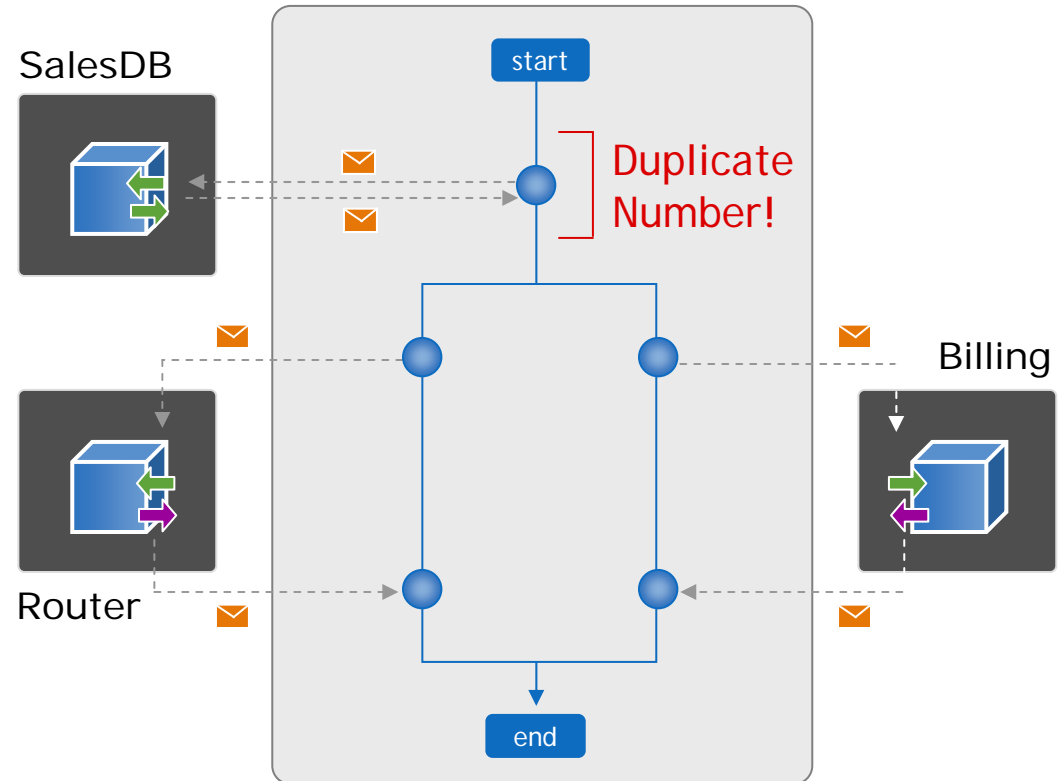
Oracle SOA Technologies



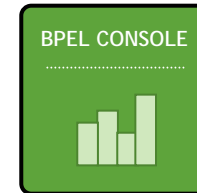
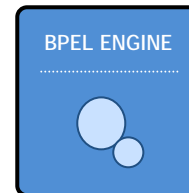
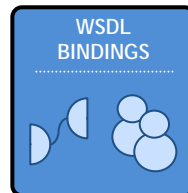
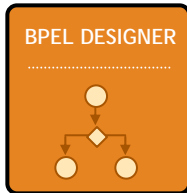
BPEL PM: Orchestration Standards

Standard markup language for composing a set of discrete services into an end-to-end process flow

- 10+ years of R&D from MSFT and IBM
- Rich Flow Semantics
- Optimized Bindings (not just Web services)
- Transformation
- WS-Security
- WS-Addressing
- A Process is a Service



BPEL PM: Key Features



MODELING	CONNECTIVITY	EXECUTION RUN-TIME	MANAGEMENT
<ul style="list-style-type: none"> • Comprehensive BPEL 1.1 • Visual Modeling Tool • Native Java Embedding • XML Facade • XSLT Transformation • Detailed error reporting • Ant-based build and deployment framework • Versioning 	<ul style="list-style-type: none"> • Bindings/adapters to 300+ backend systems (JCA) • JMS Bridge, MQ Series, TIBCO • .NET, Axis, BEA, Systinet, interop • User Tasks/Workflow • Email with Attachment 	<ul style="list-style-type: none"> • Comprehensive BPEL 1.1 • Sync. Messaging • Async. Messaging • Context Dehydration • Reliability • Side-by-side versioning • Compensating Transactions • Clustering • Large XML documents 	<ul style="list-style-type: none"> • Visual Monitoring • Auditing • BPEL Debugging • In-flight Administration • Performance Tuning • Task Management • Partitioning/Domains • Rich unit test capability
BPEL, XQuery, XSLT, WS-ADDRESSING			
Application Server (Oracle, WebLogic, WebSphere, JBoss)			

Oracle ESB: The foundation for SOA

ESB is a multi-protocol fabric to separate integration concerns from applications and business logic

How is this achieved?

1. **Virtualize Endpoints:** *From resources to services*
2. **Transform:** *Convert data to target formats*
3. **Route:** *Reliably transport and route data over a variety of protocols*

Expose everything as web services

1. Standards-based: *XPath, XSLT, SOAP, JMS, JCA, ...*
2. Hot-pluggable: *J2EE, JMS, Database, ...*

Core Features of an ESB



Connects

adapters, web services



Transports

over JMS, HTTP



Routes

based on content/header



Translates

protocols & formats



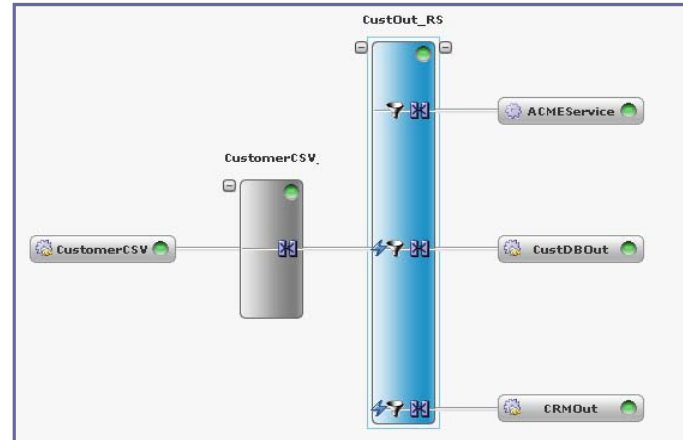
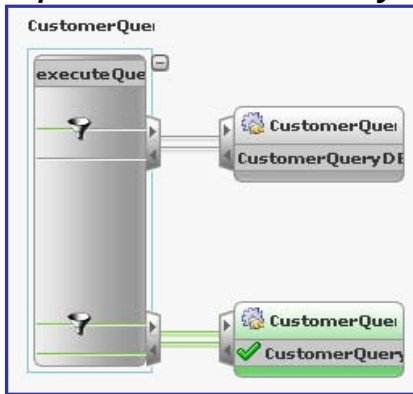
Virtualizes

services

ESB Out of Box Patterns

Virtualized Service

- 2 way sync – RPC like
- Content based responder
- Static inbound WSDL
- Operational flexibility

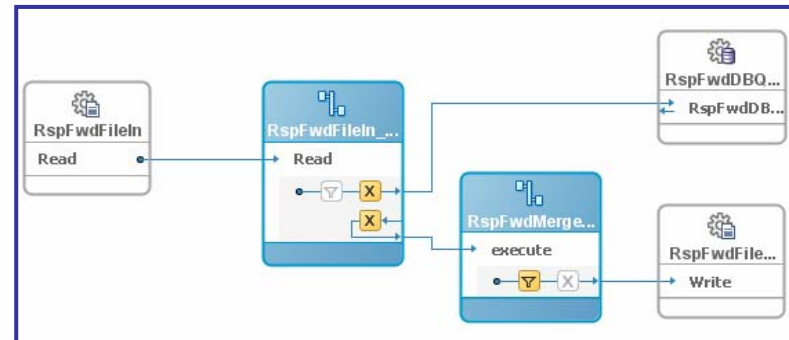


Fan In/Out

- 1 way store and fwd
- fire and forget
- Sync or Async
- Multiple transactions
- End to end

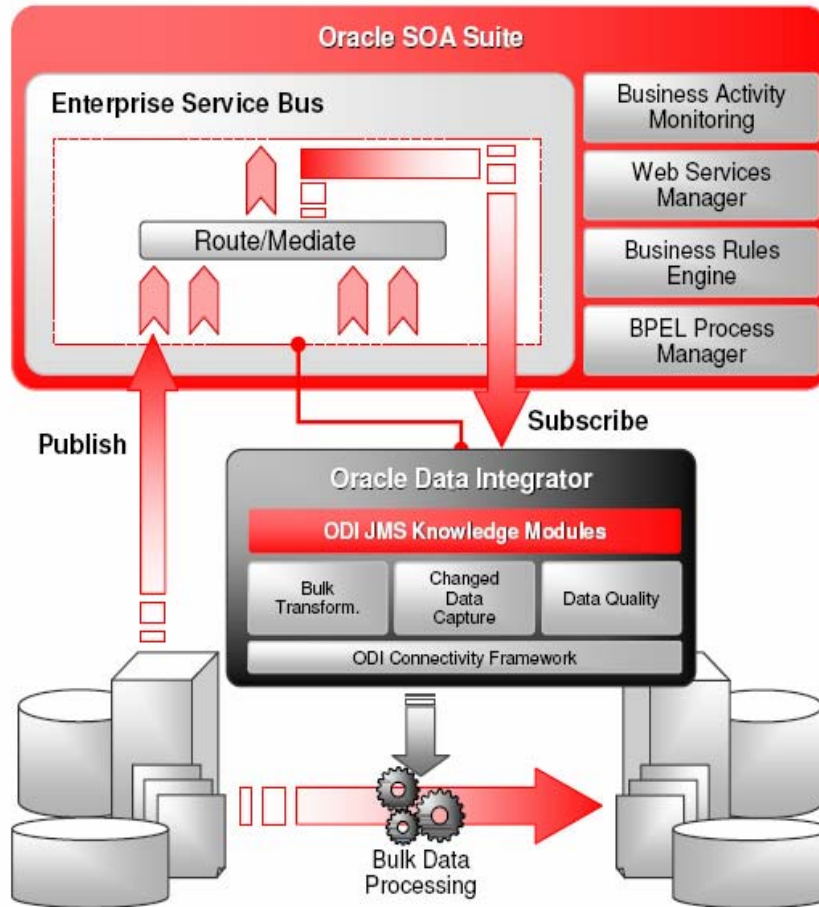
Response Forward

- 1 way inbound
- 2 way outbound
- Route based on callout response
- Forward original document



Oracle SOA Suite and ODI

Add Bulk Data Transformation to Message Processing



- **Oracle SOA Suite - ESB**

- Enterprise Service Bus for message-based real time integration of Apps
- Standards-based routing, publish-subscribe, Business Rules & Adapters
- Oracle's strategic messaging technology

- **Oracle Data Integrator**

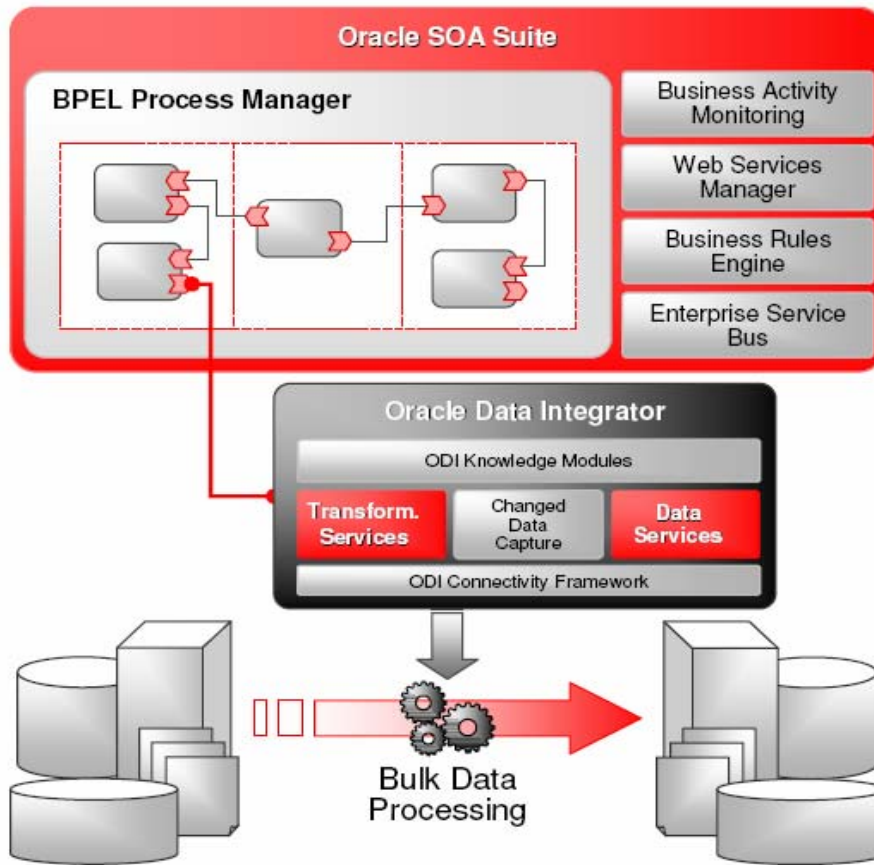
- Efficient bulk data processing as part of message flow
- Flexible use of SQL-Oriented vs. XML-Oriented data transformations
- Unified modeling, monitoring, metadata, error Mgmt, auditing

- **Example use cases**

- Periodic initialization of real-time messaging system with large data volumes
- Efficient combination of CDC with JMS

Oracle SOA Suite and ODI

Add Bulk Data Transformation to Business Process

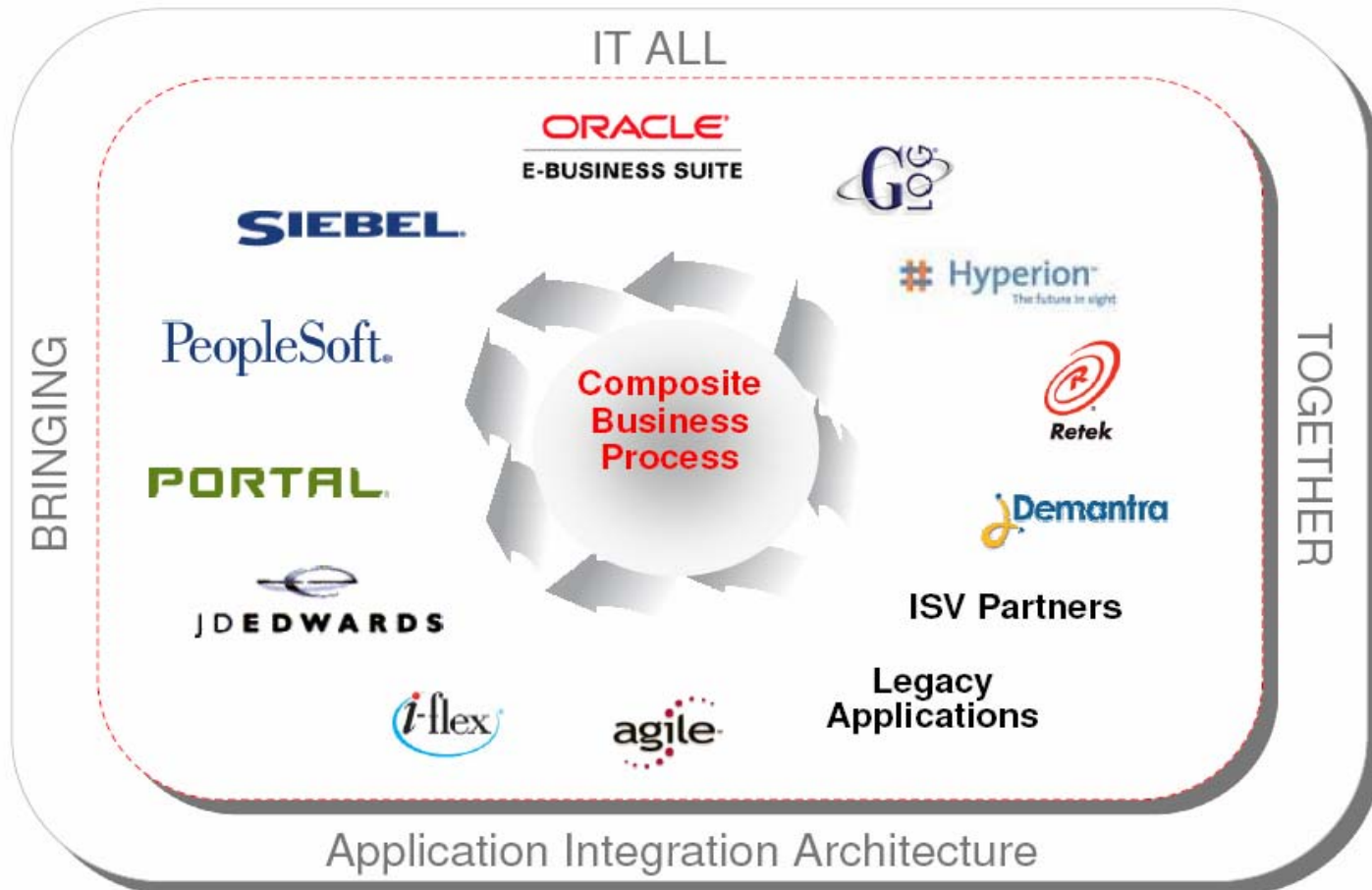


- **Oracle SOA Suite - BPEL**
 - BPEL Process Manager for Business Process Orchestration & Workflow
 - Standards-based Composite Apps and Integration Processes
 - Oracle's Strategic BPM Technology
- **Oracle Data Integrator**
 - Efficient bulk data processing as part of Business Process
 - Interact via **Data Services** and **Transformation Services**
 - Unified modeling, monitoring, metadata, error mgmt, auditing
- **Example use cases**
 - Trigger DW update off-schedule based on Business Rules
 - Drive workflows notifications to handle errors from Data Integration or Quality

BPEL / ESB for Integration

- **BPEL ↔ PSFT Integration**
 - BPEL consuming PeopleSoft Web Services
 - Component Interfaces
 - Application Messages
 - PeopleSoft consuming BPEL Web Services
 - PeopleCode API can launch BPEL process
 - PeopleCode utility AppClass that monitors and tracks BPEL processes
- **BPEL ↔ Siebel Integration**
 - Siebel Inbound/Outbound Web Service
 - Business Services
 - Workflow
- **BPEL ↔ E-Business Suite Integration**
 - EBS adapter
- **BPEL ↔ Agile Integration**
 - AIF

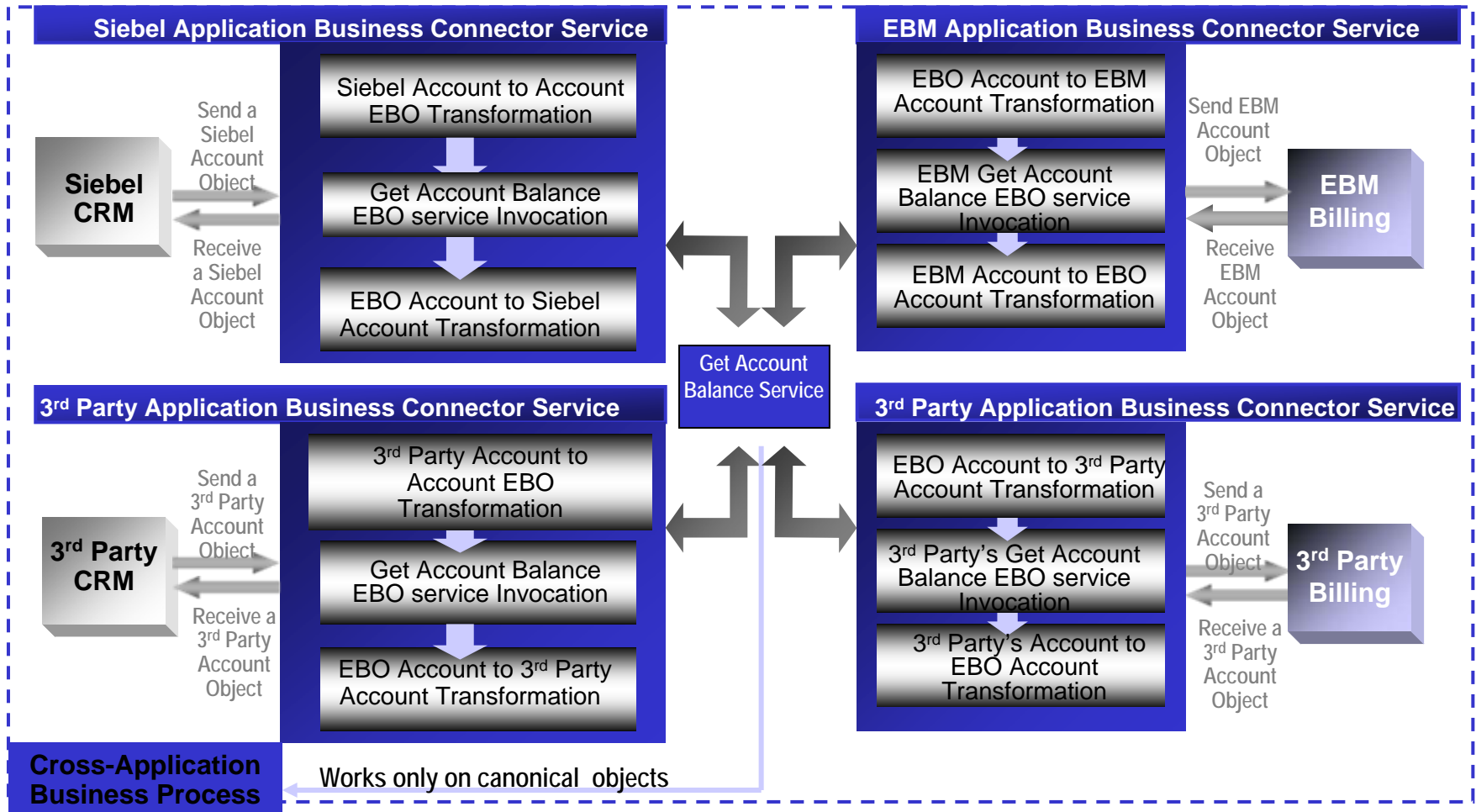
Oracle Application Integration Architecture



- ✓ Leverage existing applications for greater business impact
- ✓ Reduce the cost and risk of integrating applications
- ✓ Improve adaptability of business processes

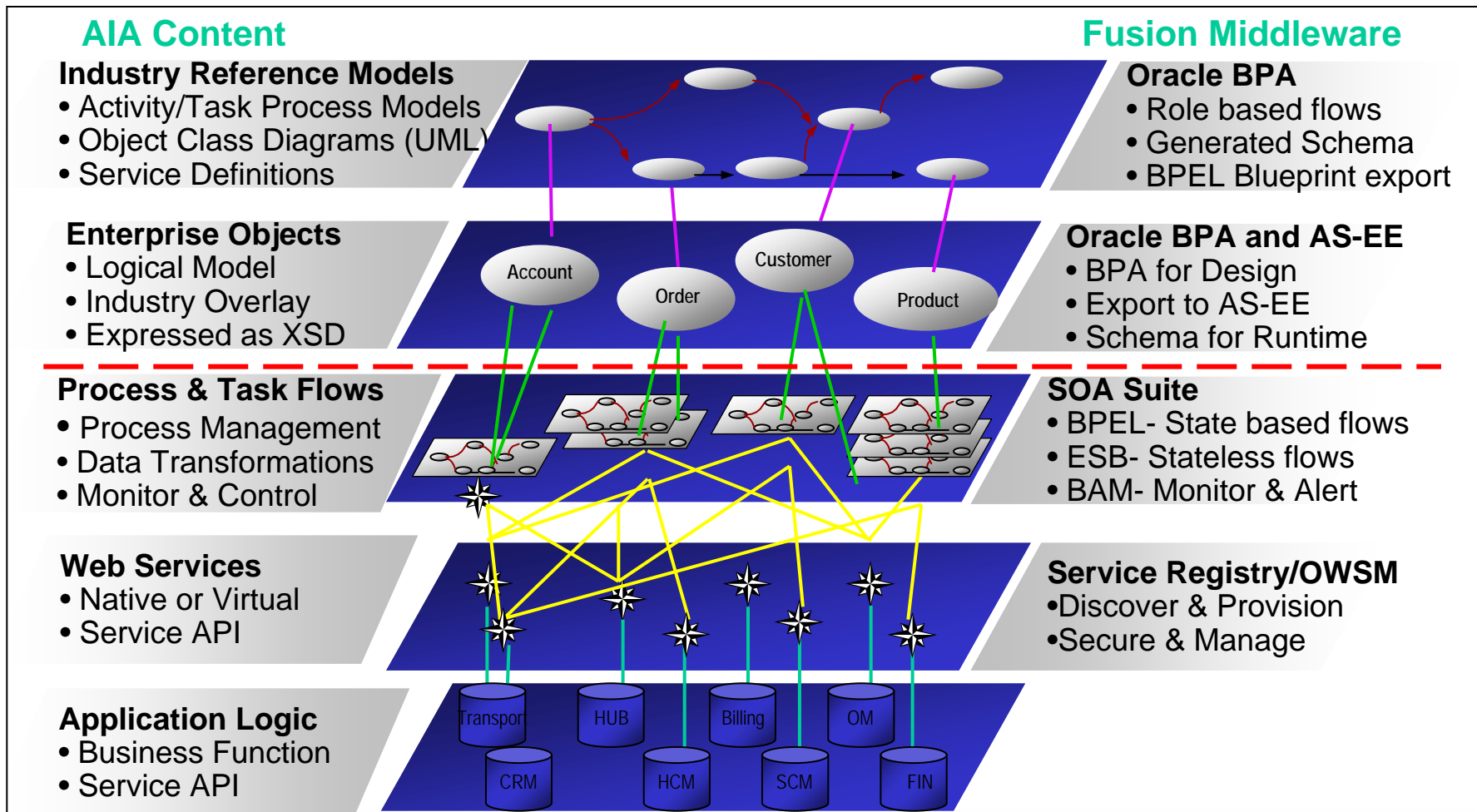
AIA Principles

Integration Architecture – Hot Pluggable



Application Integration Architecture

Solution Artifacts



Demonstration

Thank You.

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