AIA Update – Application Integration Today and Tomorrow

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Oracle AIA Product Management

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Oracle Consulting
Agenda

• Today - AIA 2.5
  • Foundation Pack
  • Available Process Integration Packs

• Tomorrow - AIA 3.0
  • Architecture Update: Oracle SOA Suite 11g
  • Enhanced Development Lifecycle
  • Demo Integrating Oracle E-Business Suite 12.1
Today - AIA 2.5
Oracle Application Integration Architecture
Reduce Complexity and Accelerate Delivery

Best Practice Processes
Reference Process Models
Composite Business Flows

Standardized Composition Framework
100+ Objects, 1000+ Services
Cross Industry and Industry Objects
FMW 10.1.3.4 Certified

Pre-built Composite Processes
30+ PIPs To Date

Customer Goal: Integrated Business Process

Oracle Application Integration Architecture

Foundation Pack
Business Process Composition Framework
- Canonical Layer (EBO/EBS)
- Pre-Defined Reference Patterns
- Integration Architecture
- FMW Methodology
- Integration Governance Tools
- Developer Utilities...

Process Integration Packs
Pre-built Composite Application Processes
- Order to Cash
- Design to Release
- Oracle to SAP
- Order to Bill
- Cust. MDM
- Prod. MDM
- Others...

ORACLE FUSION MIDDLEWARE

Customer Goal: Integrated Business Process

Oracle

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How AIA Is Delivered

**Oracle Application Integration Architecture**

**Process Integration Packs**
- Loosely coupled composite business processes

**Foundation Packs**
- Comprehensive business process composition framework

**Direct Integrations**

**Manage.** Pre-built integrations to support data flows between systems

**Process Integration Packs**

**Optimize.** Pre-built composite business processes across enterprise Applications

**Foundation Packs**

**Standardize.** Common Object and Shared Service Library with supporting SOA programming model and best practice implementation methods

**Example Uses:**
- Modernizing apps
- Consolidating systems/MDM
- Improving/Extending processes
## Available AIA Pre-Built Integrations

### Cross Industry Process Integration Packs

<table>
<thead>
<tr>
<th>Integration Pack</th>
<th>Available</th>
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| **Agile Product Lifecycle Management Integration Pack for Oracle E-Business Suite:** Design to Release | Aug 2008  | Foundation Pack 2.5 | • Agile PLM 9.2.2.6, 9.3  
  • Oracle E-Business Suite R11.i.10 CU2 and R12.1.1  
  • PIM 12.1.1 |
| **Siebel CRM Integration Pack for Oracle E-Business Suite Order Management**     | Aug 2008  | Foundation Pack 2.5 | • Siebel CRM 8.0.0.7 SIA and 8.1.1 SIA  
  • Oracle E-Business Suite R11.i.10 CU2 and R12.1.1. |
| **Siebel CRM Integration Pack for Trade Promotion Management**                   | Sep 2007  | N/A        | • Siebel CRM 8.0 SIA  
  • Oracle E-Business Suite 11.i.10 CU2 |
| **Oracle Customer Master Data Management Integration (Base Pack & Options)**     | Jan 2009  | Foundation Pack 2.5 | • Siebel UCM 8.1.1(Oracle Customer Hub)  
  • Siebel CRM 8.1.1.1 SIA  
  • Oracle E-Business Suite 11.i.10 CU2 and R12.1.1  
  • Oracle Communications Billing and Revenue Management 7.4 (BRM)  
  • SAP ECC 6.0 |
| **Oracle Product Master Data Management Integration (Base Pack & Options)**      | Jan 2009  | Foundation Pack 2.5 | • E-Business Suite PIM 12.1.1 (Oracle Product Hub)  
  • Siebel CRM 8.1.1.1 SIA  
  • Oracle E-Business Suite 11.i.10 CU2 and 12.1.1 |
| **Oracle Design to Release Integration Pack for Agile Product Lifecycle Management and JD Edwards EnterpriseOne** | Oct 2009  | Foundation Pack 2.5 | • Agile PLM 9.2.2.6  
  • JD Edwards EnterpriseOne 9.0 |
| **Oracle Project Portfolio Management Integration Pack for Primavera P6 and JD Edwards EnterpriseOne** | Oct 2009  | Foundation Pack 2.5 | • Primavera P6 PPM 7.0  
  • JD Edwards EnterpriseOne 9.0 |
| **Oracle Project Portfolio Management Integration Pack for Primavera P6 and Oracle E-Business Suite** | Oct 2009  | Foundation Pack 2.5 | • Primavera P6 PPM 7.0  
  • Oracle E-Business Suite 11.5.10 |
| **Oracle Workforce Administration Integration Pack for PeopleSoft Human Resources** | Oct 2009  | Foundation Pack 2.5 | • PeopleSoft HCM 9.0 |

* Older version of the PIP supports older application versions
# Available AIA Pre-Built Integrations

## AIA for SAP Process Integration Packs

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| Agile Product Lifecycle Management integration Pack for SAP: Design to Release | Jan 2009 | 2.5 | • Agile PLM 9.2.2.6, 9.3  
• SAP R/3 4.7 and ECC 6.0 |
| Oracle Order to Cash Integration Pack for Siebel CRM and SAP | Oct 2009 | Foundation Pack 2.5 | • Siebel CRM 8.0 SIA  
• SAP ECC 6.0 |

## SaaS Process Integration Packs

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| Oracle Lead to Order Integration Pack for Oracle CRM On Demand and Oracle E-Business Suite | Oct 2007 | N/A | • Oracle CRM On Demand  
• Oracle E-Business Suite 11.i.10 CU2 and 12.1.1 |
| Oracle CRM On Demand Integration Pack for JD Edwards EnterpriseOne: Lead to Order | Jan 2009 | Foundation Pack 2.5 | • Oracle CRM On Demand R15 (or later)  
• JDE EnterpriseOne 8.1.2, 9.0 |
| Oracle Lead to Order Integration Pack for Oracle CRM On Demand and JD Edwards World | Oct 2009 | Foundation Pack 2.5 | • Oracle CRM On Demand  
• JDE World A9.2 |

## Industry Process Integration Packs

<table>
<thead>
<tr>
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| Oracle Financial Operations Control Integration Pack for Oracle Retail Merchandising Suite and E-Business Suite Financials | Oct 2009 | Foundation Pack 2.5 | • Oracle Retail Merchandise Suite 13.1  
• Oracle E-Business Suite 12.1.1 |
| Oracle Process Integration Pack for Oracle Utilities Field Work | Oct 2009 | Foundation Pack 2.5 | • Oracle Utilities Work force and asset management (WAM) 1.8.1  
• Oracle Utilities Customer Care & Billing (CCB) 2.2  
• Oracle Utilities Mobile workforce management (MWM) 1.5 |
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| Siebel CRM Integration Pack for Oracle Comms Billing and Revenue Management: Order to Bill* | Nov 2007 | Comms FP | • Siebel CRM 8.1.1 SIA  
• Oracle Communications Billing and Revenue Management 7.4  
• Oracle E-Business Suite 12.1.1 |
| Siebel CRM Integration Pack for Oracle Comms Billing & Revenue Management: Agent Assisted Billing Care* | Nov 2007 | Comms FP | • Siebel CRM 8.1.1 SIA  
• Oracle Communications Billing and Revenue Management 7.4 |
| Oracle Comms Billing and Revenue Management Integration Pack for Oracle E-Business Suite: Revenue Accounting* | Nov 2007 | Comms FP | • Oracle Communications Billing and Revenue Management 7.4  
• Oracle E-Business Suite 12.1.1 |
| Siebel CRM Integration Pack for i-flex FLEXCUBE Account Originations | Nov 2007 | N/A | • Siebel CRM 7.8.2 SIA (FINS)  
i-flex FLEXCUBE UBS – FC UBS V.UM 7.2.0.0.0.0 |
| Siebel CRM Integration Pack for Banking Account Originations | Feb 2008 | N/A | • Siebel CRM 7.8.2 SIA (FINS) |
| Oracle Retail Merchandising Integration Pack for PeopleSoft Enterprise Financials: Financial Operations Control | Jan 2009 | Foundation Pack 2.5 | • Oracle Retail Merchandise Suite 13.1  
• PeopleSoft Enterprise Financial 9.0 |
| Oracle Financials Accounting Hub Integration Pack for PeopleSoft General Ledger | Jan 2009 | Foundation Pack 2.5 | • PeopleSoft Enterprise Financials 8.9, 9.0  
• Oracle Financials Accounting Hub 12.0.5 |
| Financial Management Integration Pack for Oracle Transportation Management and Oracle E-Business Suite | May 2009 | Foundation Pack 2.5 | • Oracle Transportation Management 6.0  
• Oracle E-Business Suite 12.1.1 |
| Order Management Integration Pack for Oracle Transportation Management, Oracle E-Business Suite and Siebel CRM | May 2009 | Foundation Pack 2.5 | • Oracle Transportation Management 6.0  
• Oracle E-Business Suite 12.1.1  
• Siebel 8.0.0.5 and 8.1 |
| Driver Management Integration Pack for Oracle Transportation Management and Oracle E-Business Suite | May 2009 | Foundation Pack 2.5 | • Oracle Transportation Management 6.0  
• Oracle E-Business Suite 12.1.1 |

* Older version of the PIP supports older application versions
## Available AIA Pre-Built Integrations

**Direct Pre-Built Integrations (Data Synchronization made simple)**

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<th>Integration</th>
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<tr>
<td>Oracle CRM On Demand Integration to Siebel CRM</td>
<td>Jul 2008</td>
<td></td>
<td>• Oracle CRM On Demand&lt;br&gt;• Siebel 7.8.2 SEA (Horizontal)</td>
</tr>
<tr>
<td>Siebel Life Sciences Integration for Oracle Adverse Event Reporting System</td>
<td>Aug 2007</td>
<td></td>
<td>• Oracle Adverse Event Reporting System 4.6.1&lt;br&gt;• Siebel CRM 7.8.2.x SIA</td>
</tr>
<tr>
<td>Demantra Integration Pack for Siebel CRM Consumer Goods</td>
<td>May 2008</td>
<td></td>
<td>• Siebel CRM 7.5+&lt;br&gt;• Demantra 7.2.1</td>
</tr>
<tr>
<td>Oracle Transportation Management (Glog) Integration to E-Business Suite</td>
<td>Sep 2006</td>
<td>Not based on Foundation Pack</td>
<td>• Oracle Transportation Management 5.5&lt;br&gt;• Oracle E-Business Suite 11.5.10 CU2</td>
</tr>
<tr>
<td>Oracle Enterprise Taxation Management Integration to PeopleSoft Enterprise</td>
<td>Jan 2009</td>
<td></td>
<td>• Oracle Enterprise Taxation Management (v2.1.5 or later)&lt;br&gt;• PeopleSoft Financials 9.0, on PeopleTools 8.48</td>
</tr>
<tr>
<td>Financials for General Ledger and Accounts Payable</td>
<td></td>
<td></td>
<td>• Oracle Enterprise Business Suite R12</td>
</tr>
<tr>
<td>Oracle Enterprise Taxation Management Integration to Oracle E-Business Suite</td>
<td>Jan 2009</td>
<td></td>
<td>• Oracle Enterprise Taxation Management (v2.1.5 or later)&lt;br&gt;• Oracle Enterprise Business Suite R12 or R11.5</td>
</tr>
<tr>
<td>Financials for General Ledger and Accounts Payable</td>
<td></td>
<td></td>
<td>• Oracle Utilities CC&amp;B V2.2&lt;br&gt;• PeopleSoft Financials 9.0, on PeopleTools 8.48</td>
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<tr>
<td>Oracle Utilities Customer Care and Billing Integration to PeopleSoft</td>
<td>Feb 2009</td>
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<td></td>
<td>• Oracle Enterprise Business Suite R12 or R11.5</td>
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<tr>
<td>Oracle Utilities Customer Care and Billing Integration to J D Edwards</td>
<td>Feb 2009</td>
<td></td>
<td>• Oracle Utilities CC&amp;B V2.2</td>
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<td>• J D Edwards v8.12</td>
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</table>
| Demantra Sales and Operations Planning Integration to Hyperion Planning    | Jul 2009 | Not based on Foundation Pack | • Demantra 7.3  
• Hyperion 11.1.1                                       |
| Siebel CRM Integration to Oracle Incentive Compensation                     | Oct 2009 |                        | • Oracle E-Business Suite 12.1.1  
• Siebel CRM SIA 7.8.2                                       |
| Oracle Value Chain Planning Integration to JD Edwards EnterpriseOne        | Jul 2009 |                        | • Demantra 7.2.0.2  
• JDE E1 9.0  
• Oracle E-Business Suite 12.1.1                             |
Tomorrow - AIA 3.0
Fusion Middleware 11g – Agile & Intelligent Infrastructure

Business Requirement: Scalable, Virtualization Layer

→ FMW11g Feature: Oracle Service Bus

- **Platform for**
  - Virtualization of AIA Services
  - Stateless high-performing AIA Processes

- **Adapt to Change**
  - Service Virtualization
  - Protocol Switching

- **Adaptive Messaging**
  - Any to Any Protocol
  - Any to Any Payload

- **Multiple Communications**
  - Sync / Async
  - One-to-many / Many-to-one
  - Mix and Match

- **High Scalability**
  - Parallel Processing
  - Throttling
Fusion Middleware 11g – Services, Events & Processes

Business Requirement: Unified platform for integration and business processes

→ SOA 11g Feature: Unified Process Platform

- Single Standards-Based Platform for all business design & execution
- BPEL, BPMN, HWF, Rules – All in the same SCA-based IDE
- Round-tripping between BPA & BPM Suite
- Dynamic Business Process Adaptation
  - Business Rules Engine
  - Process Composer
Platform for Services, Events & Processes
AIA 3.0 on 11g – SCA based Architecture

- ABCS Composites
  - Reusable
  - Deployable
- One or more components
  - BPEL / Mediator / HWF / Rules
- OSB based virtualization layer
AIA Services Conceptual View

- Portfolio of services catering to various concerns
- Infrastructure services for exception handling / diagnostics
- Layered Services for increased reusability
- Leverage JDeveloper and AIA Project Lifecycle Management for development
- FMW components for execution, monitoring and governance
Composite Business Processes

- Composite Business Processes automate, manage and optimize “real” business processes

- Process graph and logic are driven by business process requirements

- Minimally driven by application landscape

- Orchestrate business activities that are atomic operations at the business level

- Business activities are either manual, human-based or automated, system-based

- System-based business activities are implemented by data / business activity services
AIA 3 Development Lifecycle
AIA End-to-end SOA Lifecycle

- From Ideas
- Through Development
- To Production
- And Iterate . . .

3.0/11gR1 Development Lifecycle

1. Business Process Modeling
2. Functional Definition
3. Service Construction
4. Deployment Plan Generation
5. Install & Deploy
AIA Development Lifecycle

*Integrated, Automated, Productive and Role Driven*

Each lifecycle stage supports the downstream activities

- **Automation**: auto-generate inputs to be consumed by downstream activities
- **Consistency**: Information trickles downstream from one stakeholders to another automatically to ensure consistency
- **Productivity**: More scalable, productive, and lean PIP development given infrastructural support throughout the lifecycle
AIA Development Lifecycle
Tooling, Repository, Registry
1st Phase – Defining Process Models

Level 0

Levels 1/2

Level 3
WHAT – Decompose business flow into business tasks
- Reuse existing services
- Identify and request creation of new services

HOW – AIA Lifecycle Console and Database

RESULTS – Enterprise wide SOA Governance out of the box with AIA content. Central source of truth for business process deployments.
3rd Phase: AIA Service Construction

WHAT – Automate tasks / defaulting values and generate AIA Service Composite skeleton.

HOW – JDeveloper Wizard and underlying composite generator/template engine which generate AIA Service Component Project.

RESULTS – Improved Developer Productivity, reduced training, better compliance with AIA standards
4th Phase: Deployment Plan, Build & Installation

WHAT – Simplified OUI Installation and Deployment with cluster support. Complete framework for customers to bundle and deploy custom components.

HOW – Uptake of OUI 11g. Centralize deployment metadata storage with MDS. Generate deployment plans out of central repository.

RESULTS – Rich user experience, Ease of installation/migration of custom built content, reduced support calls around clustering.
Design-time AIA Asset Management

Business Requirement: Increased AIA Asset Visibility; Facilities to exercise Control

→ SOA 11g: Enterprise Repository & AIA 3.0 Feature: AIA Harvester

• AIA Asset Taxonomy aware
• Asset Models for AIA artifacts
  - EBS
  - ABCS
  - CBP
  - EBF
  - Others
• Linked to AIA RPMs
  - Business Activities
  - Business Tasks
Upgrade
Upgrade of AIA 2.x Artifacts to 3.0

Business Requirement: Upgrade Strategy for 2.x PIPs
→ AIA 3.0 Feature: Upgrade Strategy & Tools

- Requestor ABCS → Requestor ABCS Composite
- Enterprise Business Service Mediator Composite
- Provider ABCS Composite
- Transport Adapter Composite / Service Components in ABCS Composite
- Service Components in ABCS Composite

Pre-Upgrade Processing:
1. Pre-Upgrade Processing
2. Open JDeveloper or command-line
3. Save

Post-Upgrade Processing:
4. Post-Upgrade Processing
5. Deploy

11g SOA Suite Server

Oracle
Demo
Invocation eBS 12.1.1 native WS from ABCS
The above reflects Oracle’s current development plans which are subject to change at any time.
E-Business Suite SOA Provider

Generate, Deploy Service

1. Generate WSDL
2. Deploy Service
3. Invoke Service
E-Business Suite ABCS since R12.1.1
Invoke Service from AIA

Siebel CRM

Requester ABCS

Enterprise Business Service

Provider ABCS

Native WS via ISG
Questions & Answers
For More Information

http://www.oracle.com/aia