Using Oracle SOA Suite and Oracle BPEL Process Manager to Integrate and Extend Oracle Siebel CRM

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Innowave Technologies

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Group Product Manager
Oracle Fusion Middleware
Program Agenda

• Fusion Middleware Overview
• Fusion Apps and Fusion Middleware
• SOA Suite Components - BPEL
• SOA based Siebel Integration using BPEL
• SOA Suite + BPEL Demo
• SyntaxBrillian Customer Case Study
• Q & A
Oracle’s Middleware Product Strategy

ORACLE FUSION MIDDLEWARE

Comprehensive
- Best-in-Class Components You Need, When You Need Them

Preintegrated
- Lowest Total Cost – Middleware, Database & Applications Integration

“Hot-Pluggable”
- Leverage Existing Investments in Heterogeneous Environments
Oracle Fusion Middleware
The World’s Best Middleware Suite - Gartner MQs

- Application Platform Suites
- Development Tools
- Application Server
- Web Services Platform
- Enterprise Portal
- Enterprise Content Mgmt.
- Enterprise Records Mgmt.
- Enterprise Service Bus
- Business Integration
- Business Process Mgmt.
- Business Intelligence
- Corporate Performance Mgmt.
- Access Management
- Identity Provisioning
- Web Services Management
- Data Integration
Oracle SOA Platform
Best-in-Class Awards

Winner, SD Times 100
- Business Process Management
- SOA & Integration

Oracle SOA Suite “Excellent”
- Highest Rating in SOA Category
- “Hands down, the most comprehensive and easy to use product on the market today”

Winner, Best Business Process Management System

Oracle SOA Suite, Winner, Tech Innovator 2007
Business Software: Enterprise Applications and Infrastructure

SOA World Magazine
Readers’ Choice Awards 2007
Winner in 15 of 20 categories, including:
- Best SOA/Web Services Platform
- Best BPM Engine
- Best Integrated Services Environment
- Best Security Solution

Oracle BPEL Process Manager
“★★★★” | Oracle BPEL Process Manager
“★★★★” | Oracle Business Activity Monitoring

Oracle BPEL Process Manager
- Winner, Web Services Journal Readers’ Choice Award
- “World class product”

Winner, ebizQ Buyer’s Choice Award
Enterprise Information Integration
Continuing to Win Awards in 2008

Oracle SOA Suite 10g Release 3
The Oracle SOA Suite pulls together top-notch governance, business rules, security, and business activity monitoring into an ESB package replete with native BPEL orchestration and human workflow integration. Tools skew to the developer side (with the exception of EAM) but are well suited to the job. Ease of implementation and affordability make it a standout consideration.

Oracle SOA and Event Technologies

- **BPA Suite**
  - Enterprise Modeling

- **BAM**
  - Alerts Business Monitoring

- **CEP**
  - Events Data Streams

- **Enterprise Manager**
  - System Monitoring

- **BPM Suite**
  - Business User Modeling

- **BPEL Process Manager**
  - Native BPEL
  - Business Rules
  - Human Workflow

- **Oracle Service Bus**
  - Routing
  - Transform
  - Mediation

- **Data Integrator**
  - ETL & Replication
  - Data Quality

- **Web Services Manager**
  - WS Policies Security

- **JDeveloper**
  - Application Development Framework

- **Enterprise Repository**
  - SOA lifecycle governance

- **Registry**
  - UDDI

- **Messaging**
  - J2EE Application Server (Oracle AS, WebLogic, WebSphere, JBoss)

- **Coherence Cache**

- **JRockit VM & RT**
The Oracle BPEL Process Manager

Enterprise-strength infrastructure for Service Orchestration

- Comprehensive and native BPEL implementation
- Easy-to-use modeling tool
- Scalable and reliable engine
- Flexible binding framework
- Rich management and monitoring
- Runs on OracleAS, WebLogic, JBoss and WebSphere
- Get up and running in less than 15 minutes!
Realize the Full Benefits of SOA
With an Enterprise-Class Service Bus

Service Mediation & Management
• Location Transparency
• Service Virtualization
• Configuration
• Any to Any Protocol, Payload
• Policy Enforcement
• High Availability & Scale
Oracle Business Activity Monitoring
Event Correlation for Business Users

- **Monitor** business processes & services in real-time
  - Key Performance Indicators (KPIs)
  - Service-Level Agreements (SLAs)

- **Analyze** events as they occur
  - Correlate events & KPIs
  - Identify trends as they emerge
  - Alert users to bottlenecks & solutions

- **Act** on current conditions
  - Event-driven alerts
  - Real-time dashboards
  - BPEL processes & web services integration
Order Management

- Customer
- Call Center
- B2B
- BPEL
- Create Sales with Approval
- Create Purchase Order
- Update Status
- Create Invoice
- Update Status
- Create Shipment
- Pickup Notify
- Delivery & Confirmation
- 3PL Shipper
- ORACLE E-Business Suite
- BAM
Oracle SOA Governance Solution

Enterprise Repository
- Impact / dependency analysis
- Compliance Reporting
- Service reuse
- Lifecycle management

SOA Governance Suite

EM SOA Management Pack
- Management of production processes and services
- Production metrics
- SLA monitoring

Web Services Manager
- Policy-oriented security and access control

Service Registry
- Runtime service discovery

SOA Management Pack

Web Services Manager

Oracle BPEL Process Mgr

Enterprise Repository
- Impact / dependency analysis
- Compliance Reporting
- Service reuse
- Lifecycle management

Oracle Service Bus

Metadata Exchange

UDDI Integration
Siebel SOA Overview
Siebel SOA Journey

- Soap 1.1
- WSDL 1.1
- XSD support
- Introduced ASI

- WS-I 1.0
- Workflow and Business Services based ASIs
- WS-Security

- Interoperability Validation
- Access Control

Certified with FMW 10.1.3
Native
- Oracle 10G R3
- Oracle Business Analytics

Certified
- Oracle Portal 10.1.4
- Oracle IDM 10.1.4
- Oracle BPEL 10.1.3
- Oracle JMS 10.1.3

Certified with FMW 10.1.3
Native
- Oracle HTTP Server 2.0
- Oracle Enterprise Manager

Certified
- Oracle Service Registry

- WS-I Attachment
- Customer Order Management exposed as Web Services
Inbound Services (Siebel as a Provider)

- External applications usually call one of the following
  - Business Service
  - Siebel Workflow Process

- Both Workflow Processes and Business Services can be exposed as a SOAP Web Service.
Outbound Integration: Siebel as a Client (Consumer)

Siebel Application Server
- Siebel Object Manager(s)
  - Business Objects
  - Business Components
  - Business Services
  - Virtual Business Components
  - Workflow Processes
- Data Manager
- Web Services
  - SOAP / HTTP
- HTTP
- Java
- MQ / JMS
- Built in Transport adapters callable from Workflow or script within the Siebel framework

Oracle SOA Suite
- BPEL Process Manager
- Enterprise Service Bus
- Business Activity Monitoring
### Inbound Web Services

<table>
<thead>
<tr>
<th>Namespace</th>
<th>Name</th>
<th>Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CRM Contact Management</td>
<td>Inactive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRM Load Management</td>
<td>Inactive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRM Marketing Management</td>
<td>Inactive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRM Party Management</td>
<td>Inactive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRM Service Management</td>
<td>Inactive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customer Account</td>
<td>Active</td>
<td>PAY - Apps Training LAB 1</td>
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<tr>
<td></td>
<td>EAI:VWS</td>
<td>Inactive</td>
<td></td>
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<tr>
<td></td>
<td>Healthcare Group Policy Member Management</td>
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<td></td>
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<tr>
<td></td>
<td>Healthcare Individual Policy Member Management</td>
<td>Inactive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Healthcare Member Details Management</td>
<td>Inactive</td>
<td></td>
</tr>
</tbody>
</table>

### Service Ports

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Business Service/Business Process Name</th>
<th>Transport</th>
<th>Address</th>
<th>Binding</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFELPort</td>
<td>Business Service</td>
<td>Siebel Account</td>
<td>HTTP</td>
<td><a href="http://xxxx.crackloads.com/soap_end/start.srv">http://xxxx.crackloads.com/soap_end/start.srv</a></td>
<td>SOAP_RPC_LITERAL</td>
<td></td>
</tr>
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</table>

### Operations

<table>
<thead>
<tr>
<th>Name</th>
<th>Method Display Name</th>
<th>Authentication Type</th>
<th>Request Filter Set Request Filter Me Response Filter S Response Filter Method Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFEL</td>
<td>Query by D</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BFELInsert</td>
<td>Insert</td>
<td></td>
</tr>
</tbody>
</table>
# Sample Siebel Customers using SOA Suite

<table>
<thead>
<tr>
<th>Customer</th>
<th>Industry</th>
<th>Fusion Middleware Products</th>
<th>Applications Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cap Gemini</td>
<td>Services</td>
<td>SOA</td>
<td>SEBL, JDE, EBS</td>
</tr>
<tr>
<td>Move.com</td>
<td>Services</td>
<td>SOA, IDM</td>
<td>SEBL, PSFT</td>
</tr>
<tr>
<td>Network Appliance</td>
<td>High Tech</td>
<td>SOA</td>
<td>SEBL, EBS</td>
</tr>
<tr>
<td>Rackable</td>
<td>High Tech</td>
<td>AIA</td>
<td>EBS, SEBL</td>
</tr>
<tr>
<td>PTC</td>
<td>High Tech</td>
<td>SOA</td>
<td>SEBL, EBS</td>
</tr>
<tr>
<td>WindRiver</td>
<td>High Tech</td>
<td>SOA, BIEE</td>
<td>SEBL, EBS</td>
</tr>
<tr>
<td>Syntax Brillian</td>
<td>Manufacturing</td>
<td>SOA</td>
<td>EBS onDemand, Siebel</td>
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<tr>
<td>Turkcell</td>
<td>Telco</td>
<td>SOA</td>
<td>SEBL</td>
</tr>
</tbody>
</table>
Syntax Brillian Case Study

Siebel On Demand and Fusion Middleware
Syntax Brilliance

**LCD**
- High Definition LCD TVs ranging from 19"-65"
- 1080p and 100/120 Hz displays
Business Challenge

60% of Syntax Brillian business occurs in Q4 during the holiday season. Customer service call volume triples normal volume during this period.

• 2006 holiday call volume exceeded capacity resulting in system failures and a 55% call abandon rate.

The 2007 sales forecasts were planned for 3 to 4 times call volume growth over the preceding year.

Business Imperative

Improvement of our call center’s infrastructure and efficiency was required to meet committed revenue targets and improve customer satisfaction.
Technical Challenges

Our legacy call center system was a disparate collection of applications and business processes were highly manual.

The legacy SAP Business One system was struggling under the current sales volumes and a move to Oracle eBusiness Suite was planned. Unfortunately, the call center could not wait for a full blown EBS implementation.

Growth targets demanded an immediate solution that was:

• Scalable to meet cyclical demand and future growth.
• Portable to allow ramp up of a third party offshore call center.
• Integration into legacy SAP System and or future Oracle EBS.
• Provide a framework for automating manual agent tasks.
Solution Components

• Siebel CRM on Demand

• Oracle Call Center On Demand

• APEX

• Fusion Middleware (BPEL)

• Integration to SAP Business One; until Oracle EBS implementation was complete
Solution Topology

Multi-site implementation, with BPEL/Web services integration across 3 site MPLS network.
Solution

Oracle Fusion Middleware provided the framework for transaction management and application integration using web services.

1. Account Creation (Siebel to APEX to SAP)
2. Customer Information (Siebel to APEX to SAP)
3. Order Management (APEX to SAP)
4. Order Confirmation (SAP to Siebel)
5. PayPal PayFlow (Apex to iPayment)
Return on Investment

The system went live in September 2007 and was ready for the Q4 busy season.

Results:

• System scaled to take our highest call volume in company history with < 10% Call Abandon Rates.

• Remote call center in Malaysia was brought online allowing further cost reduction.

• Call center sales increased by 35% over previous year.

• Call agents efficiency increased due to process automation using APEX.
Lessons Learned

1. BEWARE THE HAPPY PATH!

• BPEL processes are often designed with the best case scenario in mind, but unexpected errors will occur (they always do).

• Build a robust error handling framework into the initial process design.

• Inherent instability on the SAP Web Service caused the destination web service to be unavailable. BPEL’s state persistence allowed manual recovery, but retries and error alerts were not in the initial design.

2. Allow additional time and testing for On Demand configuration.

• Firewall configurations and system permissions can be problematic in a hosted, multi-site implementation.
Lessons Learned Continued

3. The BPEL console was great, but we needed additional admin tools for end user exception and failure handling.
   
   • Normal business exceptions required a developer to address and fix. A general set of administration tool should be developed within a process to manage normal exceptions.

4. Minimize feature rollout during initial launch:
   
   • New Email and Voicemail services initially overwhelmed call center agents, requiring new business processes to be developed.
Final Thoughts

The project was very successful and offered Syntax Brillian a platform to manage improvements in the call center. Managers could now measure call center performance (e.g. agent performance, call volume, etc) and design specific improvement plans.

The system has been in production just over a year, and we continue to see improvements in customer satisfaction ratings.
SOA Suite and Siebel Web Services Demo
ORACLE IS THE INFORMATION COMPANY