

WebSphere Middleware Integration Capabilities with Siebel CRM

Hanumaiah Chowdary

Siebel / PeopleSoft SME, WebSphere BPTSE

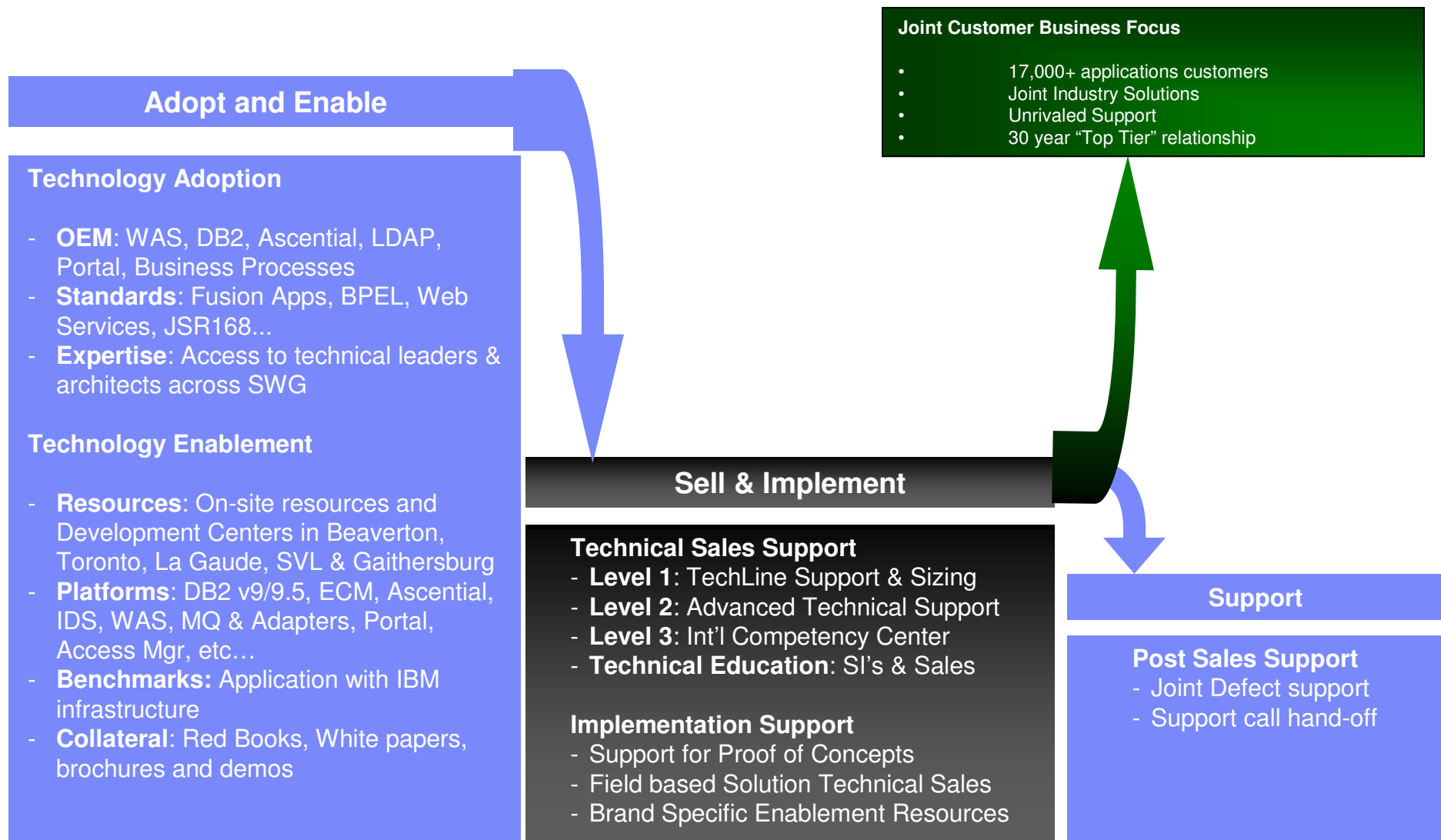
Email: Chowdary@us.ibm.com

Mobile: 408-373-2501

Agenda

- **IBM SWG Alliance with Oracle**
- Siebel Connectivity options
- Detailed view on different Siebel Integration options
- Demos and Customer References
- Why WebSphere for Siebel?
- Summary

IBM SWG Product Lifecycle Model for Oracle Apps



Experience: Oracle Application Currency & Extensions

Application	Data	Integration	Mgmt	Interface	Dev
E-Business Suite					
Siebel CRM	DB2 zOS	WebSphere MQ		Portal	Functional Tester Performance Tester
PSFT Enterprise	IDS	WebSphere Application Server		Domino	
JDE EnterpriseOne		WebSphere Enterprise Service Bus	Tivoli Storage Manager	Sametime	
Retail Retek ProfitLogic 360Commerce	DB2 UDB	WebSphere Adapters	Tivoli Identity Manager		
Banking: iflex					
Telco Portal MetaSolv					
Transportation					
JD Edwards World					

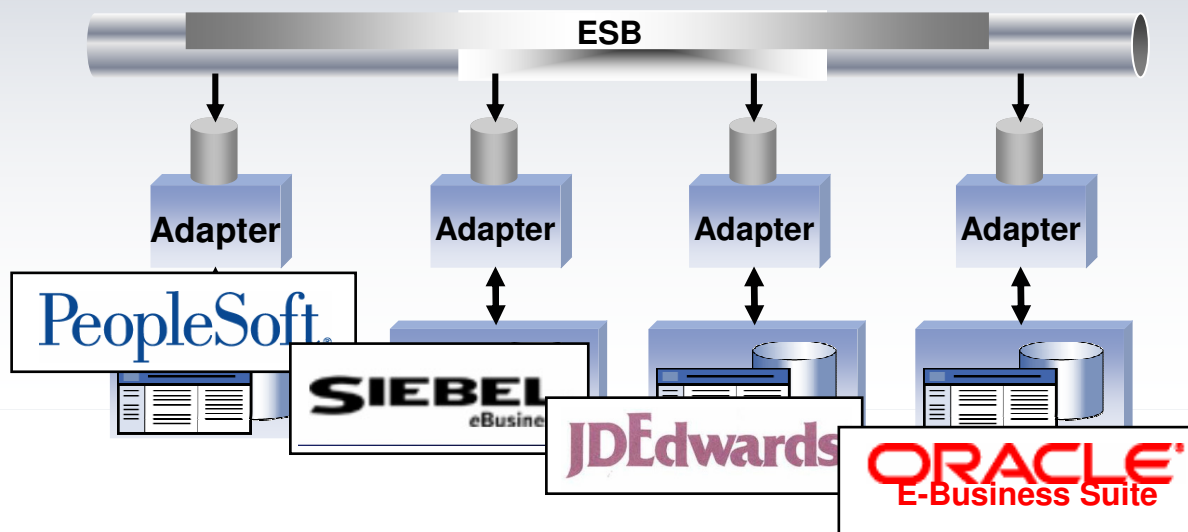
Certified or OEM

Validated

Service Enabling Oracle Applications

WebSphere adapters

- A consistent framework for access to back-end systems and technologies
- Mission-critical quality of service
- A portfolio of pre-built Oracle application adapters as well as a toolkit to generate your own



Web Services

- Programmatic exposure of web services

WebSphere MQ

- Straightforward point to point integration

WebSphere Data Power

- XML Acceleration

Message Broker

- High volume based transactions with complex events

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WebSphere with Siebel Applications

- **Enterprise Integration**

- WMQ for Siebel CRM: Siebel MQ EAI connector is certified by Siebel
- WPS for Siebel CRM: WebSphere Adaptor for Siebel CRM is validated
- WESB/WPS via web Services integration to Siebel CRM
- WAS via web Services integration to Siebel CRM

- **Application Platform**

- WAS and WMQ for Siebel Teller
- HTTP Web Server for Siebel CRM certified on AIX
- WAS for Siebel Analytics: the web server to host Analytics Web UI

Siebel CRM connectivity options

Oracle Application	Integrate			
	Adapter	Web Services	Messaging	API & Other
Siebel CRM	WBI / JCA	WAS	WMQ, JMS	Siebel JDB (Java Data Bean) Siebel Web UI DDK

Comparison of connectivity options

	Web Services	Messaging	Adapters
Interface Coupling	Tight	No – An application may process a variety of messages	Tight
Transport Coupling	Loose	Tight	Tight
Implementation Portability	Yes	Yes	No
Security	Standards defined – Not universally implemented	Vendor specific	EIS specific
Transaction Support	Standards defined – Not universally implemented	Limited in scope to queue entry point	Yes
Synchronous Invocation	Yes	Custom implementation	Yes
Asynchronous Invocation	Yes	Yes	EIS specific
Event Driven	Yes	Yes	EIS specific
Reliable Payload Delivery	Standard Defined	Yes	EIS specific

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WebSphere Integration End Points with Siebel CRM

- Messaging (JMS and WMQ)
- Siebel JDB (Java Data Bean) API
- WBI / JCA Adapters
- Web Services or ASIs
- Java/J2EE Code Generation
 - Siebel Tools (JDB/JCA - Plain Vanilla Code)
 - Siebel Web UI DDK (Complete Web Application Resources)
- Siebel – WebSphere Integration Summary

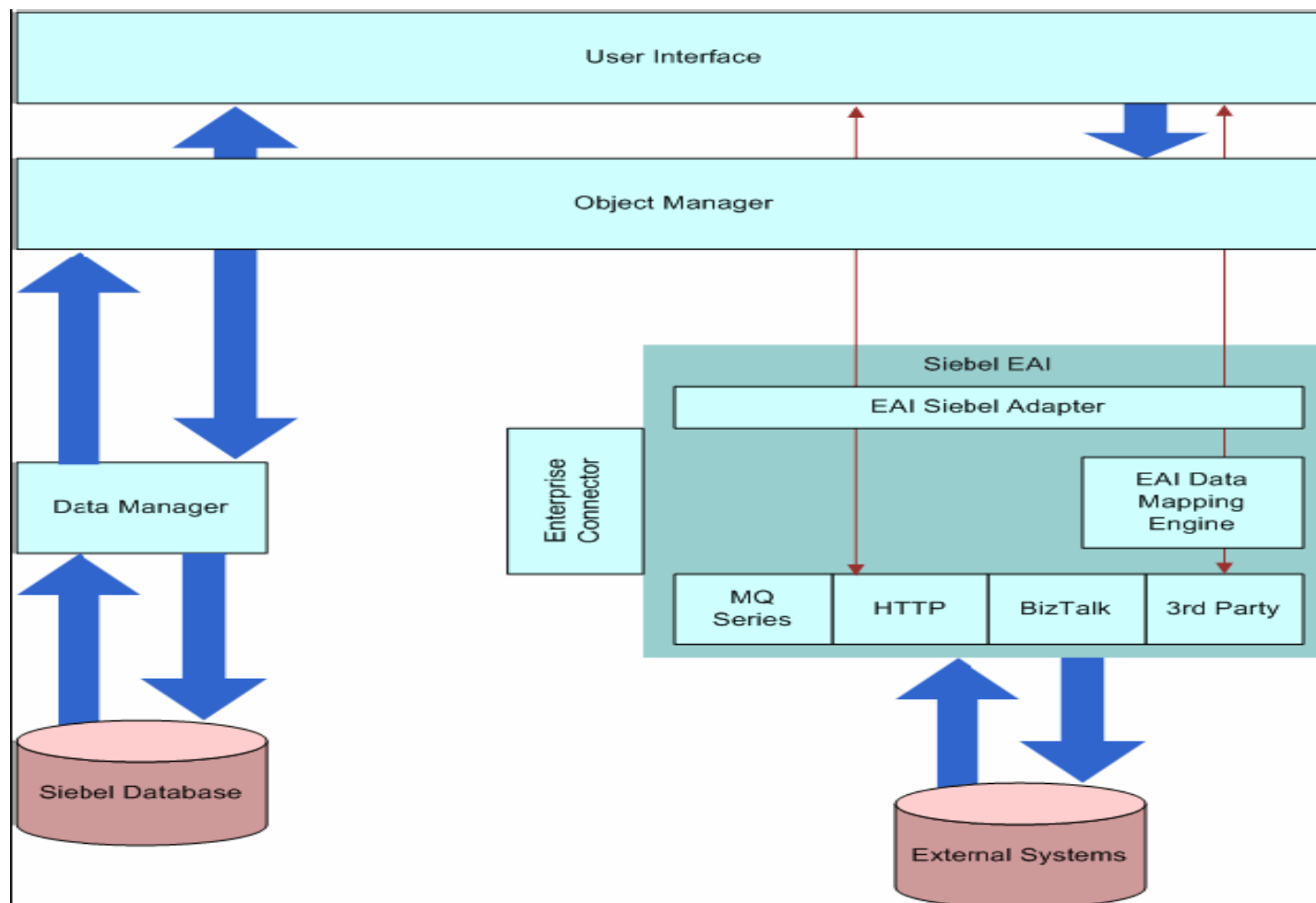
Siebel Terminology related to Integration

- **Siebel Object Manager, SWSE, SWE**
- **Business Objects / Business Components**
- **Virtual and External Business Components**
- **Integration Objects / Business Services**
- **External Integration Objects**
- **Java Business Services**

Enterprise Application Integration (EAI)

- **Siebel EAI provides components for integrating Siebel Business Applications with external applications and is designed to work with third-party solutions such as those from IBM, TIBCO, WebMethods, and others.**
- **Siebel EAI is designed as a set of interfaces that interact with each other and with other components within Siebel application. These interfaces:**
 - **Allow a flexible service-based architecture**
 - **Are compatible with IBM MQ Series and also Microsoft MSMQ**
 - **Expose internal Siebel Objects to external applications.**
 - **Take advantage of pre built adapters and enterprise connectors, and are compatible with third party adapters and connectors.**
 - **Allow for data transformation.**

EAI Architecture



Siebel EAI Adapters

- In Siebel EAI, there are three kinds of adapters:
 - **EAI Siebel Adapters**
 - Designed to interact with the Siebel business object layer
 - **EAI UI Data Access Adapters**
 - Allows custom-built Web applications access to business components and business objects.
 - **EAI Transport Adapters**
 - Business services within Siebel EAI that are designed to communicate with other protocols and technologies outside of Siebel applications to transport data from the Siebel system to another system
 - Ex : MQSeries Adapter

Messaging (MQ and JMS)

Messaging (MQ and JMS)

Messaging (MQ) in Siebel CRM

- The **Messaging Integration** with Siebel CRM for **IBM MQSeries** will be achieved by Siebel **EAI MQSeries Adapter** and also using Siebel **EAI MQSeries Server Transport** and **EAI MQSeries AMI Transport**.
- Pre-defined Services like Siebel EAI **XML Gateway Service** can be configured to use Siebel EAI MQSeries Server Transport when the **data format** to be **XML**.

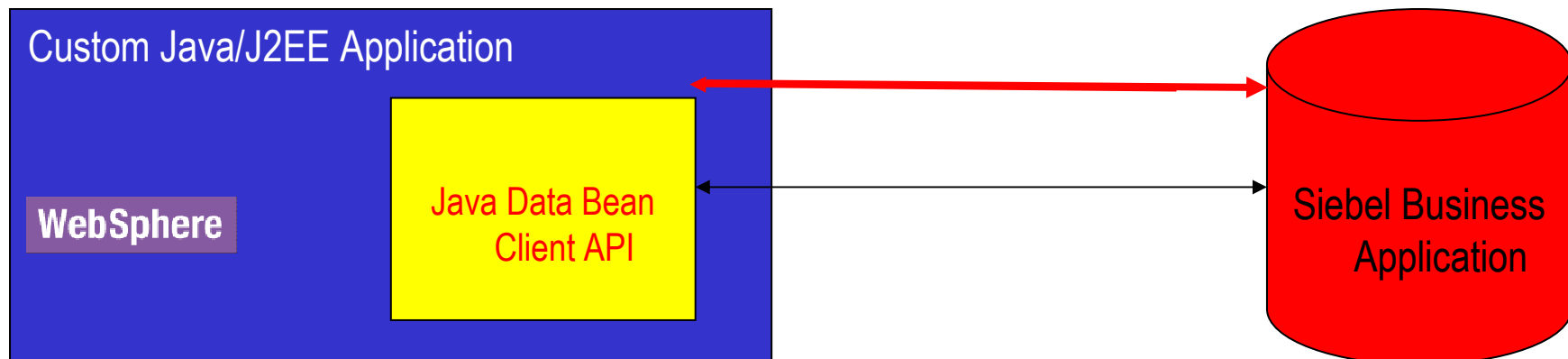
Messaging (JMS) in Siebel CRM

- The **Java Business Service** allows the sending or receiving of messages though a JMS.
- The JMS Receiver server component, in fashion identical to the MQ Series Receiver component, allows the asynchronous receipt of messages, except you are using EAI JMS Business Service instead of EAI MQSeries Server Transport.

Siebel JDB (Java Data Bean)

Siebel Java Data Bean

- What is Java Data Bean?
 - The Java Data Bean is a collection of Java classes that allow developers to interact with a variety of Siebel objects such as business objects, business components, and so on. Using this interface, you can develop Java/J2EE components that interact with Siebel applications.
 - Two Siebel .jar files are needed to compile and run a Java application that uses the Java Data Bean:
 - Siebel.jar
 - SiebelJI_*lang*.jar (*lang* = the installed language pack; for example, SiebelJI_enu.jar for English or SiebelJI_jpn.jar for Japanese.)



Adapters (WBI / JCA)

Adapters Technology

- An Adapter is a component in the WebSphere business integration system that provides communication support between an integration broker and either an application or a technology
- Adapters are meta-data driven.
- Adapters are bound to a single broker instance, and also to a single instance of the EIS to which they connect
- Encapsulates business functions as large-grained services
- Isolates the application's proprietary APIs
- Provides a consistent framework to expose external applications
- Provides bi-directional interaction and synchronous / asynchronous interaction

Adapters (WBI / JCA) : Inbound / Outbound

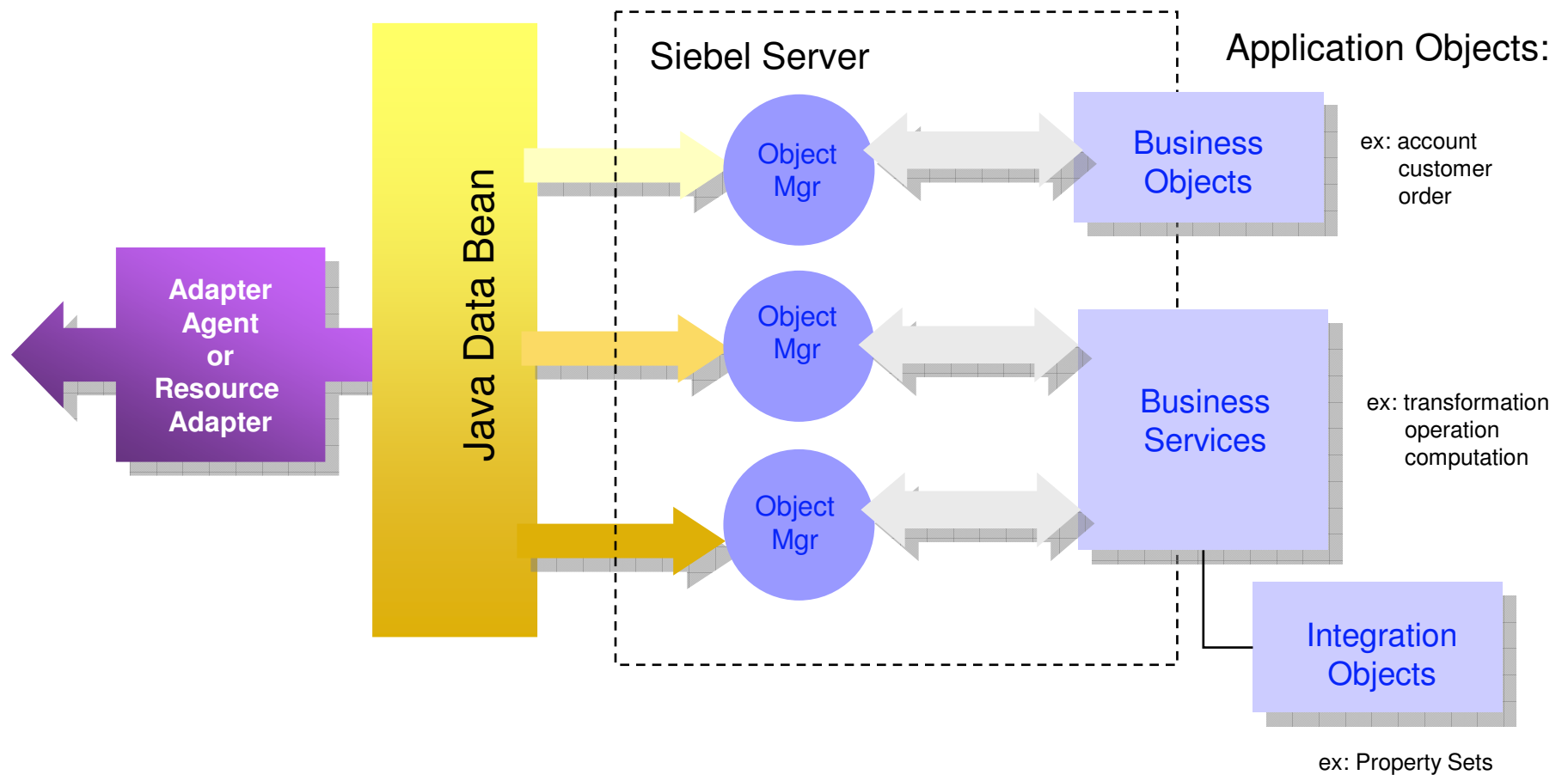
Inbound Operations – High Level Flow

- Adapter polls the Siebel event component for new events and fetches the events.
 - “Once and only once” event delivery is supported via XA transaction using the Event Staging Table (database)
 - Each event in the staging table is then delivered to the endpoint as part of a unique XA transaction controlled by **WebSphere Process Server**.
- Adapter retrieves the integration object represented by the Event.
- The integration object values are populated in the business graph which is then dispatched to registered Endpoints within the client application.

Outbound Operations – High Level Flow

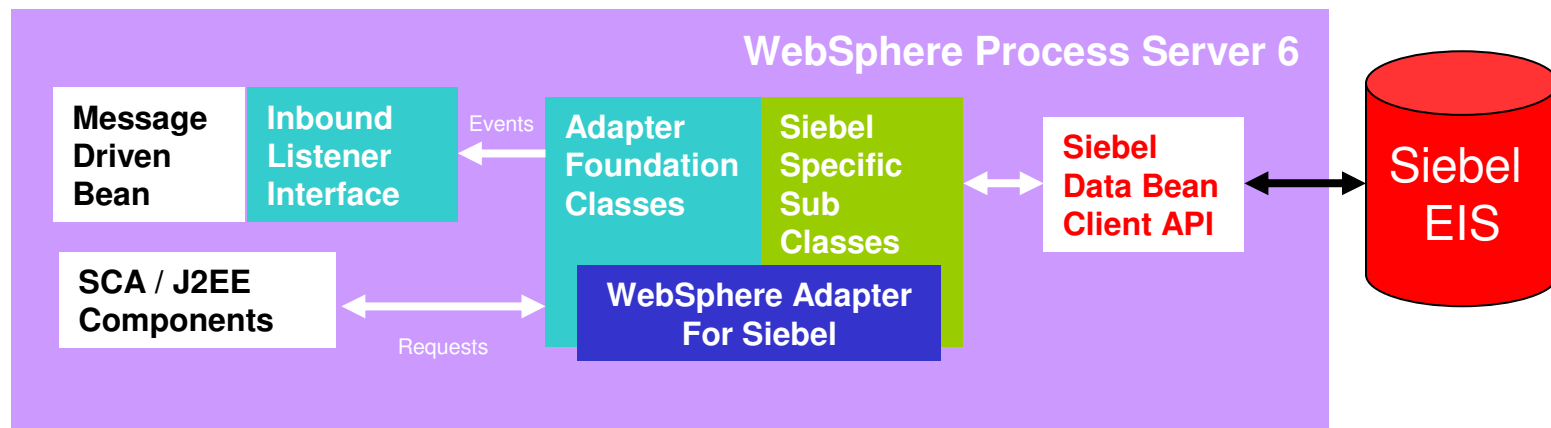
- Outbound operations involve calls made from the **WebSphere Process Server** components to the **Siebel Application** using the **WebSphere Adapter for Siebel Applications**.
- SCA Components pass data to the Adapter using **WebSphere Business Objects**.
- Adapter extracts the BO and determines the Siebel interface to call from the metadata within the BO. The adapter converts the business object data to the appropriate Siebel function call using the **Siebel Data Bean Client API** provided by Siebel.

WebSphere Adapter for Siebel



Architecture of WebSphere Adapter for Siebel Applications

- **IBM WebSphere Adapter for Siebel Business Applications** implements the JCA version 1.5 specification, enabling bidirectional connectivity to **Siebel Enterprise application**.



Siebel WebServices

ASIs (Application Service Interfaces)

ASI – Web Services (In/Outbound)

Inbound

Defines an interface for services provided by Siebel Systems and can be invoked from external applications or from within Siebel.

Ex: Data Synchronization, Business Services, Workflow Processes and Application Services.

Outbound

- An outbound ASI defines an interface from a Siebel application to an external application and provides a proxy to the external application that can be called from within the Siebel application.
- Web Services can make ASI's externally available by using information protocols (such as HTTP) and other communication protocols, such as SOAP
- To see a list of available we services in Siebel 7x:
 - Site Map → Administration – Web Services

[Home](#)
[Accounts](#)
[Contacts](#)
[Opportunities](#)
[Quotes](#)
[Sales Orders](#)
[Service](#)
[Administration - Web Services](#)

[Inbound Web Services](#)
[Outbound Web Services](#)

Inbound Web Services

Menu

New

Delete

Query

Export

Import

Generate WSDL

Clear Cache

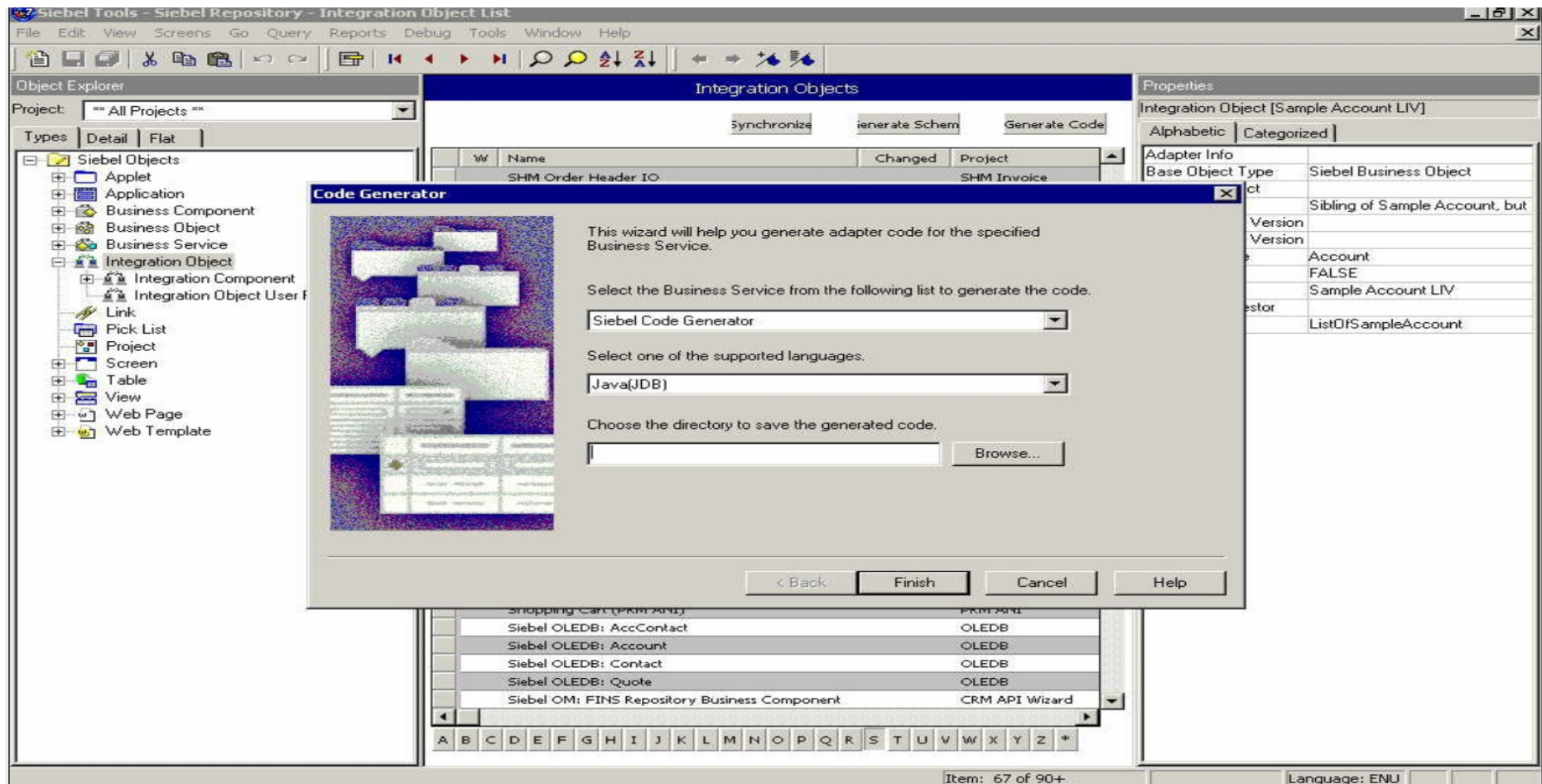
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	Namespace	Name	Status	Comment
>	http://www.siebel.com/xml/LOVService	EAILOVWS	Inactive	
	http://www.siebel.com/xml/SessionAccess	SessionAccessWS	Inactive	
	http://siebel.com/asi/	Siebel Account	Active	
	http://siebel.com/asi/	Siebel Contact	Inactive	

Java / J2EE Code Generation

Siebel Tools (JDB/JCA Code Generation)

Siebel Tools (JDB/JCA Code Generation)

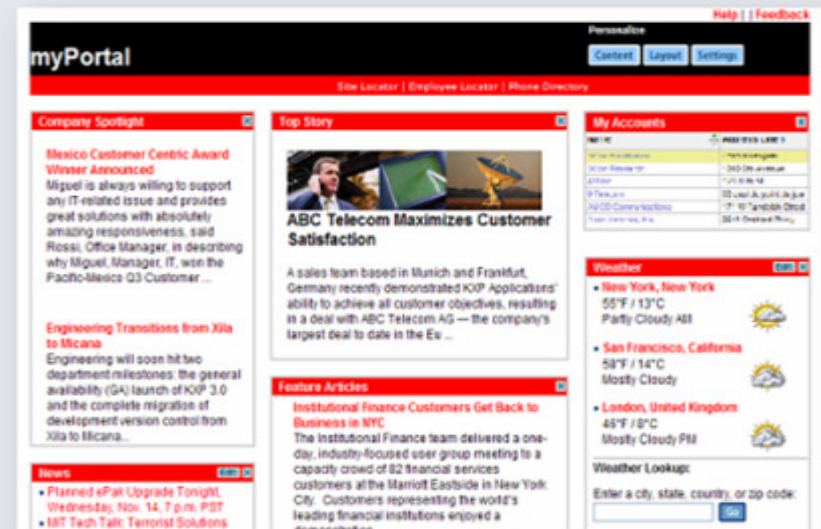


**Similar functionality plug-in is available for VAJava and
WEBAPIE**

Siebel Web UI DDK (Dynamic Developer Kit)

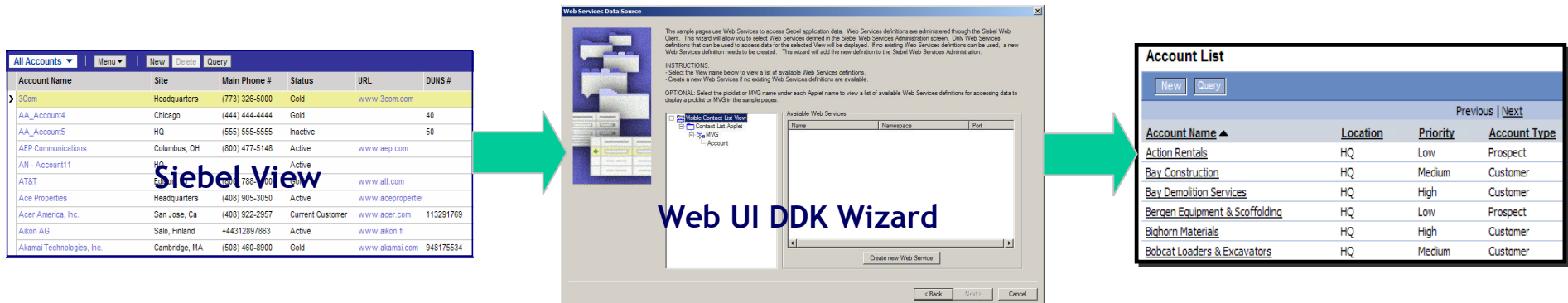
Siebel – J2EE Integration (pre-7.8)

- **Tightly Coupled Object Interfaces**
 - Java Business Service
 - Java Data Bean (JDB)
 - J2EE Connector Architecture (JCA)
- **Loosely Coupled Interfaces**
 - Message oriented – MQ etc
 - Web Services
- **Geared more towards data layer integration**



Siebel 7.8 and above - Web UI DDK Solution

- Siebel 7.8 delivers solutions to expose Siebel Data in J2EE environment.
- The Web UI DDK Wizard in Siebel Tools creates repository objects, enters administrative runtime data, and generates sample J2EE artifacts for an Siebel view
- The Web UI DDK is intended to be used as a learning tool and a starting point for Java developers to expose Siebel application functionality in a custom J2EE Web application



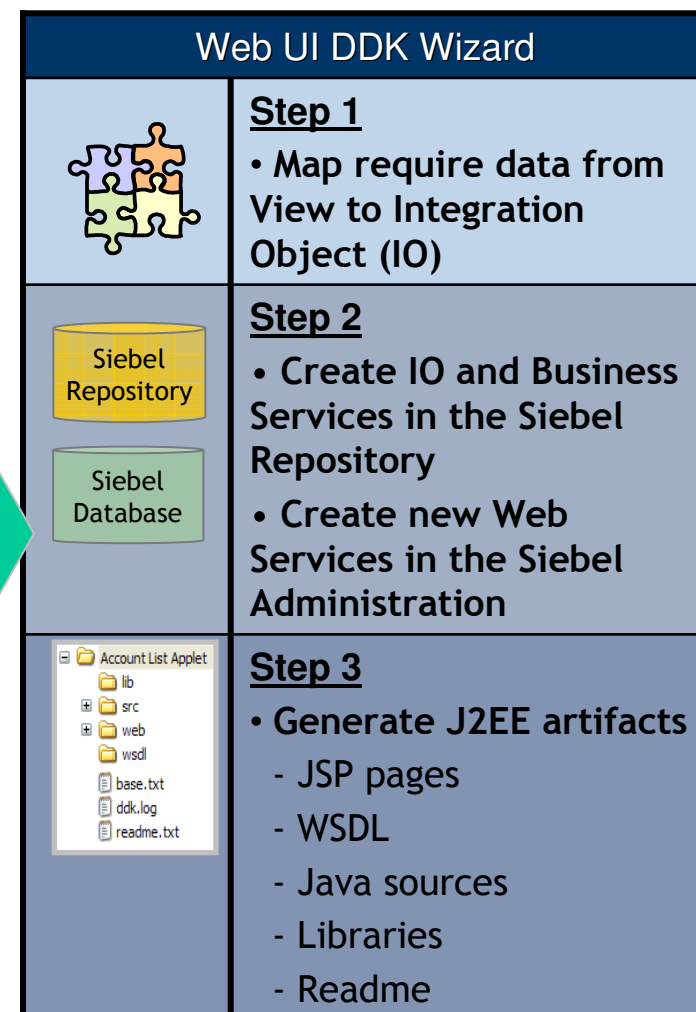
Siebel Mediator in RAD actually generates a complete, flexible JSF Portlet(s) from any Siebel Business Components

Web UI DDK Wizard

- Siebel developer invokes the Web UI DDK Wizard in Siebel Tools
- Smart wizard creates repository objects, enters administrative runtime data, and generates J2EE artifacts for the Java Developer

Views			
W	Name	Changed	Project
	Alert Online Subscription View		Enterprise Syst
	Alert Online View		Enterprise Syst
	Alert Subsystem Detail View		Enterprise Syst
	All Account Across Organization Category Search View		User Categor
	All Account Category Search View		User Categor
>	All Account List View		(SE)
	All Account List View (SCW)		(SCW)
	All Accounts across My Organizations		(SE)
	All Accounts across Organizations		(SE)
	All Activity List View		(SE)
	All Agreements across Organizations		(SSV)
	All Call Script Runs View		(SE)
	All Campaign Members View - Deleted		
	All Campaign Members View - Inbound		
	All Campaign Members View - Outbound		
	All Campaign Templates View		Tem
	All Campaign Templates across Organizations		Tem
	All Campaigns across My Organizations		- C
	All Change Projects Across Organizations List		ct
	All Change Projects List View		ct
	All Channel Partner Across Organization		rtne
	All Channel Partner List View		rtne
	All Charges Across Organization		
	All Competitive Company across Organization		(SE)
	All Contact Across Organization Category Se		orie
	All Contact Category Search View		orie
	All Contact List View (SCW)		Contact (SCW)
	All Contacts across My Organizations		Contact (SSE)
	All Contacts across Organizations		Contact (SSE)
	All Content Item Inbox List View		Content Manag

Select view
to run wizard



Siebel – WebSphere Integration Summary

Siebel – WebSphere Integration Summary

WebSphere offers a variety of connectivity solutions with Siebel CRM. These solutions are primarily targeted at connecting Siebel to other applications, existing or new, and to integrate Siebel with transaction environments or other customer data environments.

- Business APIs and Web Services – **Access and operate on application objects i.e. Siebel Business Objects and Siebel Business Services**
- Messaging – **Exchange messages with application i.e. Siebel Transport Adapters (JMS, MQ, Http)**
- Batch Processing – **Read and write bulk data via staging tables i.e. Siebel Enterprise Integration Manager**
- Workflow – **Interact with application workflow i.e. Siebel Workflow**
- Direct extraction – **Read data from application base tables directly**

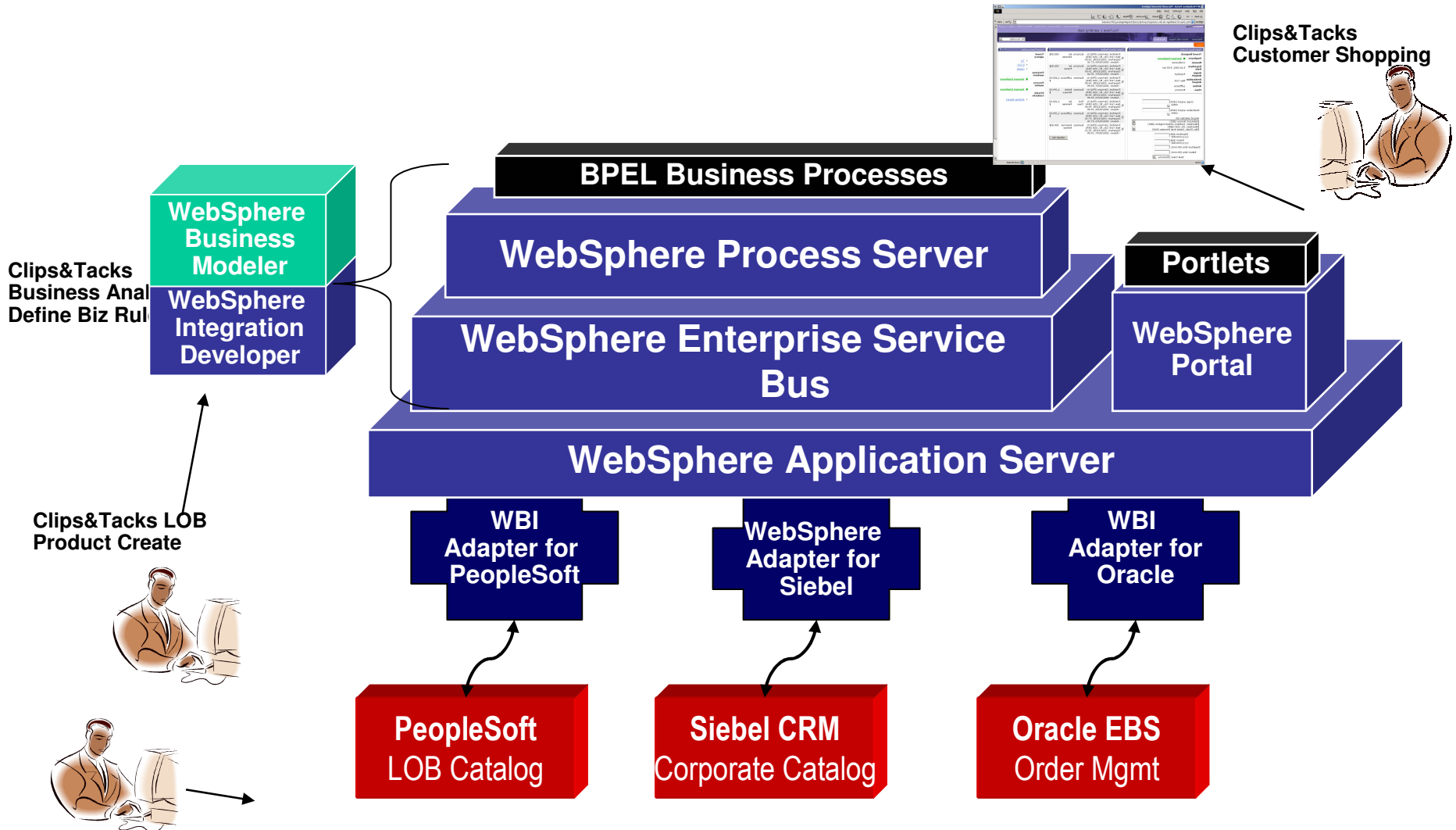
Siebel – WebSphere Integration Summary

Interface Type	EIS Interface	Direction	Interface Technologies	Description
API	ASI	Bi-directional	Java, all Transport Adapters	Application Service Interfaces for bi-directional exchange of Integration Objects
API	Business Services	Inbound	Java, all Transport Adapters	Siebel application/processing logic
API	EAI Siebel Adapter	Inbound	Java, all Transport Adapters	Siebel Business Service for standard C R U D Integration Object operations
API	Business Components	Inbound	Java, all Transport Adapters	Siebel application Business Object access
API	VBC	Outbound	Java, all Transport Adapters	Siebel application makes synchronous outbound call via Virtual Business Components
API	Web UI DDK	Inbound	SOAP	Access to Siebel Views for custom UI development (i.e. portals)
Messaging	Transport Adapters	Bi-directional	SOAP, JMS, WMQ, HTTP	Bi-directional transport adapters to interact with Siebel APIs
Event store	All inbound interfaces	Outbound	Java	Poll for events, retrieve via inbound interfaces, and publish
Workflow	Siebel Workflow	Bi-directional	Java, all Transport Adapters	Siebel Workflow for application process activities
Batch	EIM	Bi-directional	ODBC, JDBC	Enterprise Integration Manager for bulk import/export

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IBM SOA and Oracle Apps Demo - Product View



IBM WebSphere Integrates JD Edwards, PeopleSoft and Siebel

Royal Caribbean Cruises Ltd.



Action Taken

- WebSphere Adapters and integration middleware for JD Edwards, PeopleSoft, and Siebel
- Connected various legacy information sources as part of its SOA strategy

Business Challenge

- Transform its business beyond cruise vacations to become a full-fledged vacation company
- Expand to offer land and sea packages and overnight stays without a full-cruise commitment

Benefits

- Information is instantly available, accurate, and accessible from ship to shore
- “We estimate that we have saved at least 30% in terms of time and costs as a result of using the WebSphere Adapters.”

– Mike Suttan, CIO

IBM WebSphere Integrates Siebel

South African Revenue Service



Action Taken

- WebSphere's platform to integrate data from 12 separate back-end tax systems
- Interfaced with Siebel Universal Application Network and Siebel Call Center on the front end.

Business Challenge

- Achieve single, dynamic view of all taxpayers to reconcile accounts
- Incorporate data from disparate legacy systems for use across many tax compliance applications

Benefits

- Integrated main line-of-business applications in just four weeks
- Savings up to \$3 million per day
- Improved service for South Africa's 20 million taxpayers

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What Does this mean to YOU and Your Customer?

- **Strength of WebSphere with Siebel:**
 - A variety of proven options to connect to the enterprise
 - An Integrated Approach that reduces effort & risk.
 - Customer can be confident they have proven market leading technologies across the SOA spectrum
 - Potential to reduce overall project cost as much as 30% by lowering licensing costs, support costs, development effort, integration costs, and delivering superior price/performance
 - You can leverage the full capabilities of IBM hardware, software & services to deliver a complete reliable, scalable, integrated solution for your customer.
- **How can we Help?**
 - Documentation
 - SME's
 - Online Demos
 - Live demonstration of IBM SOA integration using Oracle Applications

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In Summary

- WebSphere for Innovation
- Existing Oracle acquired applications are going to stay for years to come
- Let's show our customers that they made the right decision with WebSphere
- Show IBM strength to customers (Software + Hardware + Services)
- Reach out to Oracle WebSphere alliance team for help

This is our opportunity ... it is up to us to make it happen!

In Summary...continued

- IBM and Oracle strategic partnership is growing both competition and cooperation
- Siebel customers can feel comfortable with Oracle's *"Application Unlimited"* commitment to continue to support IBM Software
- SOA is a joint strategic direction of IBM and Oracle
 - Best-of-breed IBM SOA Middleware
 - Best-of-breed Oracle Applications leading with Siebel for CRM
- You can start today with IBM SOA Middleware and integrate Siebel with other applications to maximize business value...no need to wait.

Thousands of Customers are doing this today!

Questions?

Thank You

