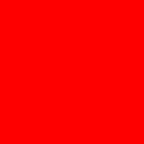




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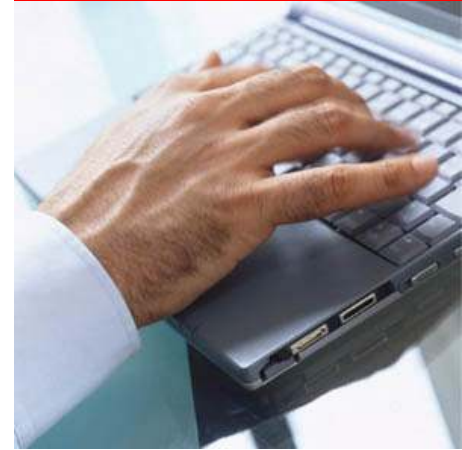
## **Enterprise Architecture and Services Oriented Architecture (SOA)**

Eric Rudie  
Principal Sales Consultant – Oracle Public Sector



The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remain at the sole discretion of Oracle.

# Agenda



- Why SOA with Oracle E-Business Suite?
- Service Enabling Oracle E-Business Suite
- Extending Oracle E-Business Suite with Oracle SOA Suite?
- Key Messages

# What Customers are Telling Us..

- Innovation
  - “Speed of Business Is Increasing”
  - Multi-channel, outsourcing, off shoring, collaboration with partners and customers, etc.
- Reduce Complexity
  - “Need a More Flexible, Agile IT”
  - Less vendors without lock-in
- Reduce Costs
  - Development Lifecycle, Improve ‘QoS’

# What is SOA? (technically speaking ...)

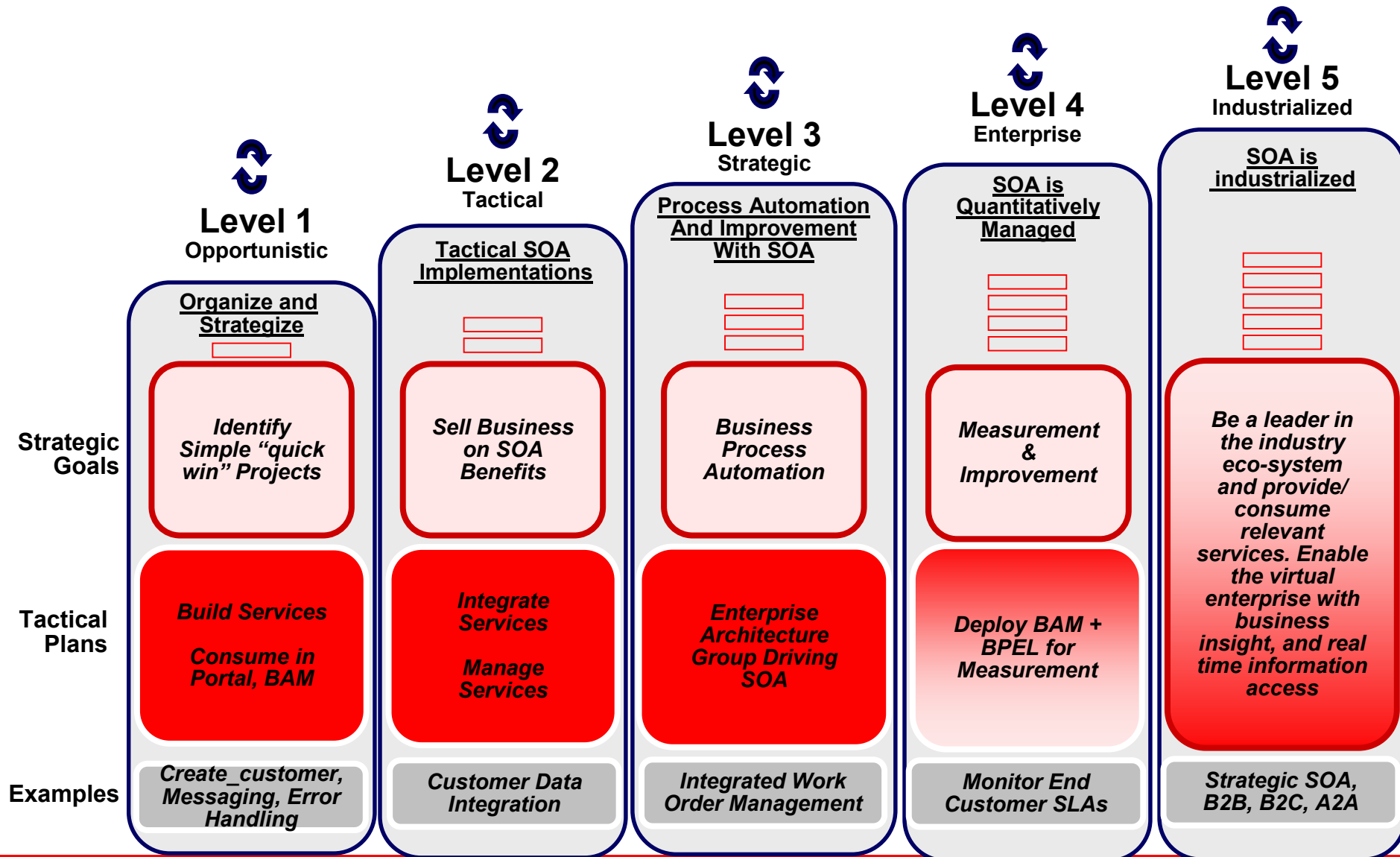
A Service Oriented Architecture is a collection of self-contained services that can communicate with each other.

Key characteristics of services:

- ✓ loosely coupled
- ✓ coarse grained
- ✓ typically published & available for invocation on a Service Bus

Defining services at a “business level” enables quick composition of end-to-end business processes, delivering on the promise of greater IT flexibility and agility

# SOA Adoption Model



# Oracle's Fusion SOA Strategy

- Oracle Fusion Architecture
  - Blueprint for SOA-based Enterprise Solutions
- Oracle Fusion Middleware
  - Technology Infrastructure for SOA Applications
- Oracle Applications
  - Protect, Extend, Evolve through Fusion Architecture

# Why SOA with Oracle E-Business Suite?

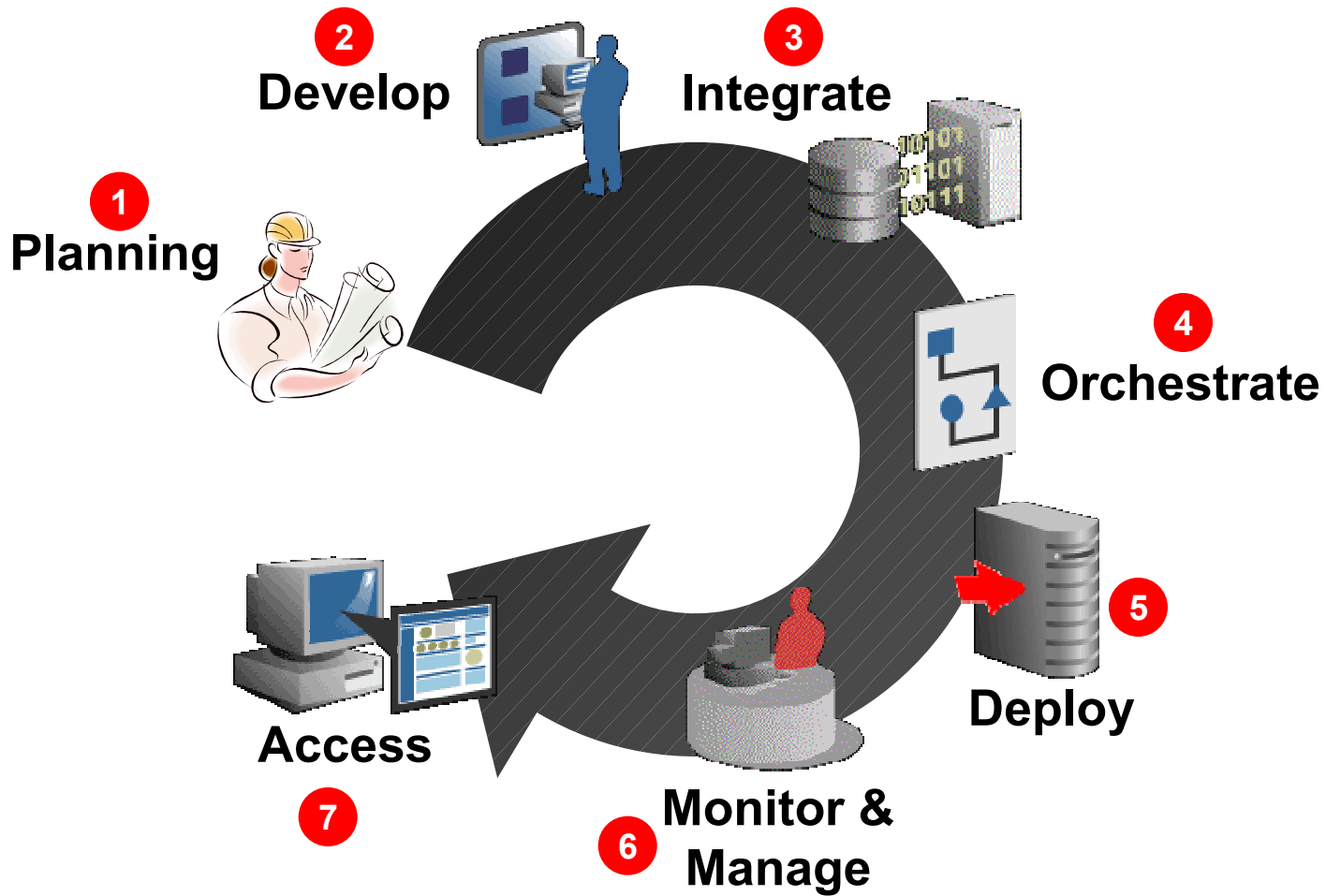
- Oracle E-Business Suite provides comprehensive business functionality within a Single, Unified suite of applications
- ***The Reality of Modern Business ...***
  - Heterogeneous IT Environments
  - Business Processes should be Visible & Flexible
  - Monolithic Legacy Applications
  - Need for Actionable Business Insight

# Promise of SOA

- Greater Enterprise Flexibility and Agility
- Lower Technology Costs
- Smaller Business IT Gap

*How do I get to SOA with Oracle E-Business Suite? ...Today*

# Service Oriented Lifecycle



# SOA Lifecycle

## Planning

- Gain comprehensive understanding of existing business assets
  - Processes, Public Interfaces, Services, Events, Open Interface Tables
- Level of Services
  - Course/Fine grained

# Integration Repository

- A comprehensive catalog of Public Interfaces in EBS
- Standardized Documentation
- Benefits
  - Promotes re-use of existing assets
  - Single source of truth
  - Assurance of using supported interfaces

Organization Customer Business Object Services - Mozilla Firefox

http://apps274t.us.oracle.com/8062104\_HTMLJ0A.jsp?page=oracle/apps/ind/repo/webui/InterfaceListPG6InterfaceType=...

Integration Repository

Organization Customer Business Object Services

Base Service Web Service

Qualified Name /oracle/apps/ar/hz/service/account/DirCustomerService Status: Active  
Interface oracle.apps.ar.hz.service.account.DirCustomerService Scope: Private To Appl  
Extends oracle.svr.Service  
Product Receivables  
Documentation Organization Customer Business Object API, Oracle Trading Community Architecture Technical Implementation  
XML Schema DirCustomerService

Extracts a particular Organization Customer business object from TCA.

Full Description

Source Information

Methods

Select Object and Create Grant

Select Details	Internal Name	Status	Description
<input type="checkbox"/>	<a href="#">show create OrgCustomer</a>	Active	Creates an Organization Customer business object.
<input type="checkbox"/>	<a href="#">show get OrgCustomer</a>	Active	Extracts a particular Organization Customer business object from TCA.
<input type="checkbox"/>	<a href="#">show get OrgCustomer</a>	Active	Extracts a particular Organization Customer business object from TCA.
<input type="checkbox"/>	<a href="#">show get OrgCustomer</a>	Active	Extracts a particular Organization Customer business object from TCA.
<input type="checkbox"/>	<a href="#">show save OrgCustomer</a>	Active	Saves an Organization Customer business object.
<input type="checkbox"/>	<a href="#">show update OrgCustomer</a>	Active	Updates a Organization Customer business object.

# SOA Lifecycle

## Developing Services

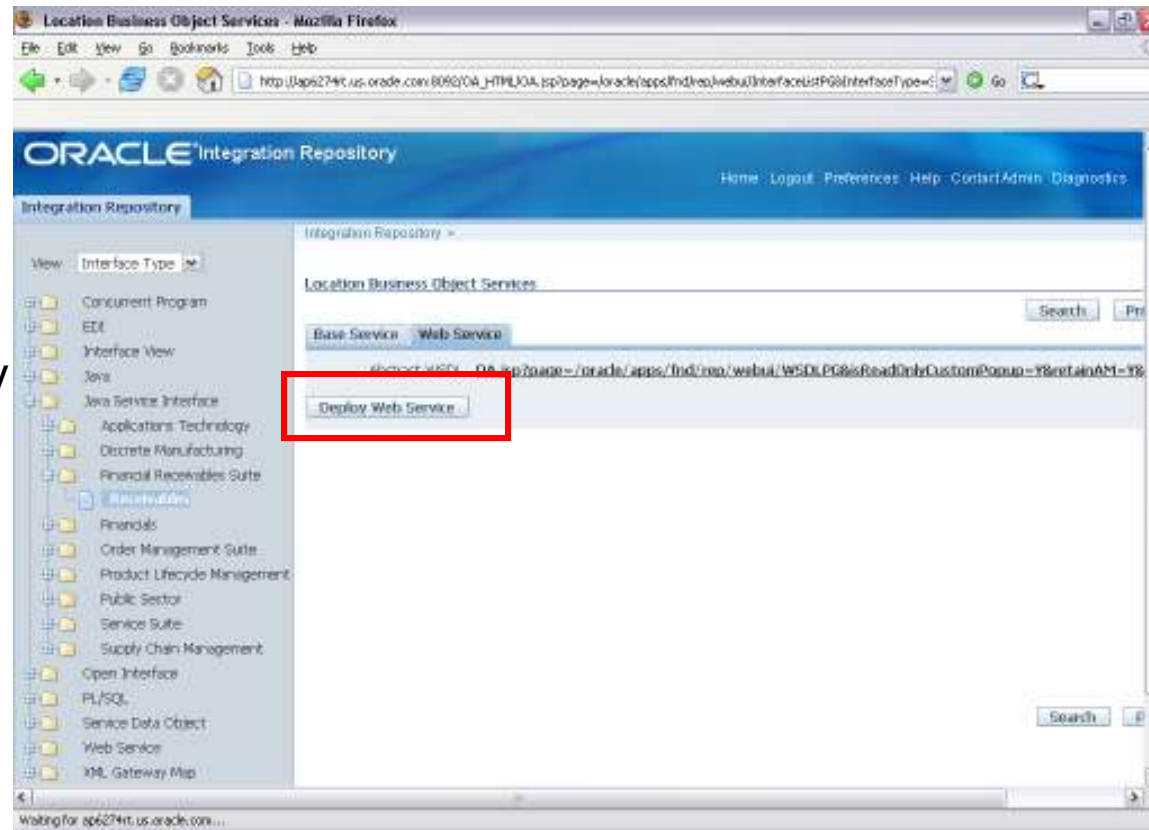
- What is a Service?
  - A **business service** is a unit of discrete business functionality
- Key characteristics of services:
  - ✓ Loosely coupled
  - ✓ Coarse grained
  - ✓ Standards Based Interface
  - ✓ Encapsulated Business Logic

# Service Enabling E-Business Suite

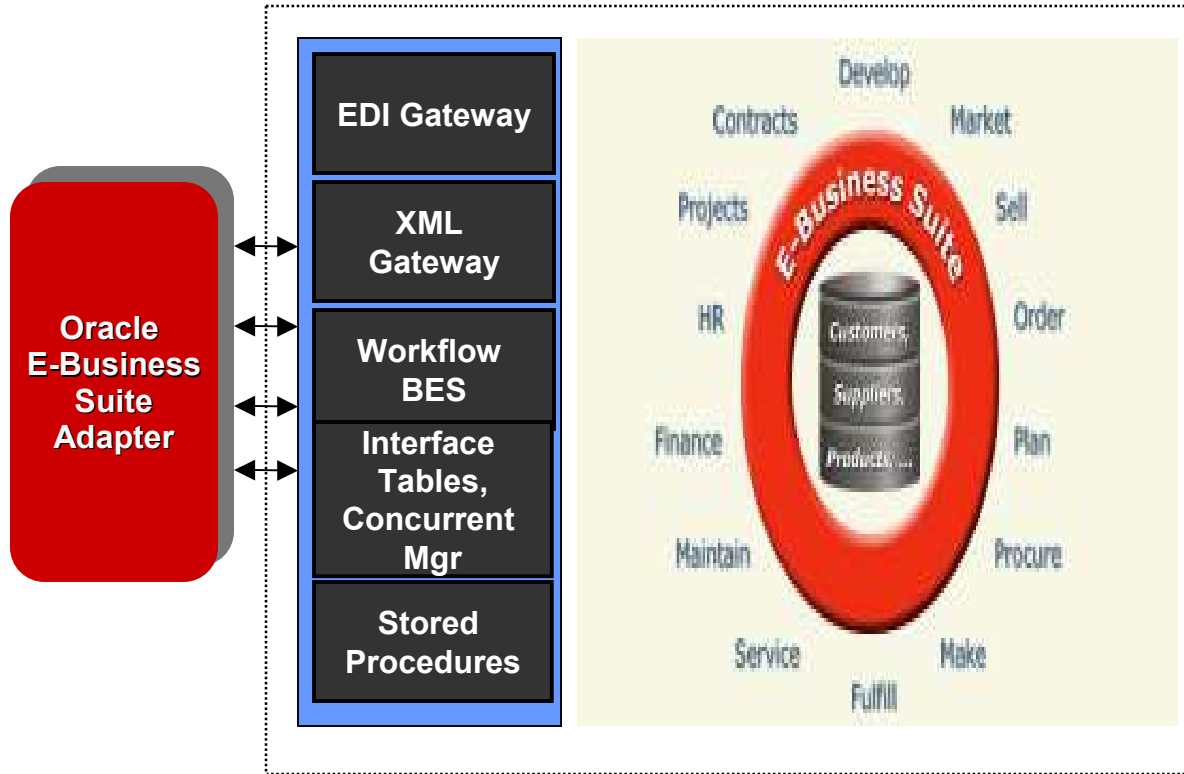


# Web Service Provider

- Step 1: Discover
  - Pull up the Java Service Interface in Integration Repository
- Step 2: Deploy
  - Use the Web Service Tab to generate bindings and deploy the Web Service
- Step 3: Secure
  - Grant access on a method to a User or a Group
- Step 4: Advertise
  - Deploy the WSDL to any UDDI compliant platform



# Oracle Applications Adapter



- Exposes existing EBS Integration Interfaces as Web Services
- Interfaces with Integration Repository
- Version Aware
- Declarative approach to Integration
- Faster Design to Deploy Time

# SOA Lifecycle

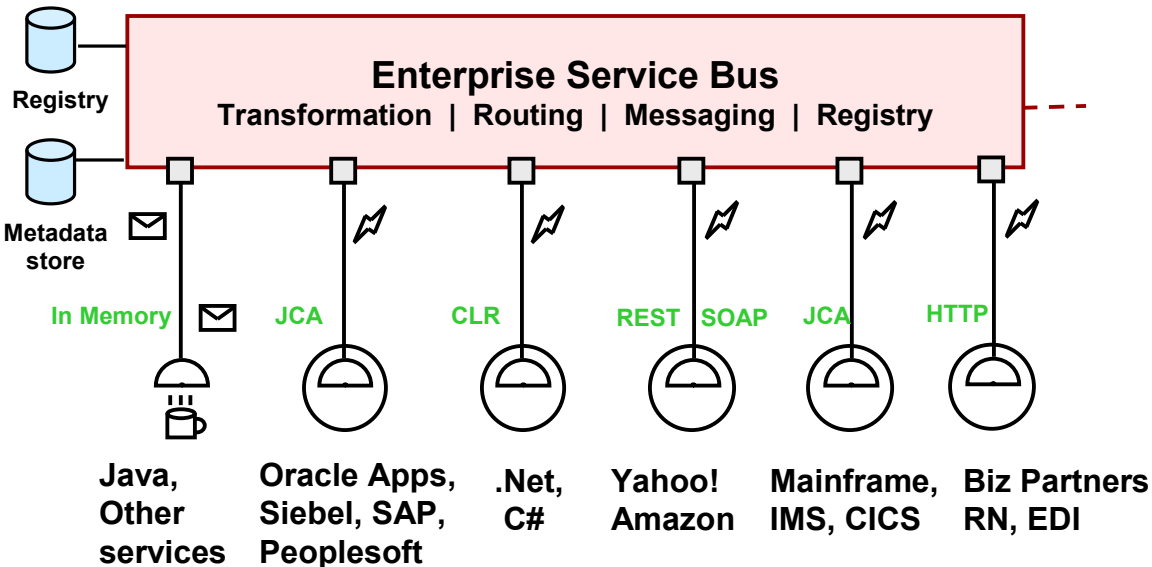
## Integrate

### Key Features

- Content Based Routing
- Complex Business Data Transformations
- Multi Transport Fabric

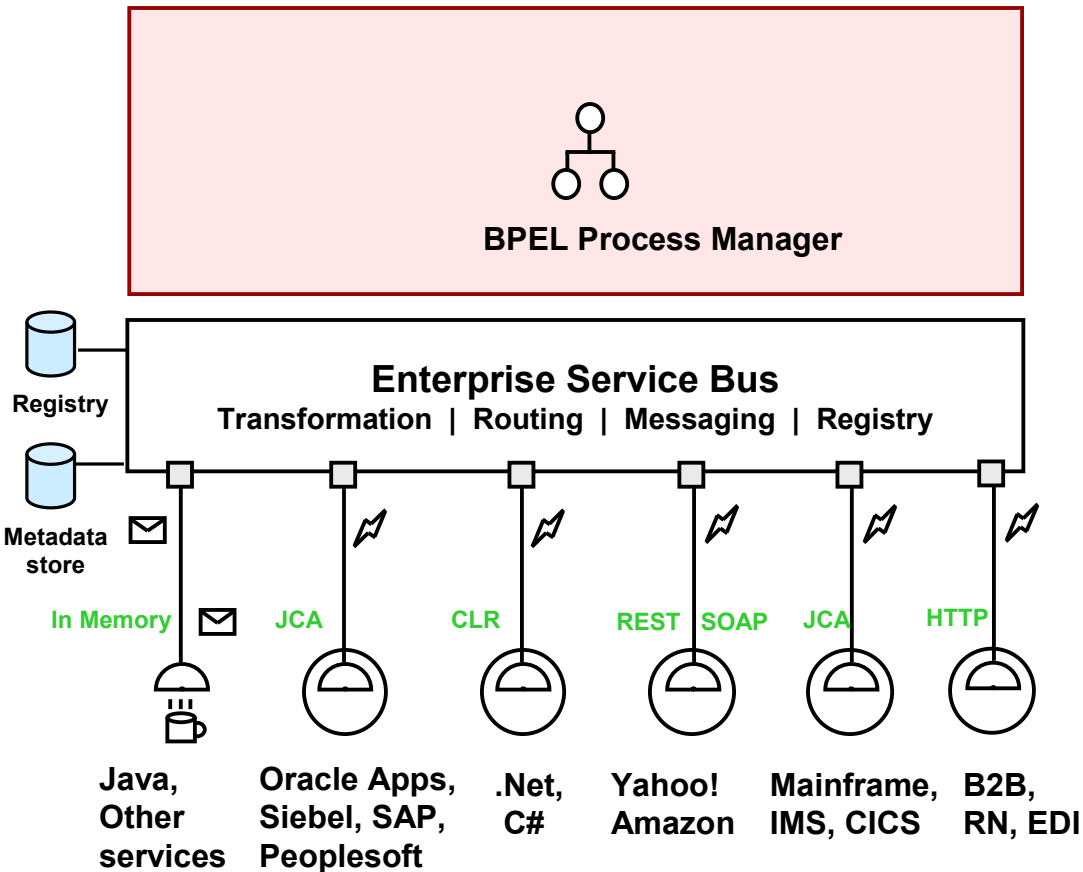
### Usage Patterns

- Point to Point
- Canonical Modeling
- Store and Forward
- Request/Response
- Externalized Services



# SOA Lifecycle

## Orchestrate



## Key Features

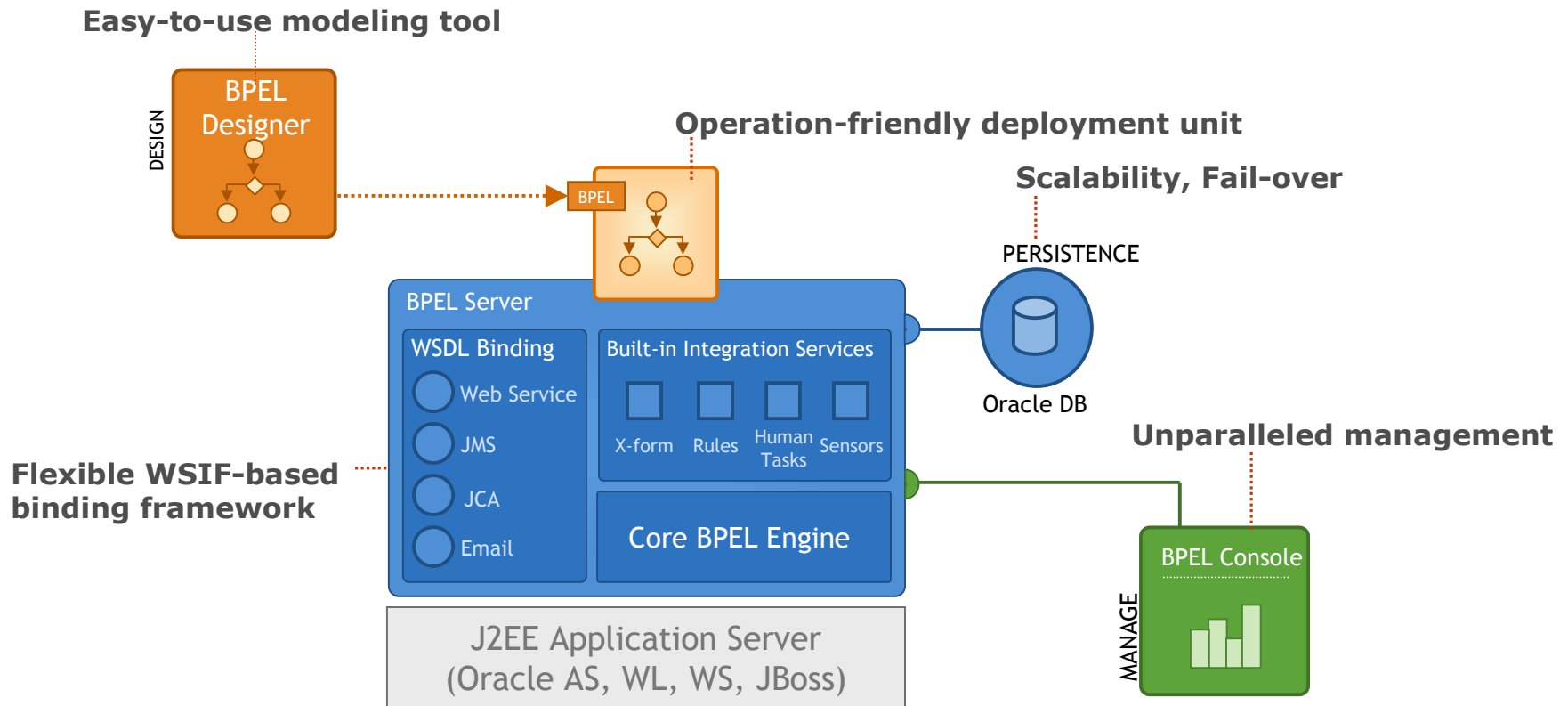
- Comprehensive BPEL support
- Human Workflow & Rules
- ESB-based Binding Framework
- Unit Testing Framework

## Usage Patterns

- Complex Integration Patterns
- Long Running Transactions
- Processes Involving Human Tasks
- Composite Applications

# Oracle BPEL Process Manager

*Enterprise-strength infrastructure for designing, deploying and managing BPEL business processes*

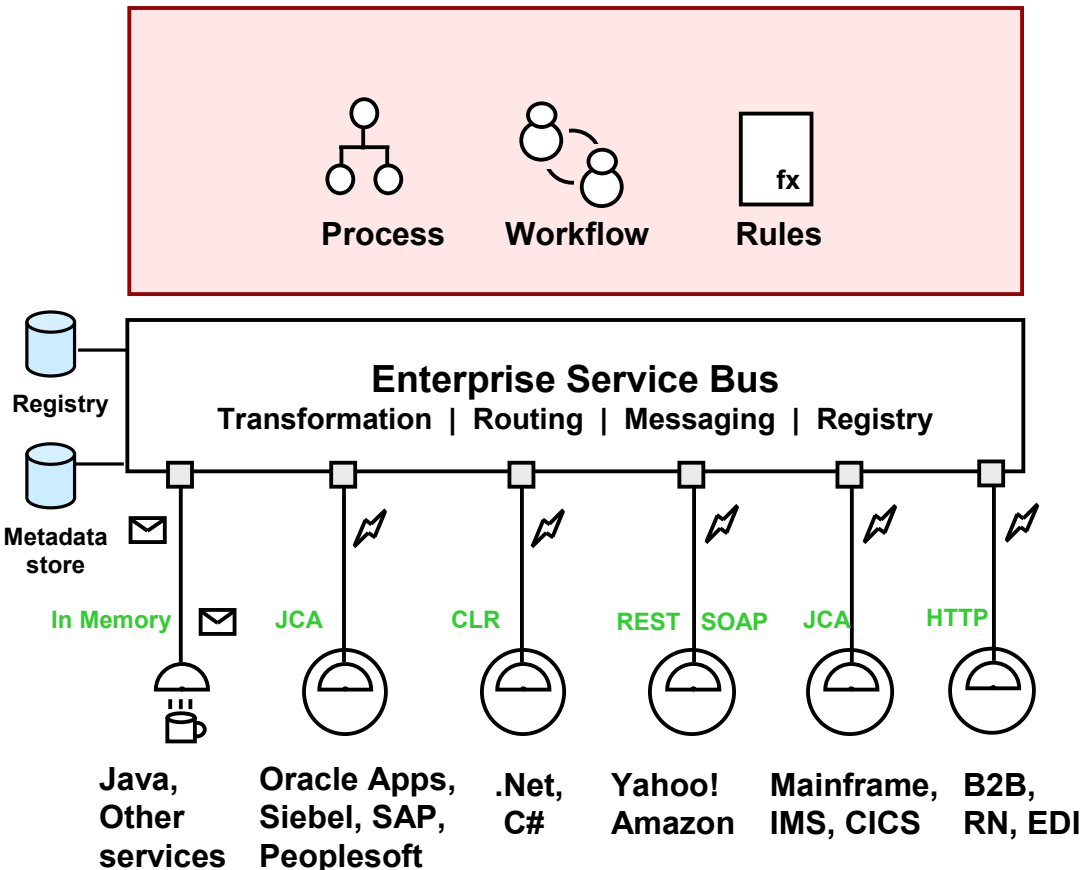


# Human Workflow & Business Rules

Comprehensive Human workflow and Business Rules Support

## Key Features

- Interleave system and human interactions into end-to-end process flow
- Various Approval and User Interaction Patterns
- Customizable Worklist Application
- Decision Service for Incorporating Business Rules into BPEL Process



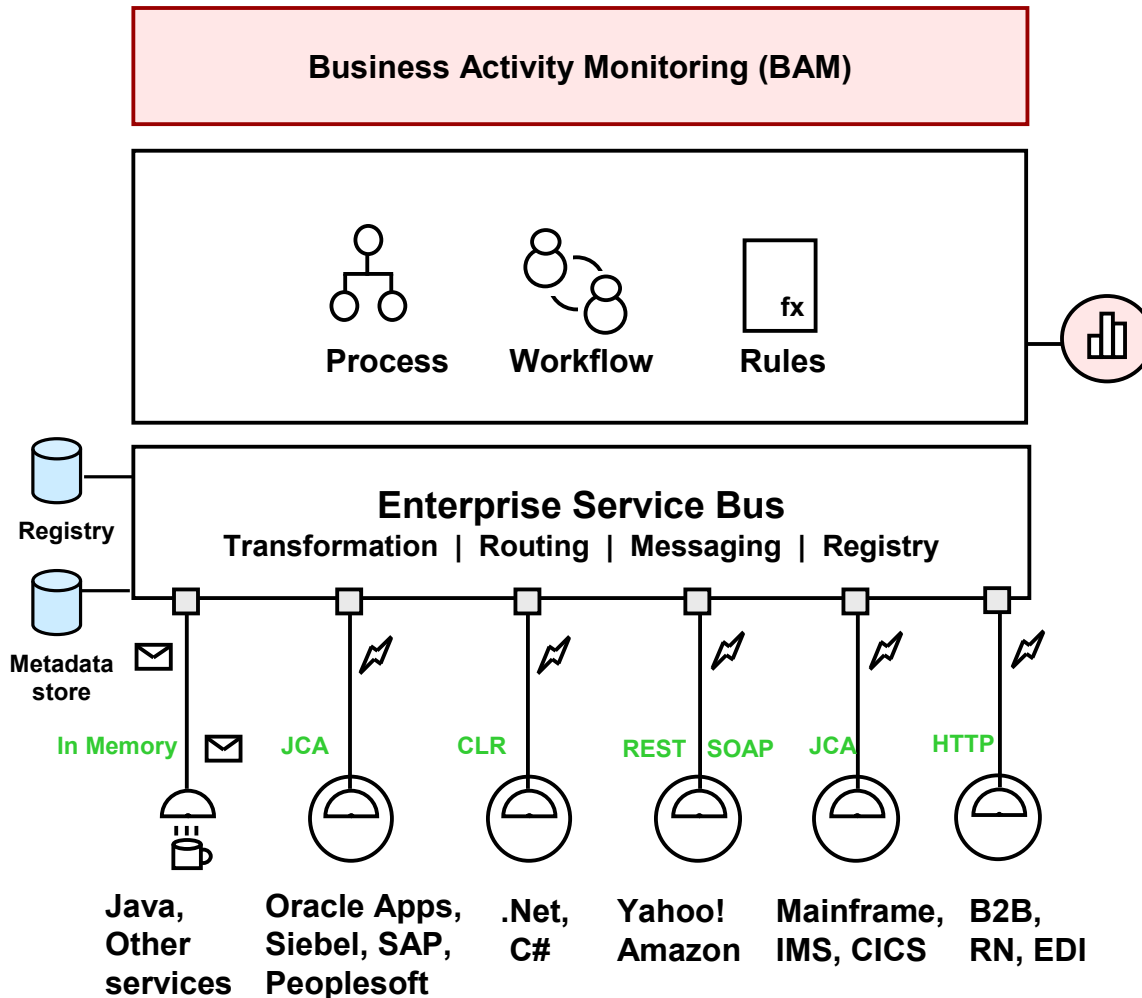
# SOA Lifecycle

## Monitor & Manage

Real Time Access to Critical Business Indicators

### Key Features

- Real-time KPIs
- User Defined Alert Rules
- Integrated Reporting and Analytics
- Tightly Integrated with BPEL PM



# Deliver Information to Business Users



- Real-time KPIs
- Thin Browser GUI
- Role-based Access
- Live Display Technology
- Portal Compatible
- Embedded Actions

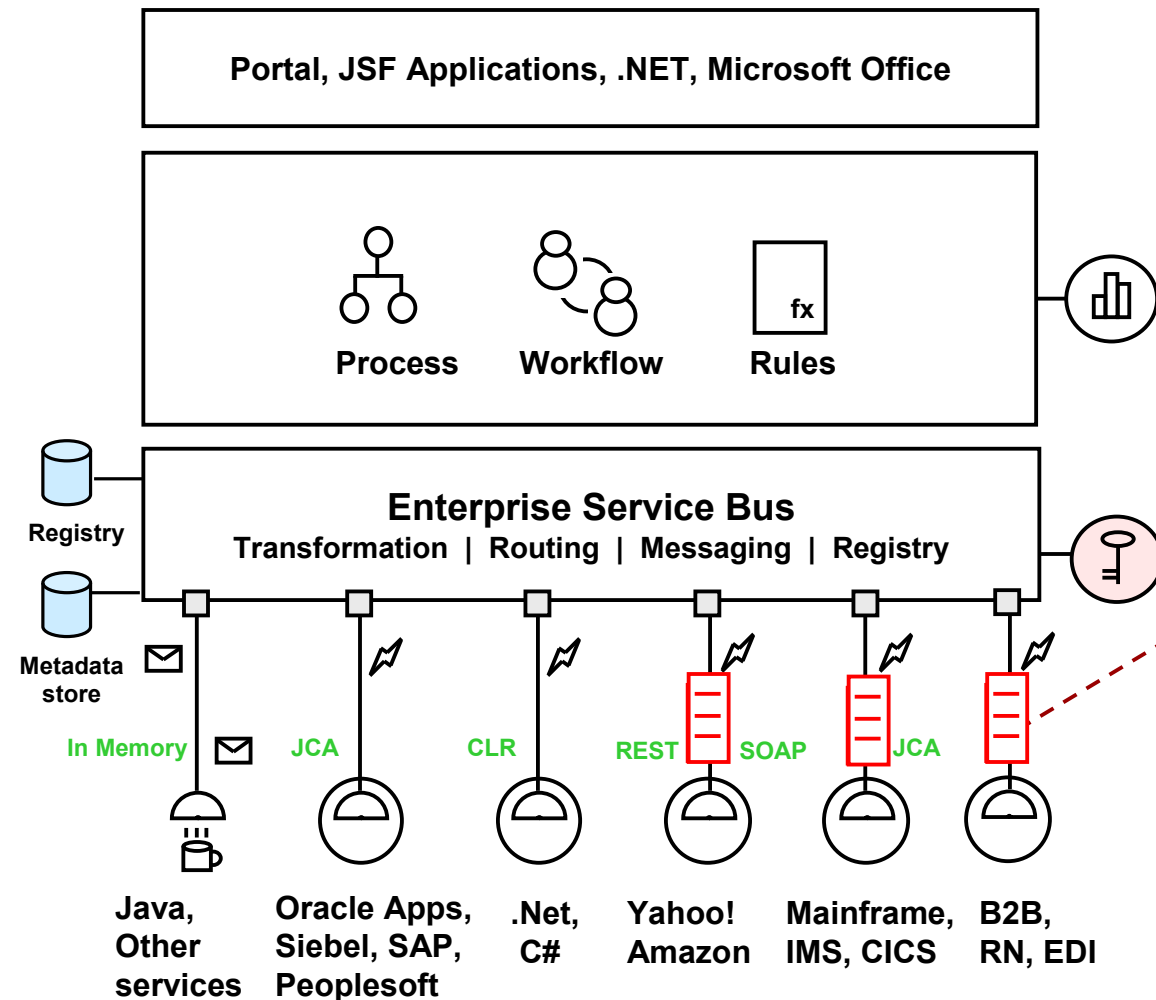
# SOA Lifecycle

## Access

Policy based Access  
Control

### Key Features

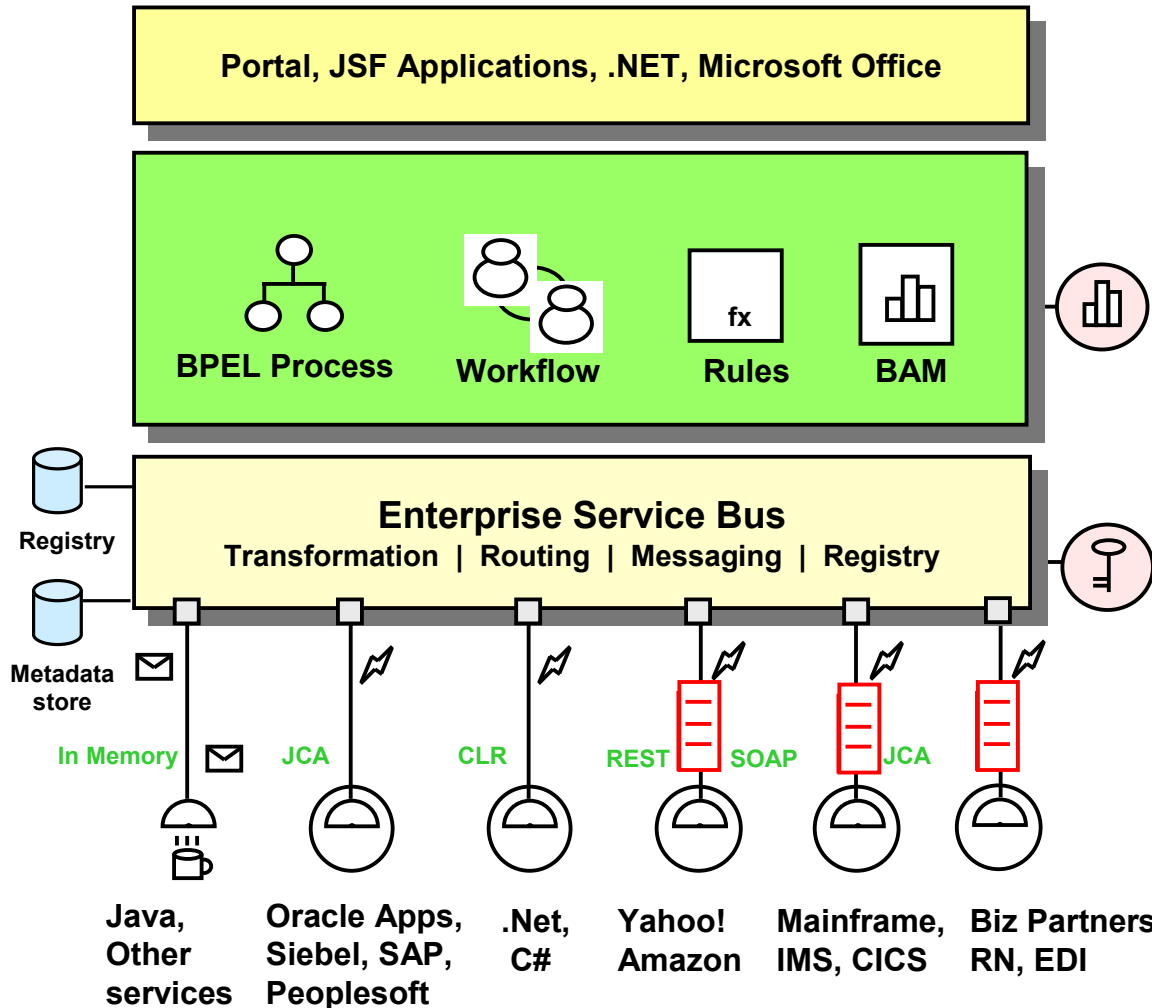
- Authentication & Access Control
- Change Policies without Changing Endpoint
- Encryption/Decryption, Signature Verification
- Custom Message Handlers
- WS-Policy, WS-Security Support



# Oracle SOA Platform – Summary

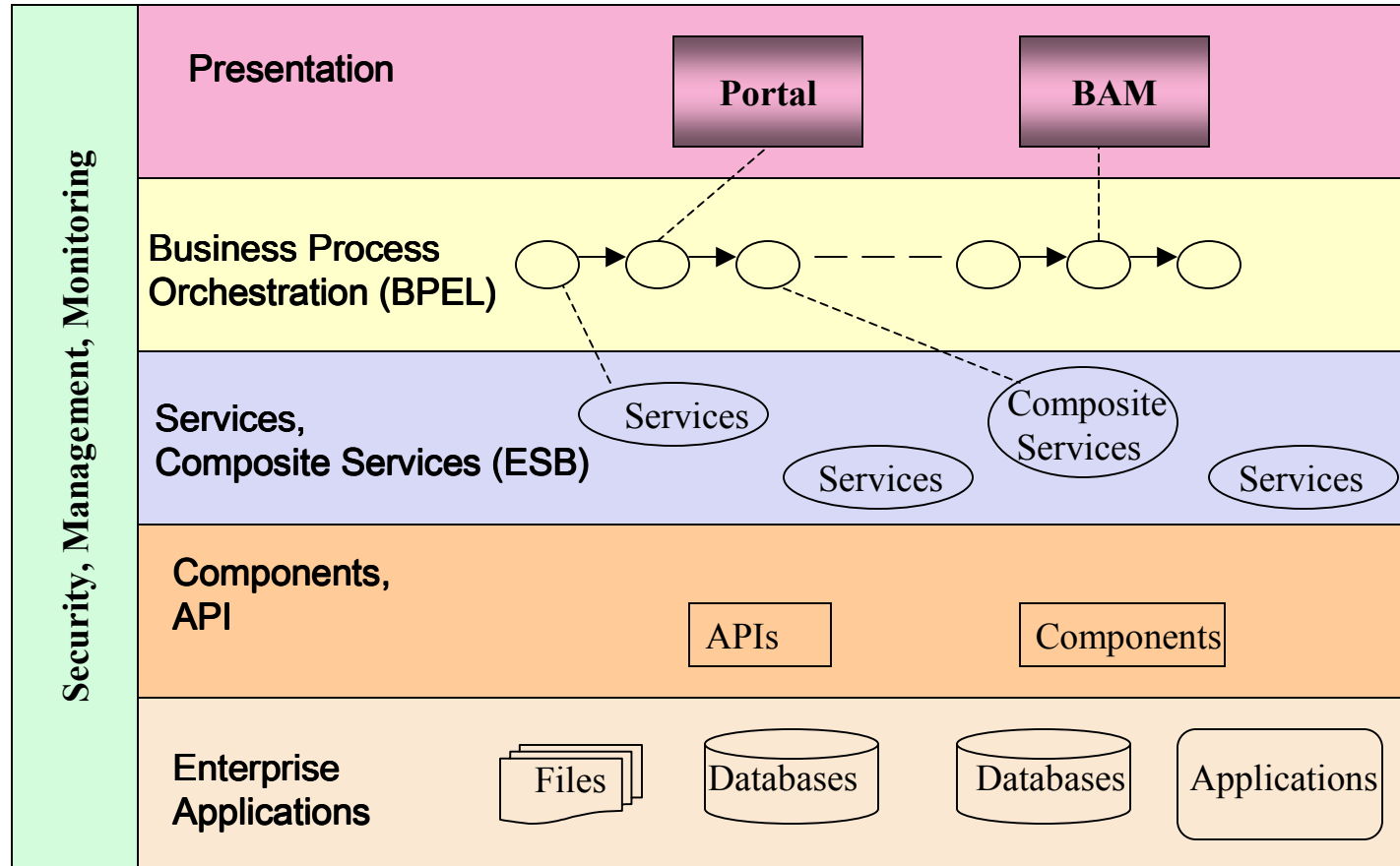
## Key Features

- 100% BPEL Support
- Extensible Human Workflow
- Flexible Rules Integration
- Integrated Business Activity Monitor
- JCA/WSIF Binding Framework
- Integrated ESB, Registry, WSM



# SOA Approach

Flexible, Visible, Manageable



# Key Messages

- **Service Enable Oracle E-Business Suite today to participate in SOA**
- **Maximize the Value of your Investment in EBS by leveraging Oracle SOA Suite**
  - Provides a comprehensive SOA platform
  - Build Adaptive Business Processes
  - Delivers Actionable Business Insight
  - Provides Superior Ownership Experience
- **Progressive Path to Fusion**

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