

Technologie Seminars

Database Technologie & Fusion Middleware Overview Seminar



ORACLE IS THE INFORMATION COMPANY

SOA – The next steps

How can you make it work?





Agenda

09.30 Opening SOA – The next steps (Oracle Nederland)

10.45 Pauze

11.15 InterAccess / Quion

11.45 Gemeente Arnhem

12.15 Vragen en afsluiting



Even voorstellen



- Oracle Nederland
 - Raymond Klein Robbenhaar (Dagvoorzitter)
 - Brian Wolff
 - Jan Poortinga
 - Rob Schootman
- Quion / Interaccess
 - Henk Nijenhuis
- Gemeente Arnhem
 - Bas Kooter
 - Gudron vd Wal

Technologie Seminars

Kalender najaar 2007

Overview Seminar

<u>Database Technologie & Fusion Middleware Overview</u> 31 augustus 2007 Praktijkgerichte overzichtspresentatie van de s^{In})uwste Oracle Database Technologie en de Fusion Middleware software.

Database Technologie Seminars

- Security & Compliance 6 september 2007
 In deze sessie ligt het accent op Database Security, een belangrijk onderdeel van de compliance eisen. Daarnaast komen Identity & Access Management en Data Vault aan bod.
- Lancering Oracle Database 11g 6 november 2007
 Ontdek de innovatieve mogelijkheden voor beveiliging, compliance, beschikbaarheid en beheer van de nieuwe Oracle Database 11g.
- <u>Database Application Development</u> 8 november 2007
 Vereenvoudigde applicatieontwikkeling met de Oracle Database, waarvoor gebruiksvriendelijke tools (gratis) meegeleverd worden.
- Enterprise Grid Computing 6 december 2007 Over Oracle RAC, voor het clusteren van fysieke servers tot één virtuele machine, en Oracle Enterprise Manager, voor het integraal beheer van uw IT-omgeving.

Fusion Middleware Seminars

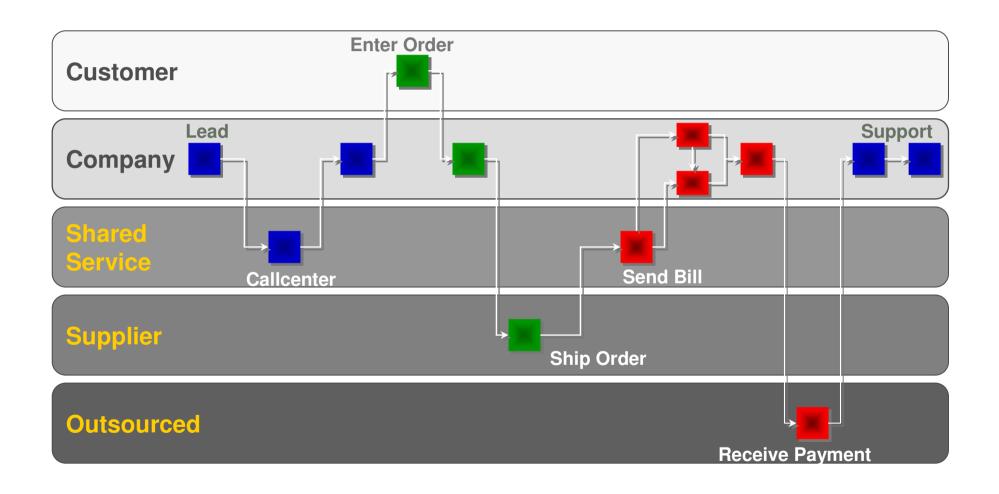
- SOA: the next steps 20 september 2007
 Geavanceerde mogelijkheden van Service Oriented Architectures op gebieden als Governance, Security en Business Activity Monitoring.
- Enterprise Content Management 11 oktober 2007
 Ontdek de nieuwste Oracle oplossingen voor het beheren van site content en het creëren van één ingang voor alle bedrijfsapplicaties.
- Fusion Middleware & Oracle Applications 22 november 2007 Presentatie over de praktische inzetbaarheid van Fusion Middleware voor het integreren van onder meer de Oracle E-Business Suite, Siebel en PeopleSoft.
- Business Process Management 20 december 2007
 Verbeter uw bedrijfsprocessen en verhoog de productiviteit met tools voor het analyseren en optimaliseren van uw bestaande applicaties.



SOA "The Next Steps"

- Intro
 - What is SOA
 - Demo SOA basic components ESB / BPEL
- Next steps for implementing SOA
 - Governance
 - UDDI repository, OWSM, OEM, BAM
 - SOA Suite
 - BPA suite
- Next step in SOA suite development
 - Oracle SOA Suite 11g brief preview

An Enterprise Process







Support Growth & Change

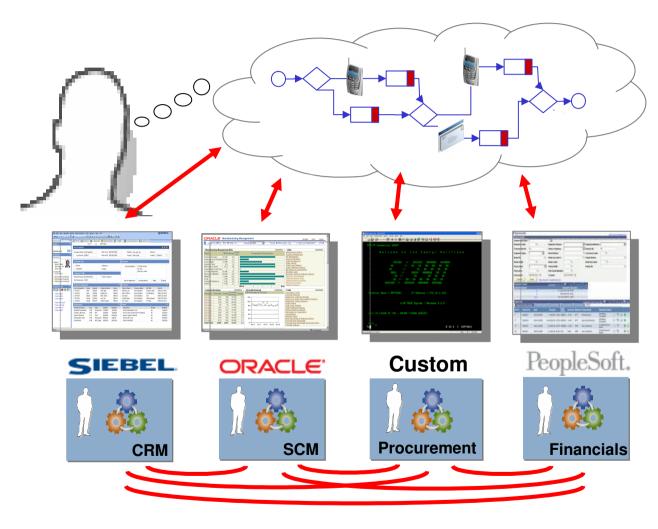


Business Insight



Compliance & Risk Mitigation

Typical Situation



- Silos of systems
- No business alignment
- No use of standards
- User drives process
- Rigid architecture
- Hard to maintain

What Is "SOA"?

Service-oriented architecture:

- Concept not a product
- Loosely coupled software services

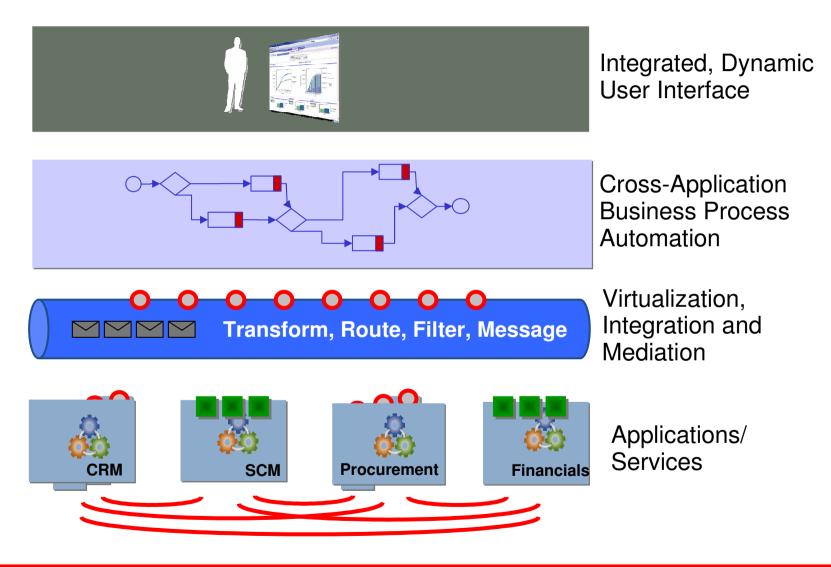
A **service** is a function that

- Supports a business process
- Is well-defined and self-contained
- Described solely by its interface contract and behavioral attributes

SOA heavily relies on *standards* to ease system connectivity

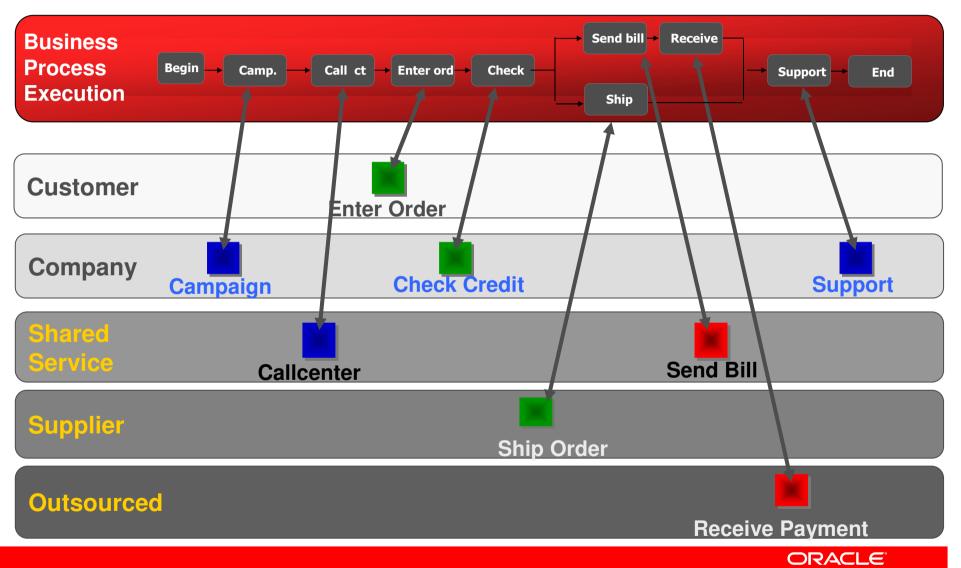
- Standard data format
- Standard interface definitions
- Standard wire protocols
- Standard security protocols

SOA Architecture with BPM



Business Process Management

Service Orientation with Orchestration



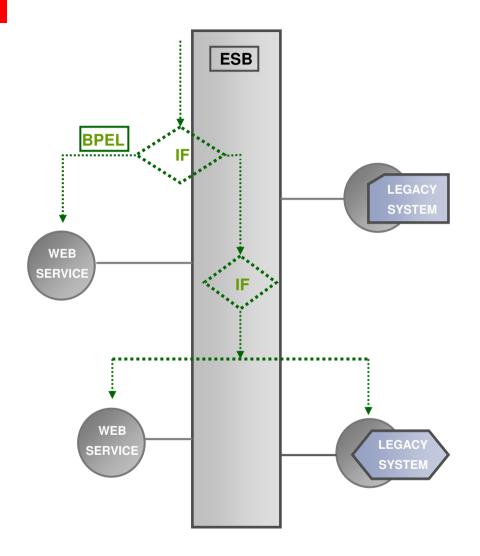
SOA Advantages

- Silos of systems
- No business alignment
- No standards
- User drives process
- Rigid architecture
- Hard to maintain

- ✓ Reusable business components
- ✓ Better Alignment
- ✓ Standards based
- Automated process
- ✓ Flexibility
- ✓ Standard components/services

- Shorter time to market
- User- friendliness
- Business Insight
- ...

Components of a SOA Infrastructure



Build/re-use Services
Web or Legacy Services

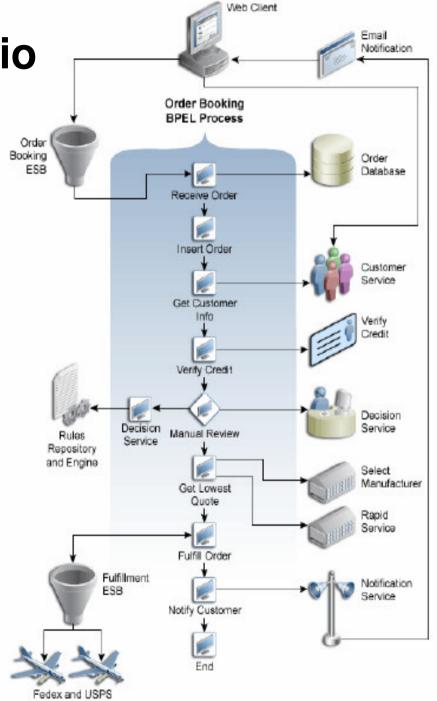
Connect ADAPTERS

Route & Transform ESB

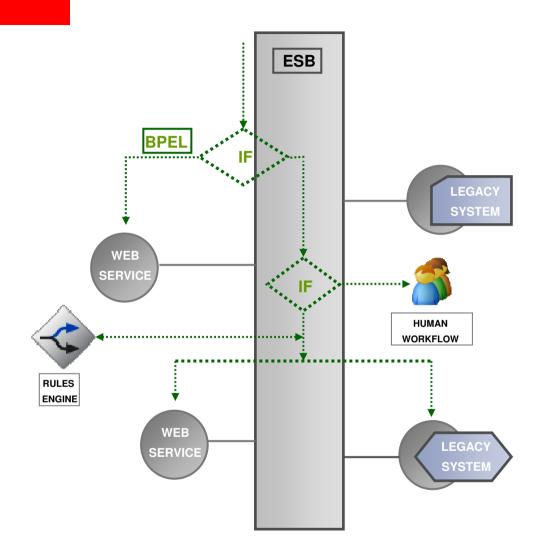
Orchestrate
BPEL/BPM ENGINE

Demo scenario

Order Booking



Components of a SOA Infrastructure



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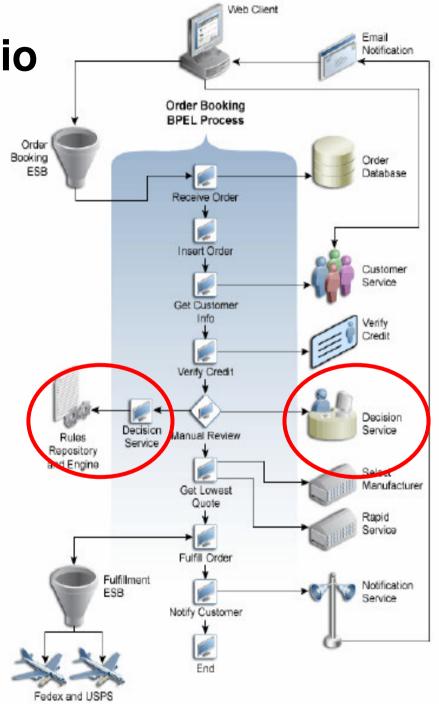
Route & Transform ESB

Orchestrate
BPEL/BPM ENGINE

Involve human beings
HUMAN WORKFLOW

Externalize business rules RULES ENGINE

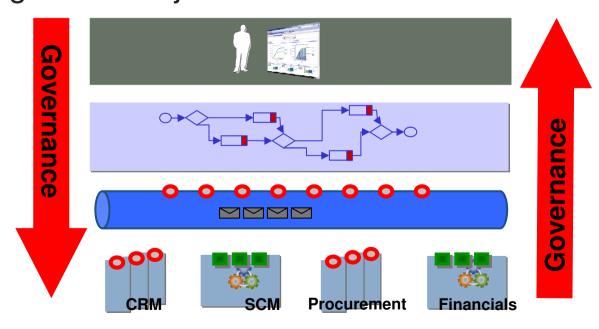
Demo scenario
Order Booking



Governance:

Definition

•IT governance is the responsibility of executives and the board of directors, and consists of the leadership, organisational structures and processes that ensure that the enterprise's IT sustains and extends the organisation's strategies and objectives.





IT Governance.. (volgens Cobit)

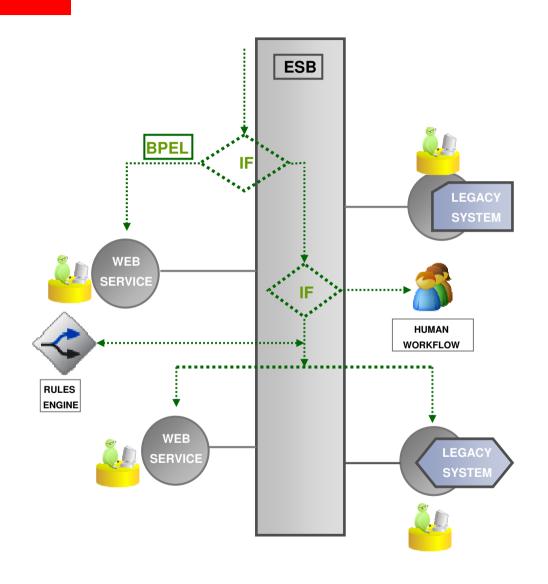
Control Objectives for Information and related Technology

Best Practices - Focus Areas:



- Strategic alignment focuses on ensuring the linkage of business and IT
- Value delivery is about ensuring that IT delivers the promised benefits against the strategy,
- **Resource management** is about the optimal investment in, and the proper management of, critical IT resources:
- **Risk management** requires risk awareness by senior corporate officers, transparency about the significant risks to the enterprise.
- **Performance measurement** tracks and monitors strategy implementation, project completion, resource usage, process performance and service delivery,

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Discover & Publish
SERVICE REGISTRY

What Is The Registry?

Provides visibility into services, service providers and related resources across the enterprise







Oracle Application Server
Services, BPEL Processes, ESBs



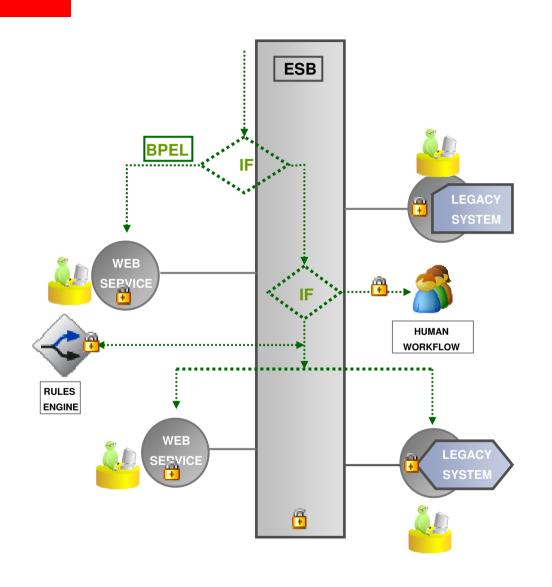
Registry Provides Key SOA Governance Capabilities

"Those IT managers seeking closer alignment with business goals must combine the ideas of registries, policy and business services to increase the chances of success."

— Gartner Group

- Lifecycle management via custom taxonomies
- Change notification
- Controlled view and access into services
- SOA metadata management
- Quality control through approval process

Components of a SOA Infrastructure



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Discover & Publish
SERVICE REGISTRY

Secure

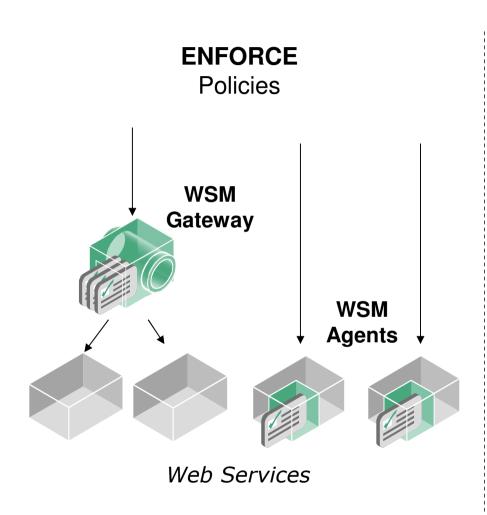
GLOBAL SECURITY FRAMEWORK

Oracle Web Services Manager

BUILD Policies



Policy Manager



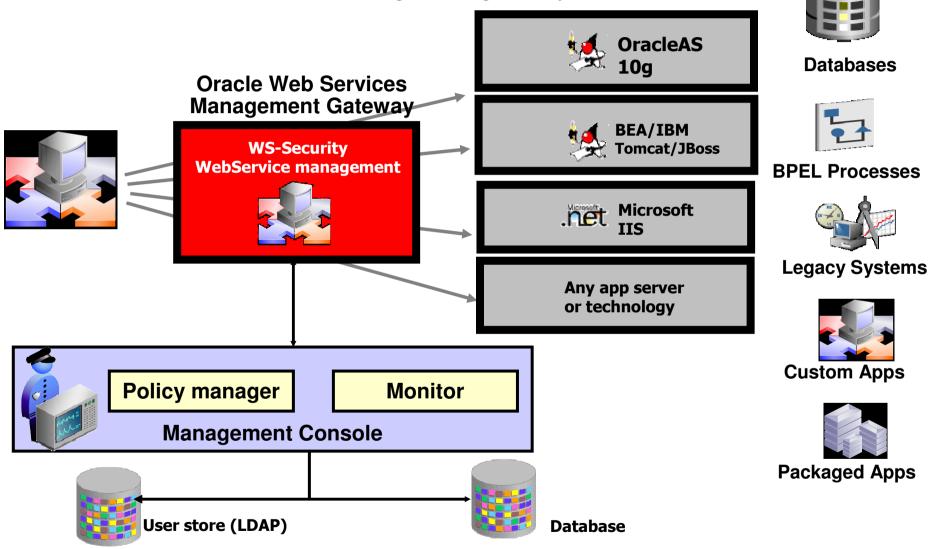
MONITOR Policies



Web Service Monitor

Manage Web Services

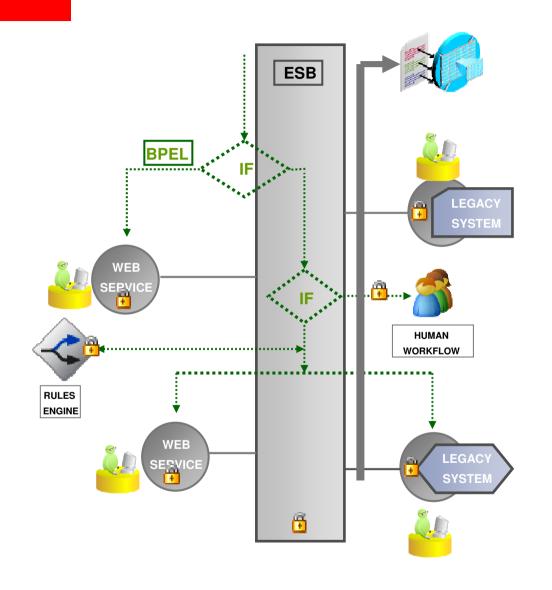
Oracle Web Services Management gateway



Support For Key Security Standards

- Encryption algorithms: AES-128, AES-256, 3-DES
- Message digests: MD5, SHA-1
- Message structure: XML / SOAP / WS-Security1.0
 - Security token profiles: Username, X.509, SAML
- Message integrity: XML Signature,
- Message confidentiality: XML Encryption
- PKI
 - Key encryption: RSA OAEP-MGF1P, RSA V1.5
 - Signature algorithms: RSA (PKCS #1) (1024-, 2048-bit keys),
 DSA
 - Credentials store, wallets: PKCS#12

Components of a SOA Infrastructure



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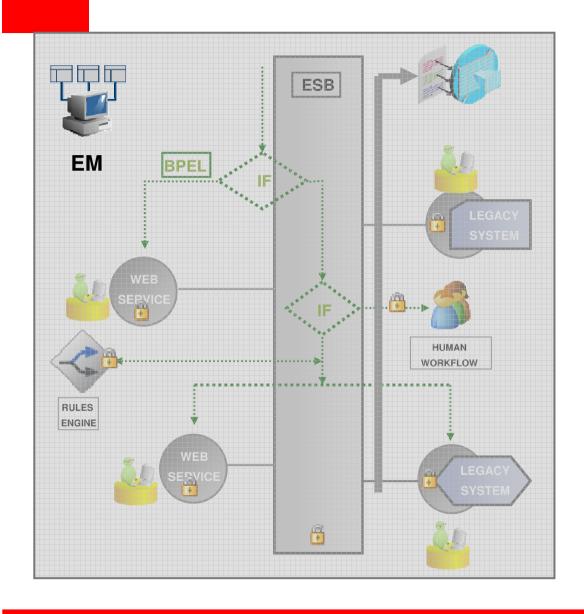
Discover & Publish
Service Registry

Secure

GLOBAL SECURITY FRAMEWORK

Monitor, Analyze & Act
BAM

Components of a SOA Infrastructure



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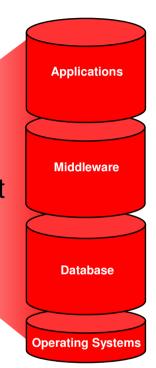
BAM

Manage

Enterprise Manager

Oracle Enterprise Manager 10g Release 3

- Configuration Management
- Service Level Management
- Application Performance Mgmt
- Lifecycle Management
- Dashboards



BEA IBM BEZ Juniper Blue Lane Microsoft Check PointNetApp Citrix Nortel Dell Onaro Egenera Pillar Data EMC Radware • F5

- •E-Business Suite
- Oracle SOA Management
 SAP
- PeopleSoft
- Oracle Identity Management

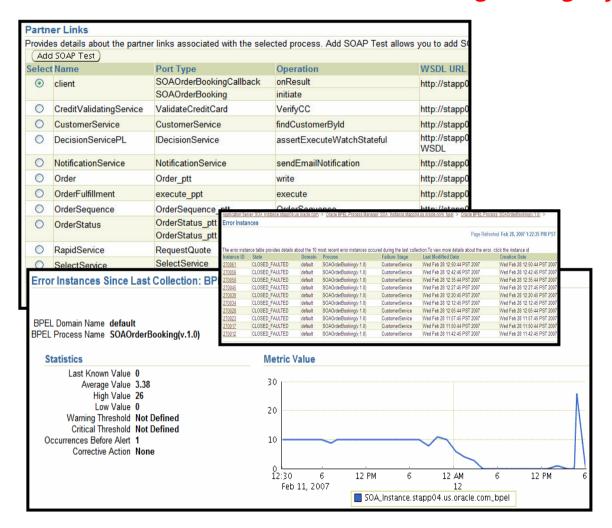
Siebel

Remedy

- Microsoft MOM
- JBoss
- IBM WebSphere MQ

SOA Management Pack

SOA RunTime Governance – Manage for agility



Manage what matters

- Auto-discover design time dependencies
- Model processes as services

BPEL Process Monitoring

- Latency, Throughput,
 Volume metrics
- BPEL process errors

BPEL partner link monitoring

- SOAP Service Tests
- AS Web services

SOA Infrastructure Monitoring

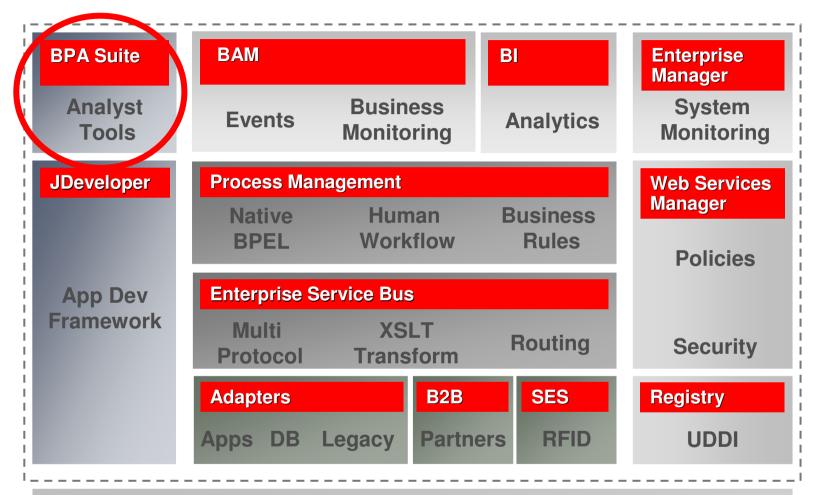
BPEL PM, AS, DB dehydration store, etc.



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Oracle SOA Product Mapping



J2EE Application Server

Oracle AS, JBoss, WebLogic, WebSphere



Collaboration between Business and IT

Social environment

Organization

Employees

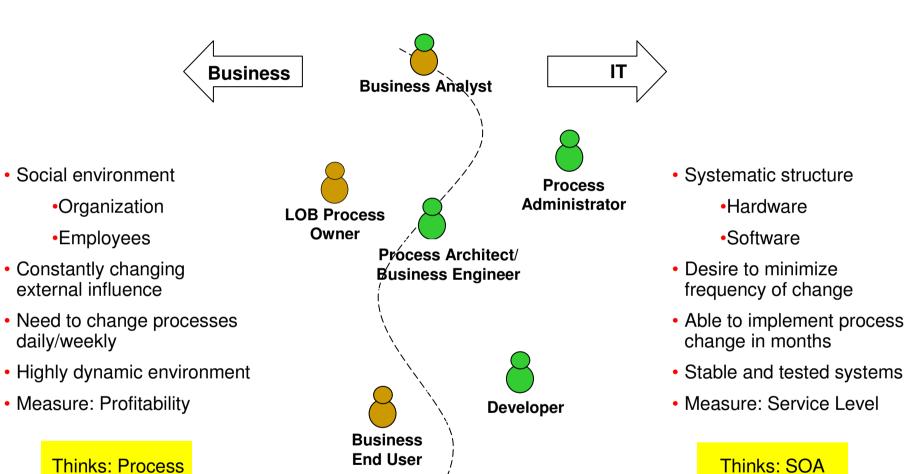
Constantly changing

Measure: Profitability

Thinks: Process

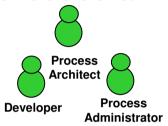
external influence

daily/weekly

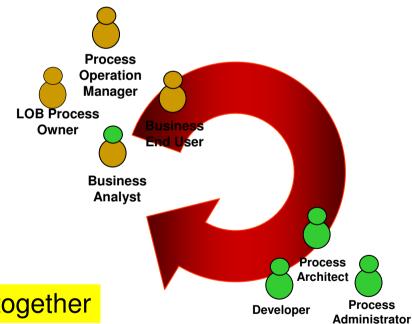


BPM and SOA – Different Audiences

SOA addresses an IT audience



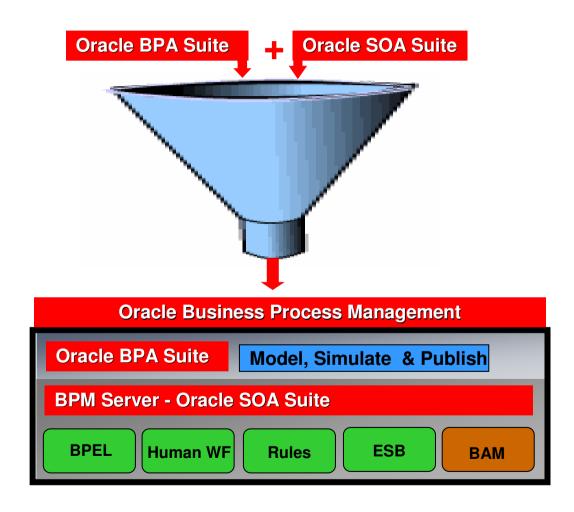
- BPM addresses
 - 1st the Business audience
 - 2nd the IT audience as influencers



..... and BPM enables them to work together

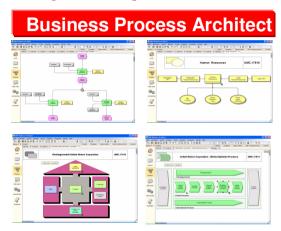
Oracle Business Process Management

Core Components



Oracle BPA Suite

Key Components



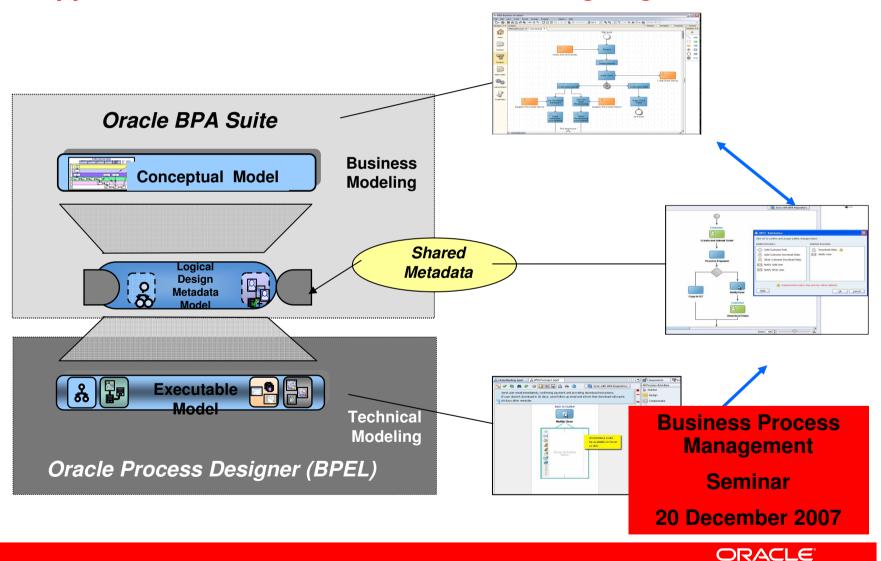


Business Process Simulator Technically, Precedent All Control of Control of

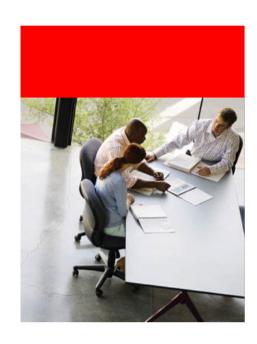


Key Underpinnings of our Integration

Approach Business and Technical Modeling Alignment







Oracle SOA Suite Roadmap

10gR2 Jan 06 10gR3 Oct 2006 11gR1 2007+

Individual Best-Of-Breed Engines

- BPEL PM
- OWSM
- B2B
- UDDI Registry
- BAM

Development

- Portal Integration framework (JSR-168)
- · Sensors integrated with Oracle BAM

With each new release:

- Further extend
- Integrate existing

New Components

- Oracle ESB
- · Oracle Business Rules
- · Oracle BPA Suite

SOA Platform Release

- · Single installer for BPEL, ESB, OWSM
- Shared OracleLite, app-server, JDev instances
- · Unified Web service test interface
- · Integrated consoles, design-time

Key Features

- Rich, Meta-data driven Human Workflow
- BPEL Test
- Mediation
- · Decision Service
- Large Process Support
- Transaction Tracing
- · Connected Consoles
- Error Hospital (10.1.3.3)
- Rich Modeling for Biz Analytics, BPMN
- Bi-directional support between model, executable processes and BAM

New Components

- · Oracle Data Integrator
- ECMS Integration (Stellent)
- Tangosol (Coherence)
- · Complex Event Processing

Development

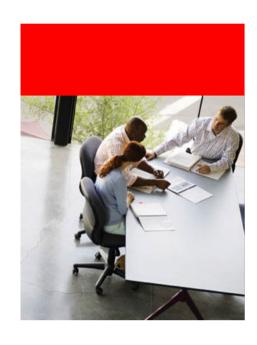
- SCA platform
- Tangosol (Coherence) for dehydration
- BPEL versioning extended to composites
- ESB error hospital extended to composites + batch resubmission etc..)
- BPEL unit testing extended to Composites
- J2FF BAM
- Extensible BPEL Designer Palette
- · Richer Worklist Applications
- MDS (metadata services) Integration
- Bi-directional support between simulation and BAM
- XSL document merge/many to 1

Internal

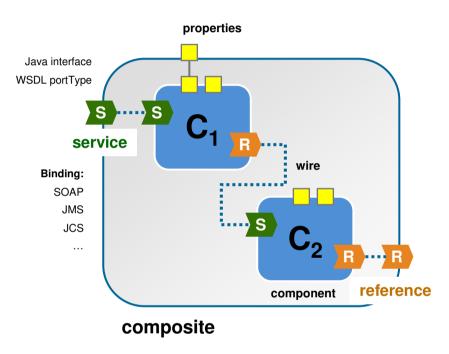
- · Architecturally unified
- Integration with Business Events
- Unified EM console







What is SCA?



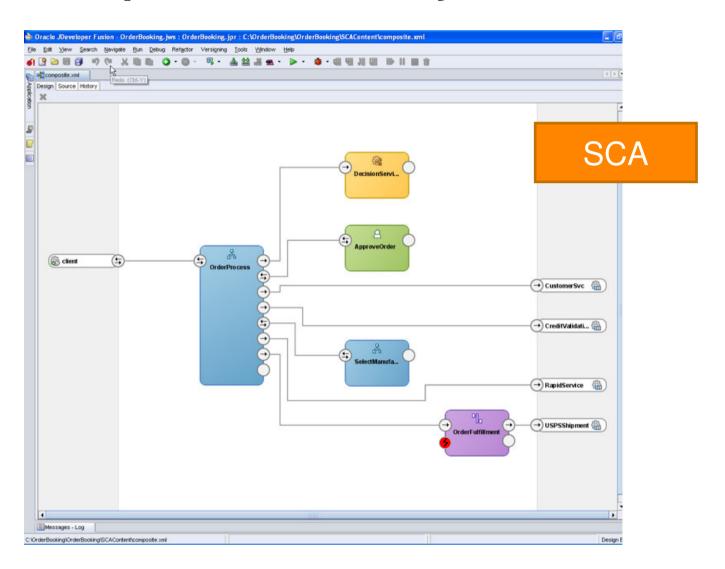
Service Component Architecture:

- language-neutral
- · component model
- assembly model
- Specifications backed by a growing number of leading industry vendors
- http://www.OSOA.org

SCA terminology:

- Composite: deployment unit
- Service: entry-point into composite
- Component: provides logic
- Reference: refers to external services
- Wire: connects services, components and references – no special semantic.

Graphical Assembly







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Klanten Benelux









landbouw, natuur en voedselkwaliteit













AIRSTOP and go



























Norg en Zekerheid voor u







Eurotransplant International Foundation



Questions

