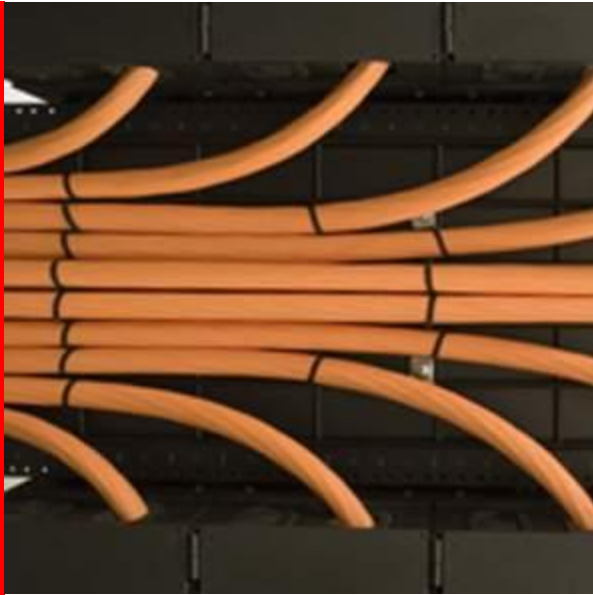




ORACLE®



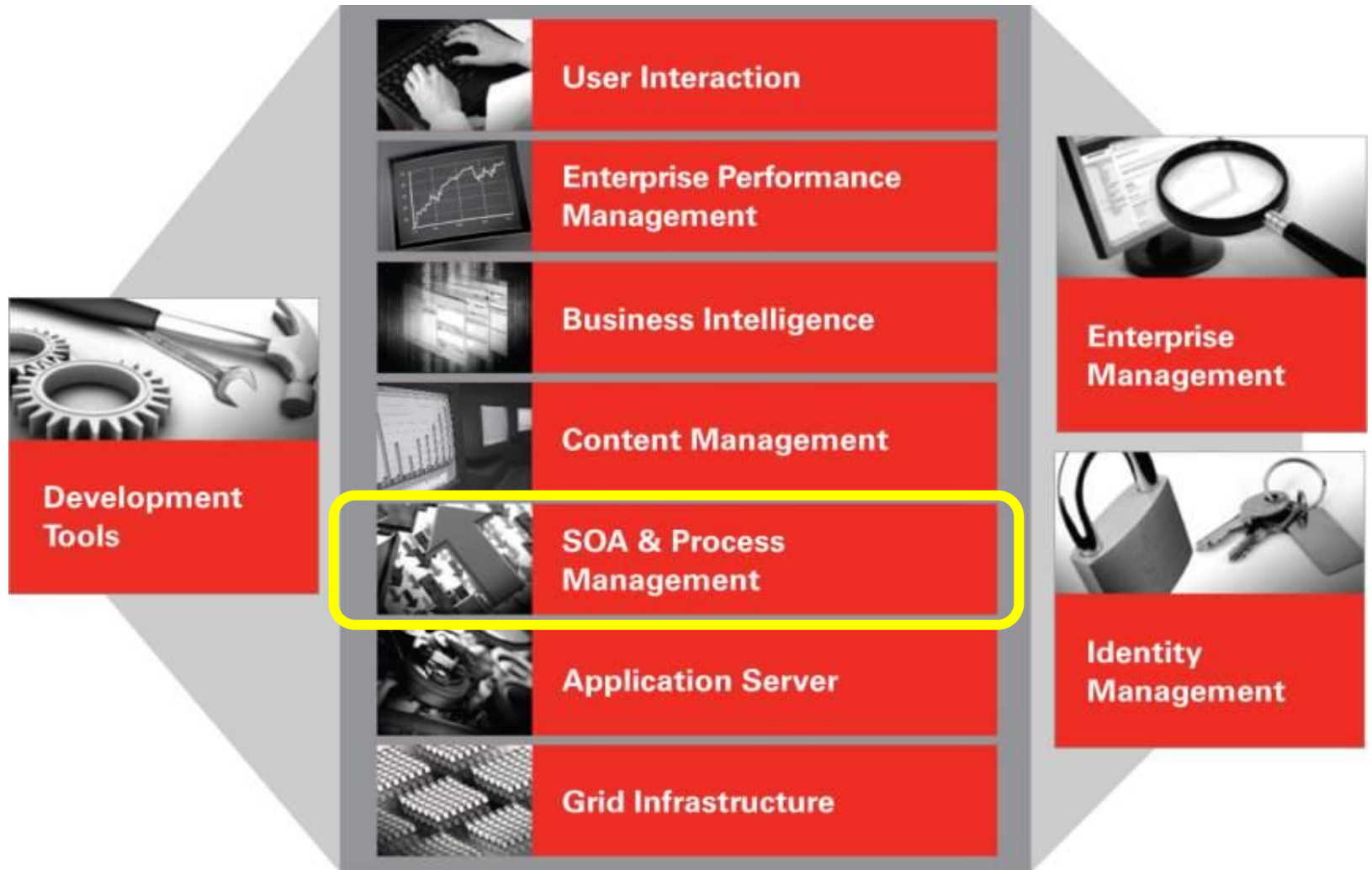
SOA 管理解决方案

马平 (ping.ma@oracle.com)

高级解决方案顾问

甲骨文 开发者计划

甲骨文融合中间件





决定SOA成败的关键因素是什么？

SOA 设计

前端应用

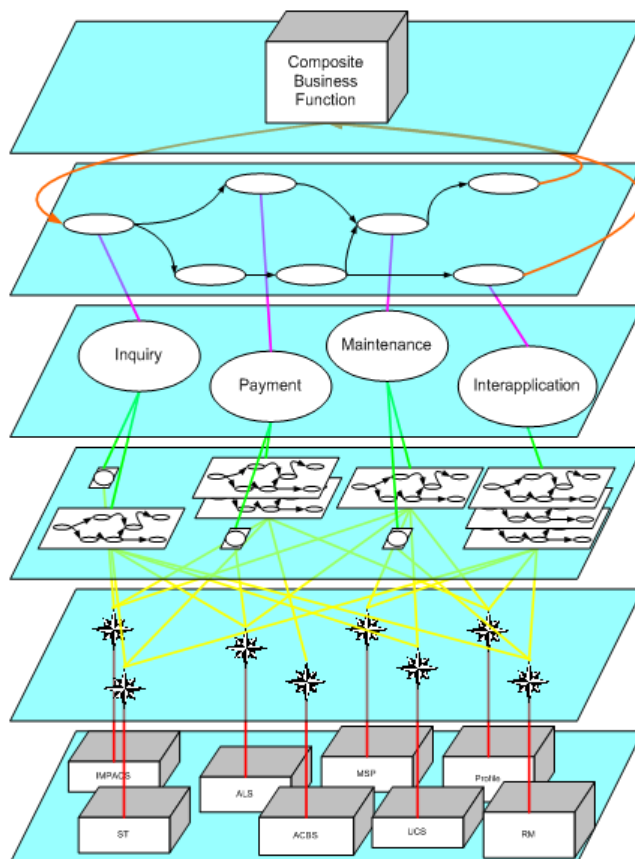
业务流程

业务服务

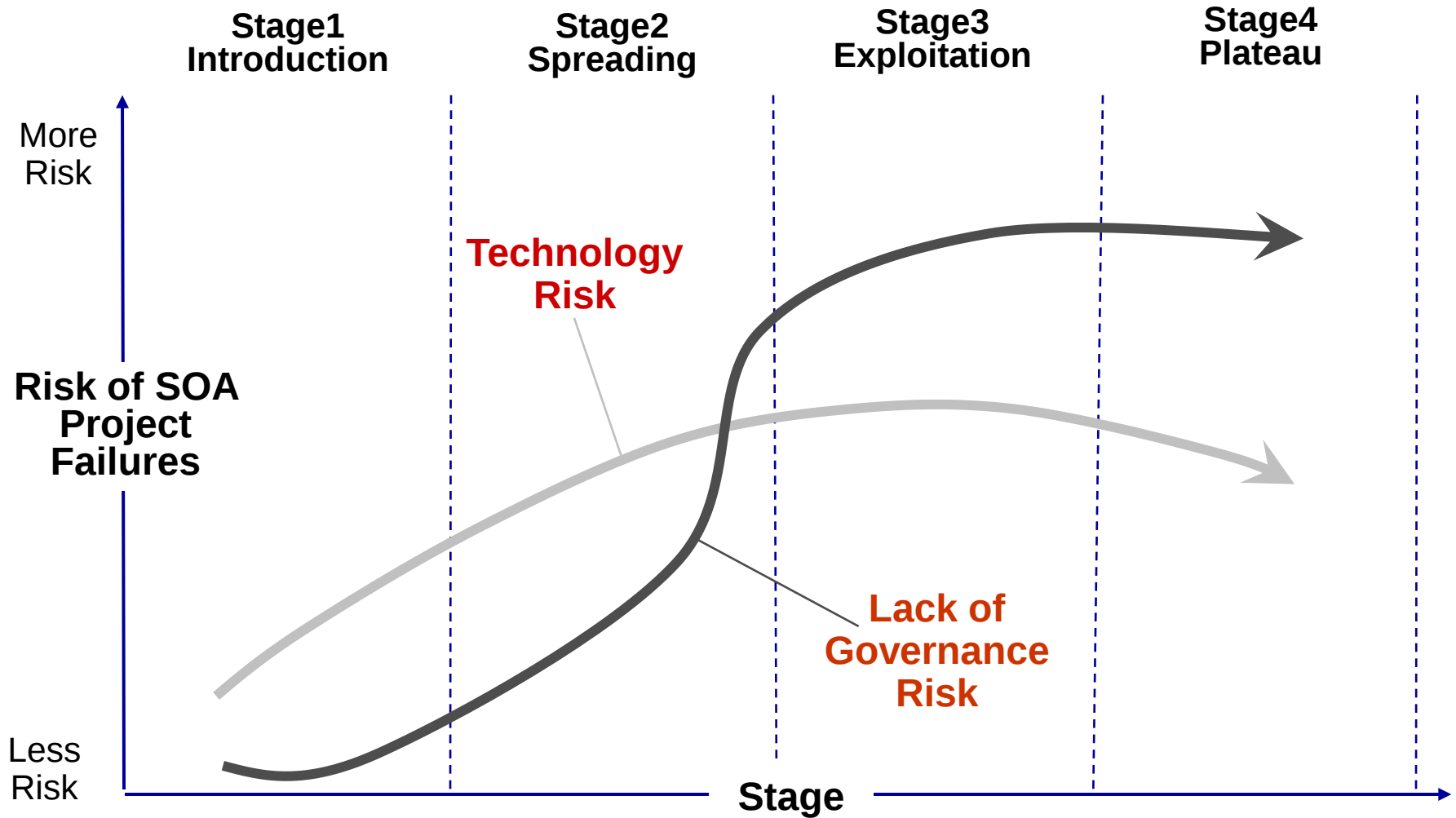
服务编排

原子服务

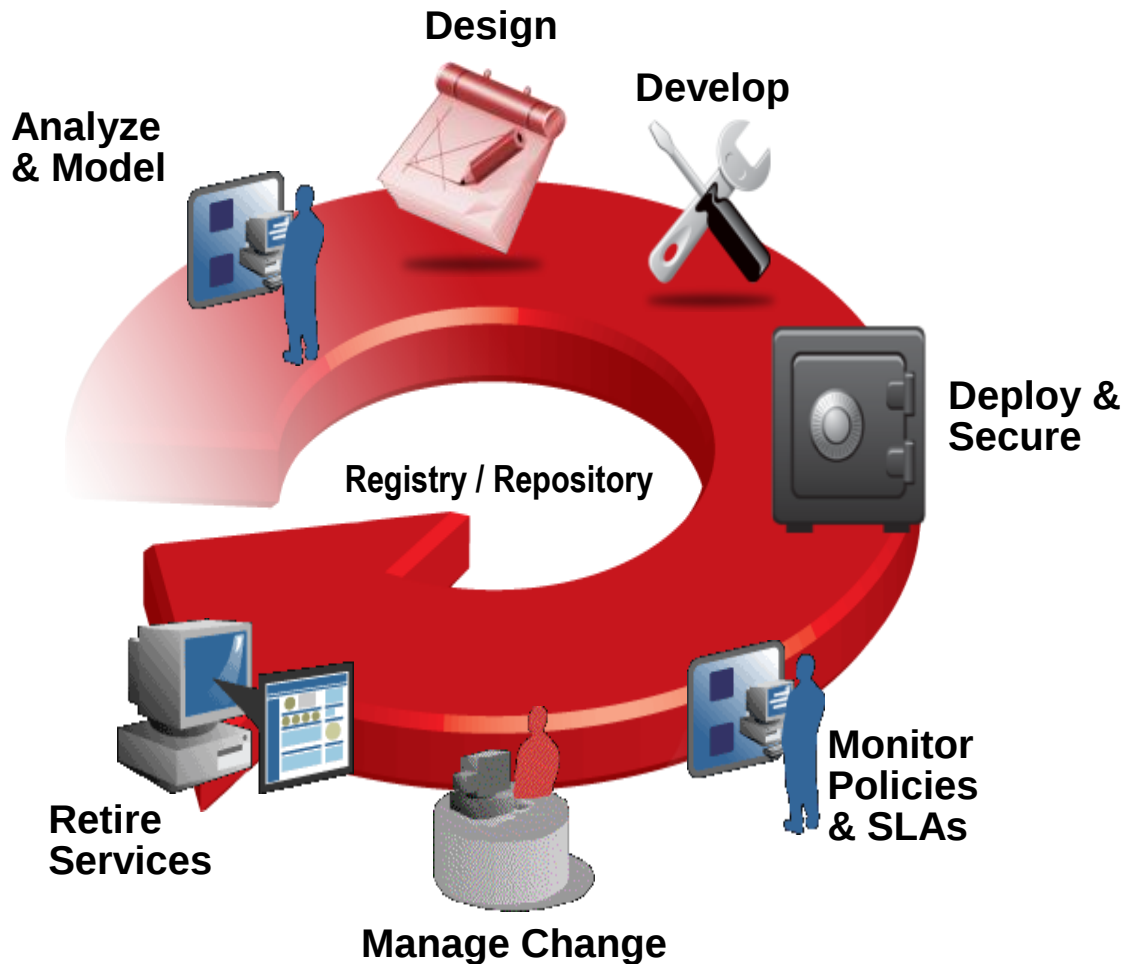
底层应用



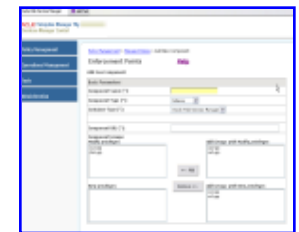
SOA项目的4个阶段



SOA 生命周期管理



Visibility



Control



Analytics

SOA 管理的主要内容

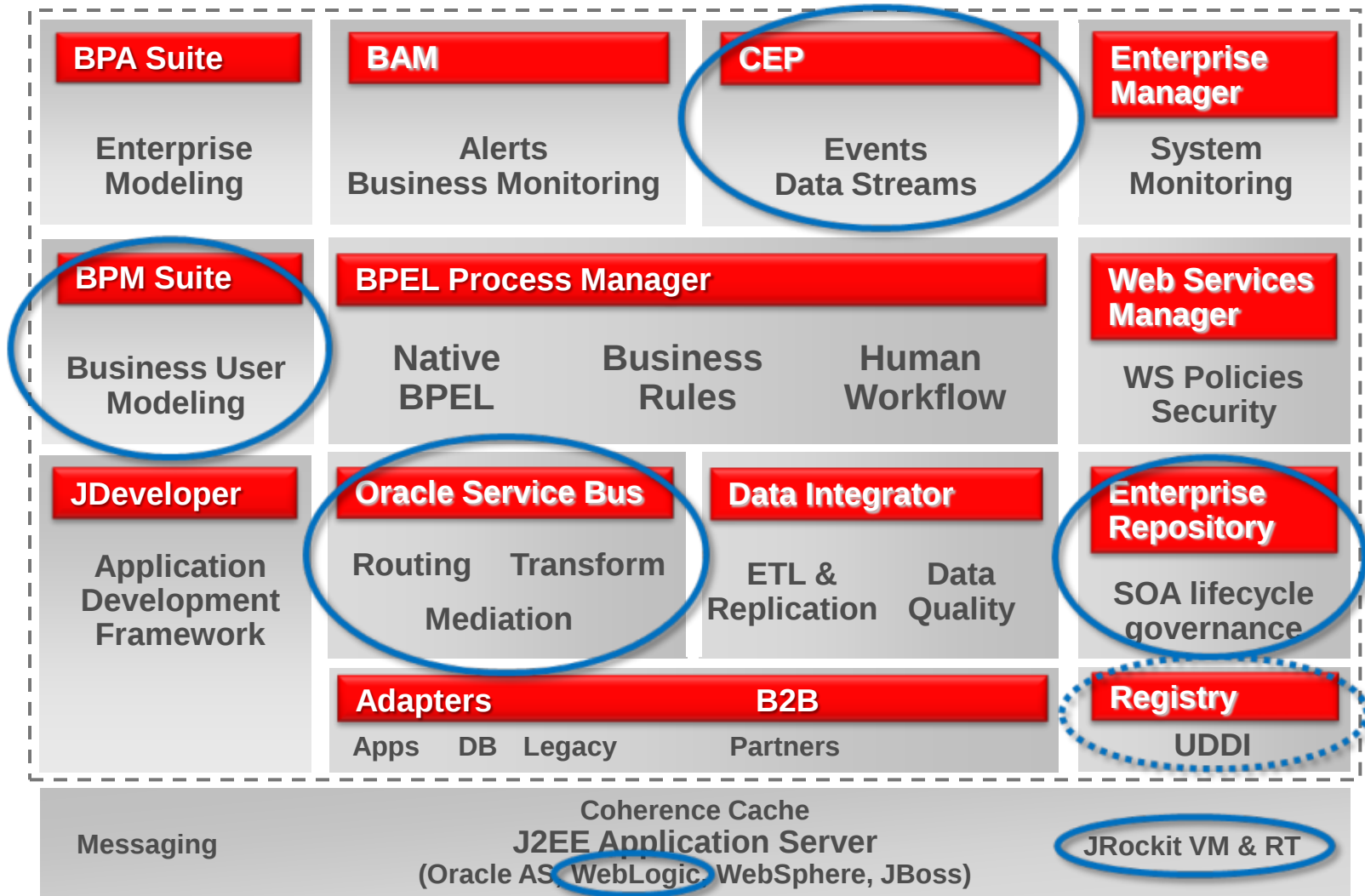
Registry/Repository

Policy Management

SOA Provisioning

SOA Monitoring / Management

Oracle SOA 组件概览

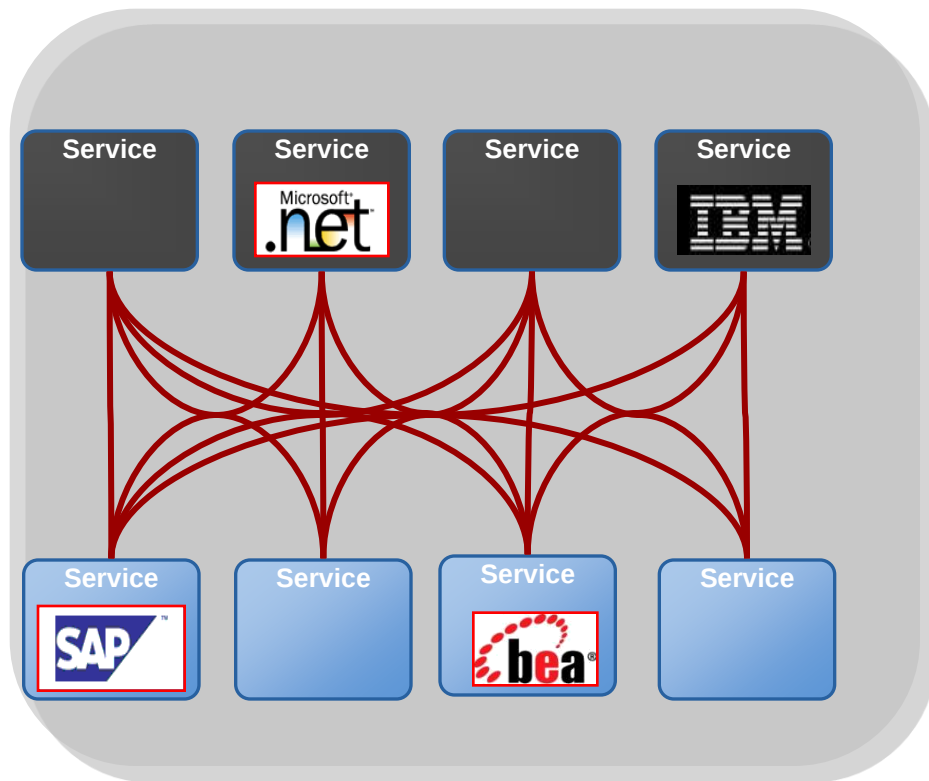


Oracle Service Bus: 面向服务的架构的基础



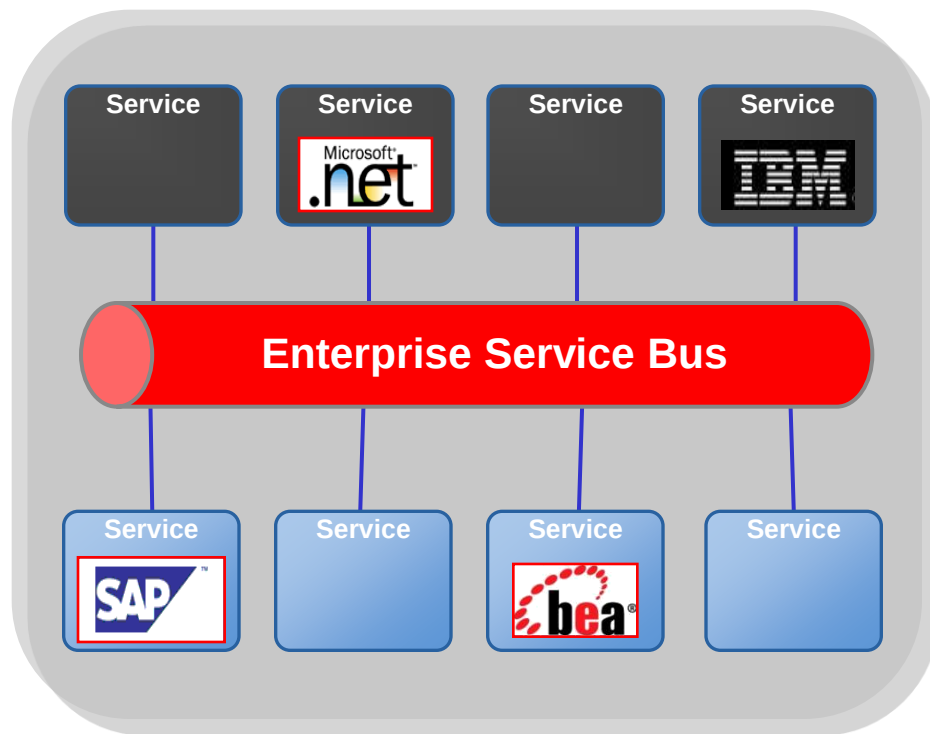
使用ESB之前

- 紧耦合
 - 通讯链路杂乱
 - 固化的传输协议
 - 固化的数据格式
 - 难以做到消息可视化
 - 疲于应对需求变化

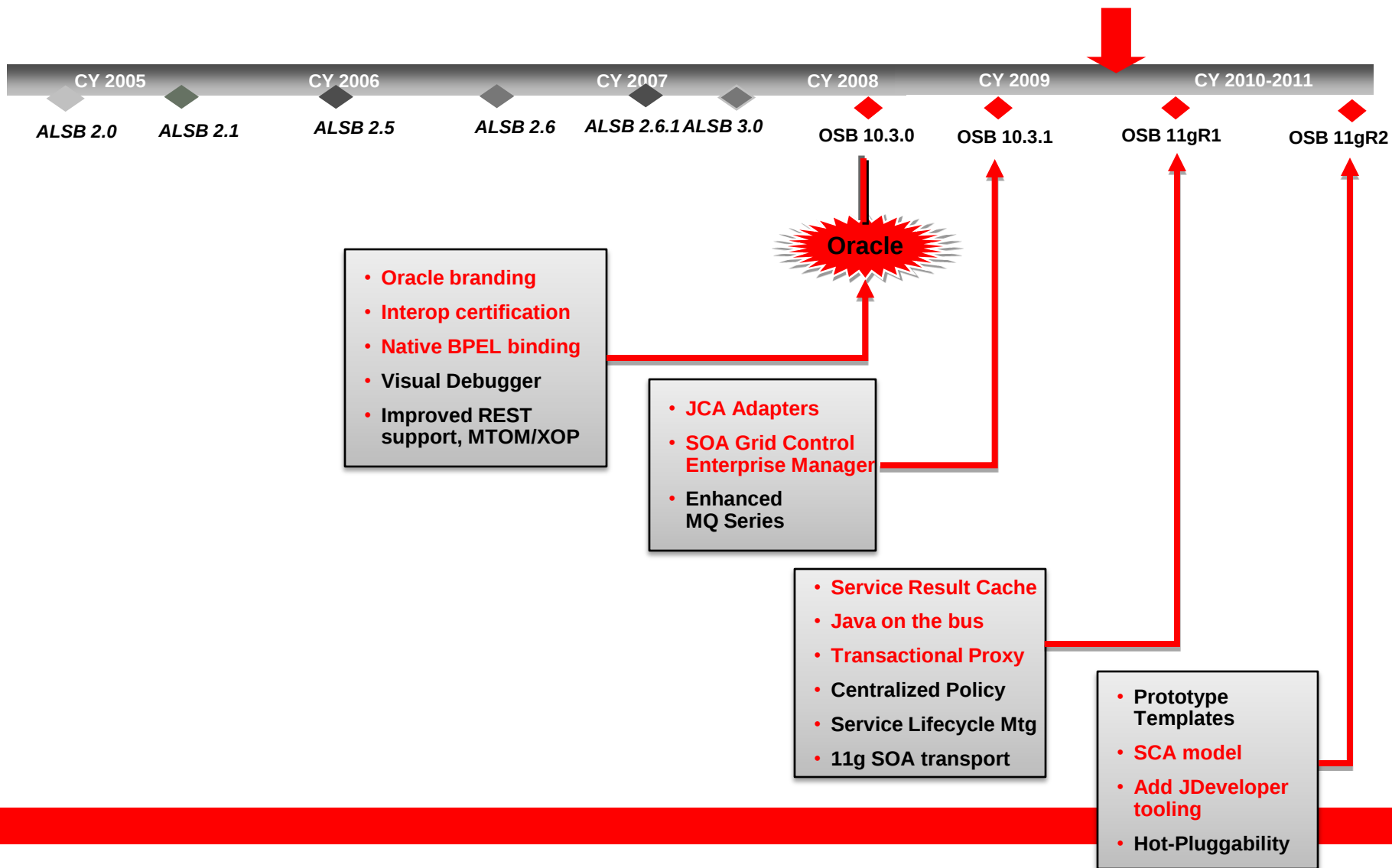


使用ESB之后

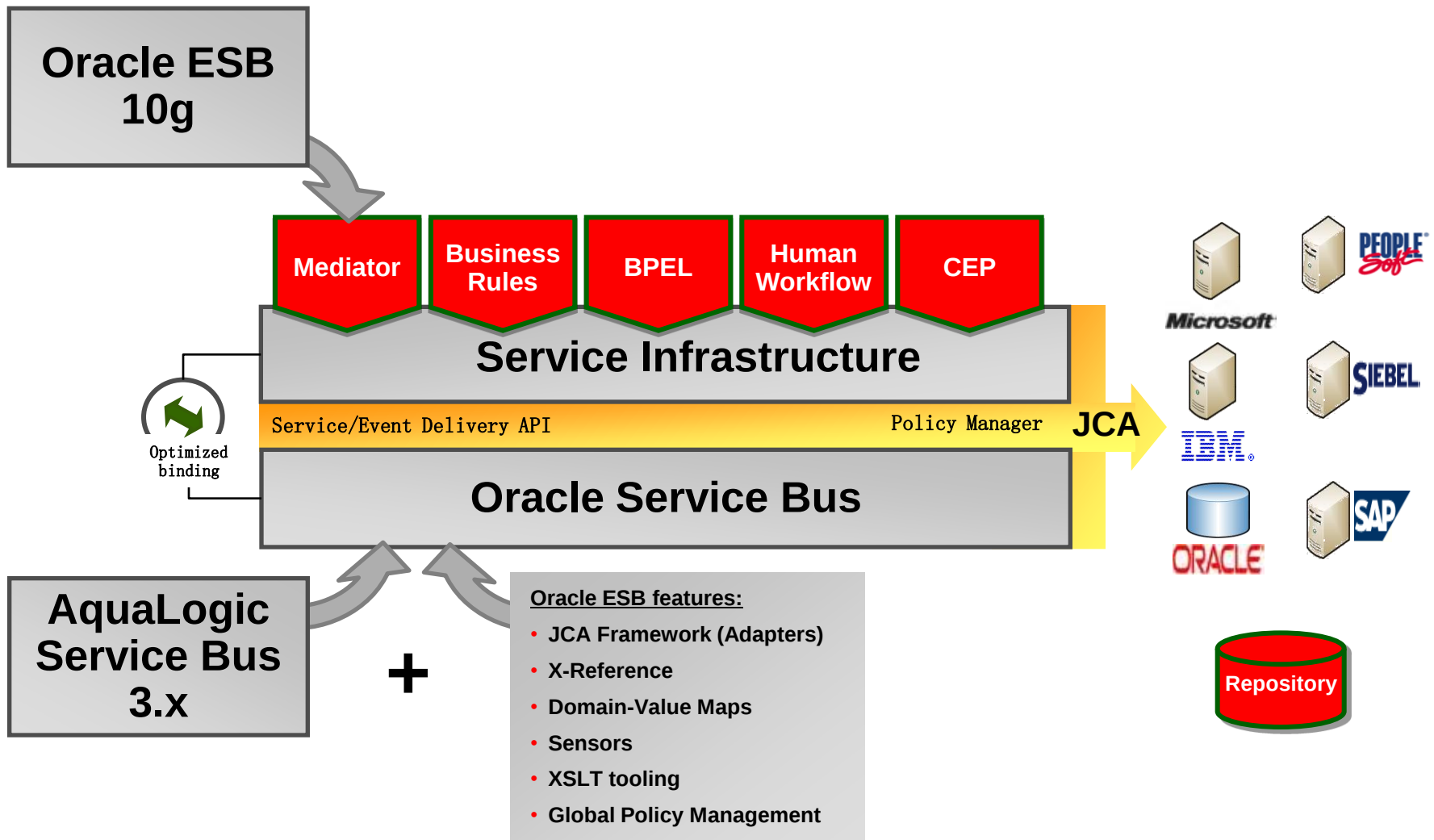
- 松耦合
 - 通讯链路清晰：所有服务全部连接到ESB，且只需连接一次。
 - 服务重用性大大提高
 - 服务扩展性大大提高
 - 轻松做到消息可视化
 - 快速应对需求变化
 - 风险控制



OSB发展路线图



OSB: 从 10g 到 11g



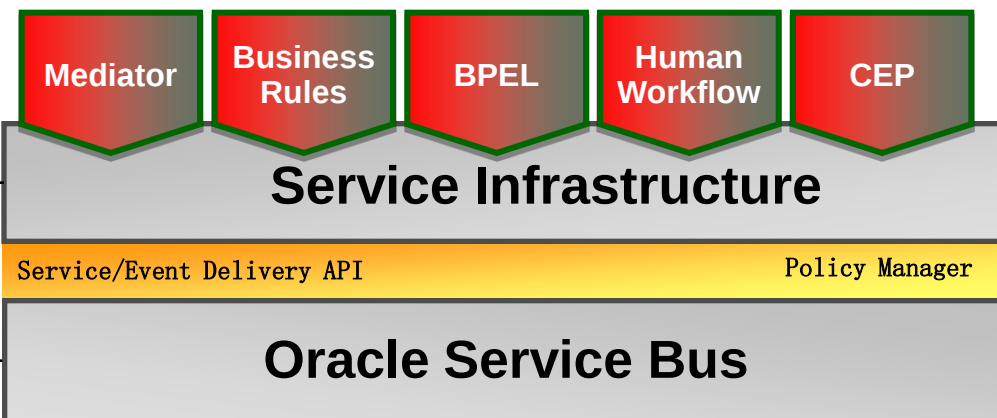
打造统一的服务平台



应用组装人员



- 服务合成
- 转换
- 过滤



SOA
Operations



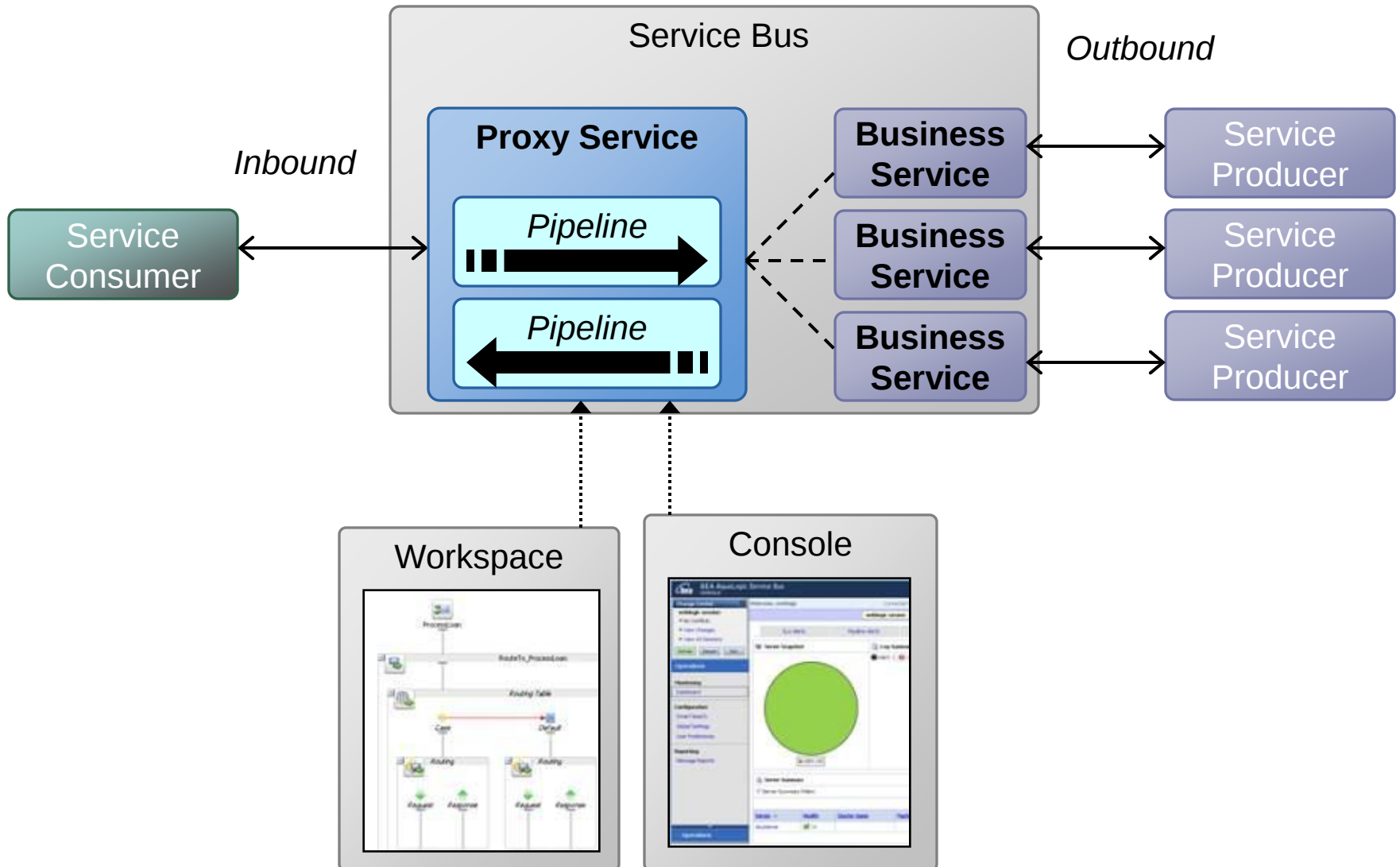
端到端的SOA
生命周期管理

JCA

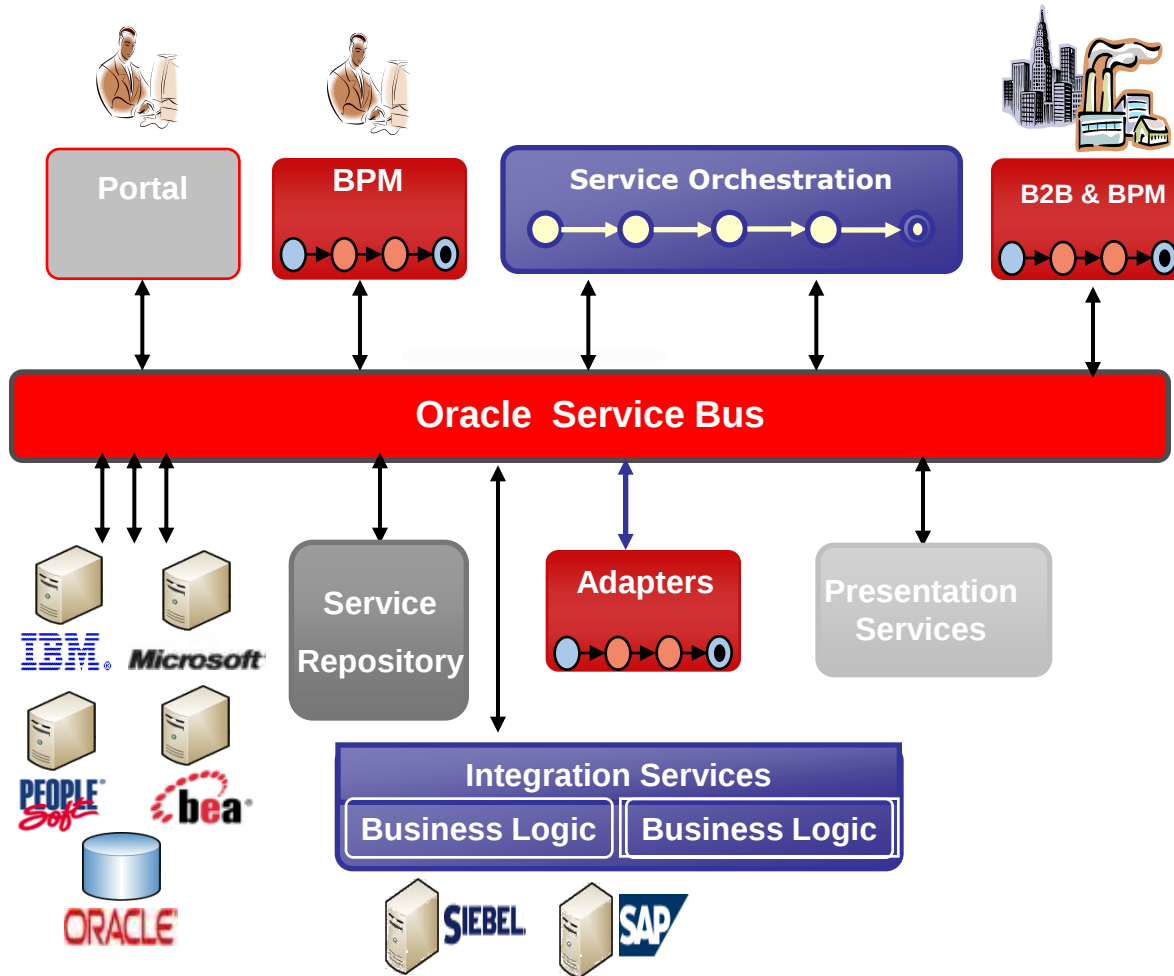


- 服务虚拟化
- 共享服务网关
- 监控

OSB: 基于配置，无需编码



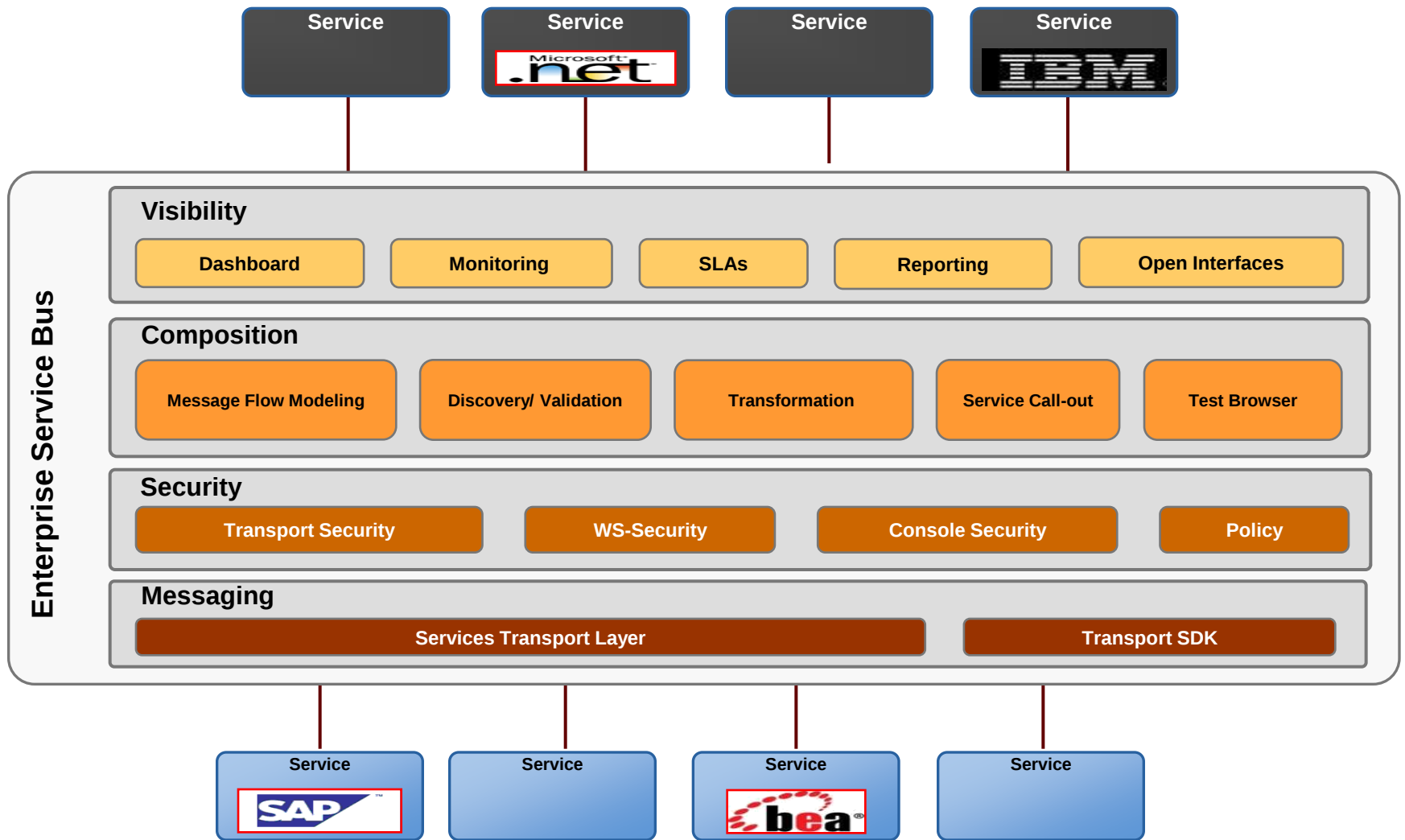
使用OSB的好处



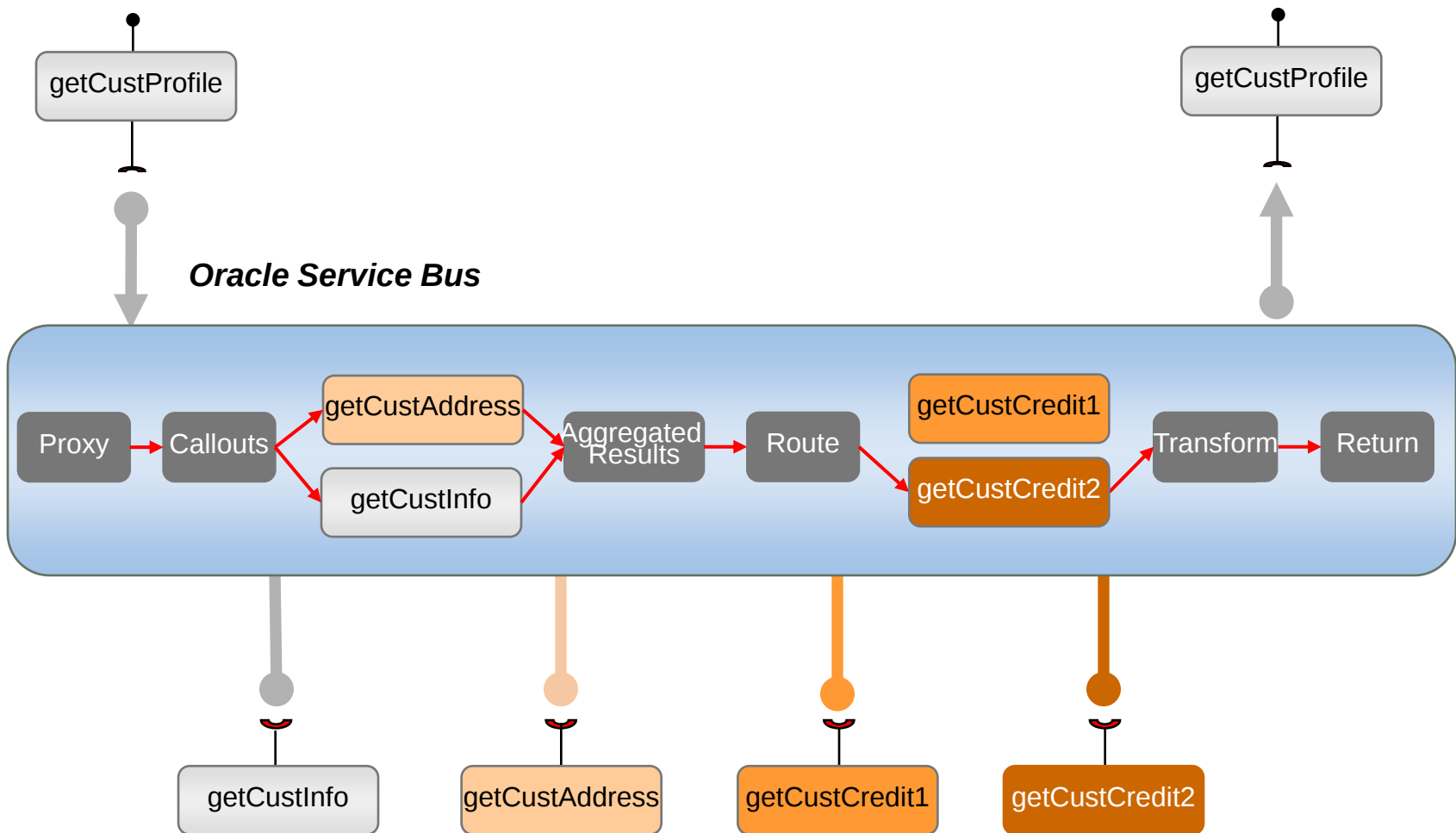
服务的交互与管理

- 位置透明
- 服务虚拟化
- 配置简单
- 任意传输协议、数据格式
- 高级集成模式
- 高可用性和高扩展性

OSB 功能模块



OSB 应用场景举例



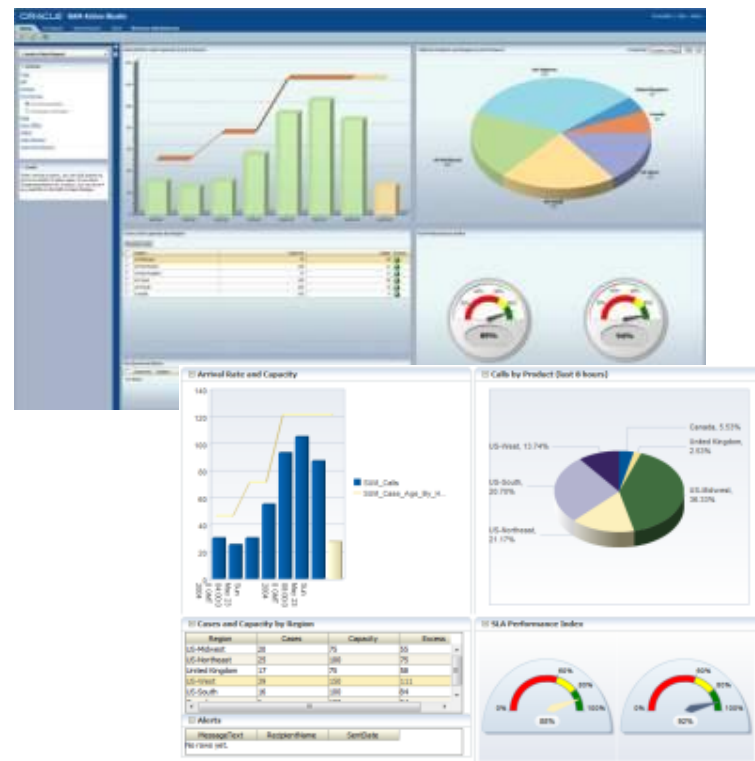
Oracle Business Activity Monitoring :

为业务人员提供专业的观察视角

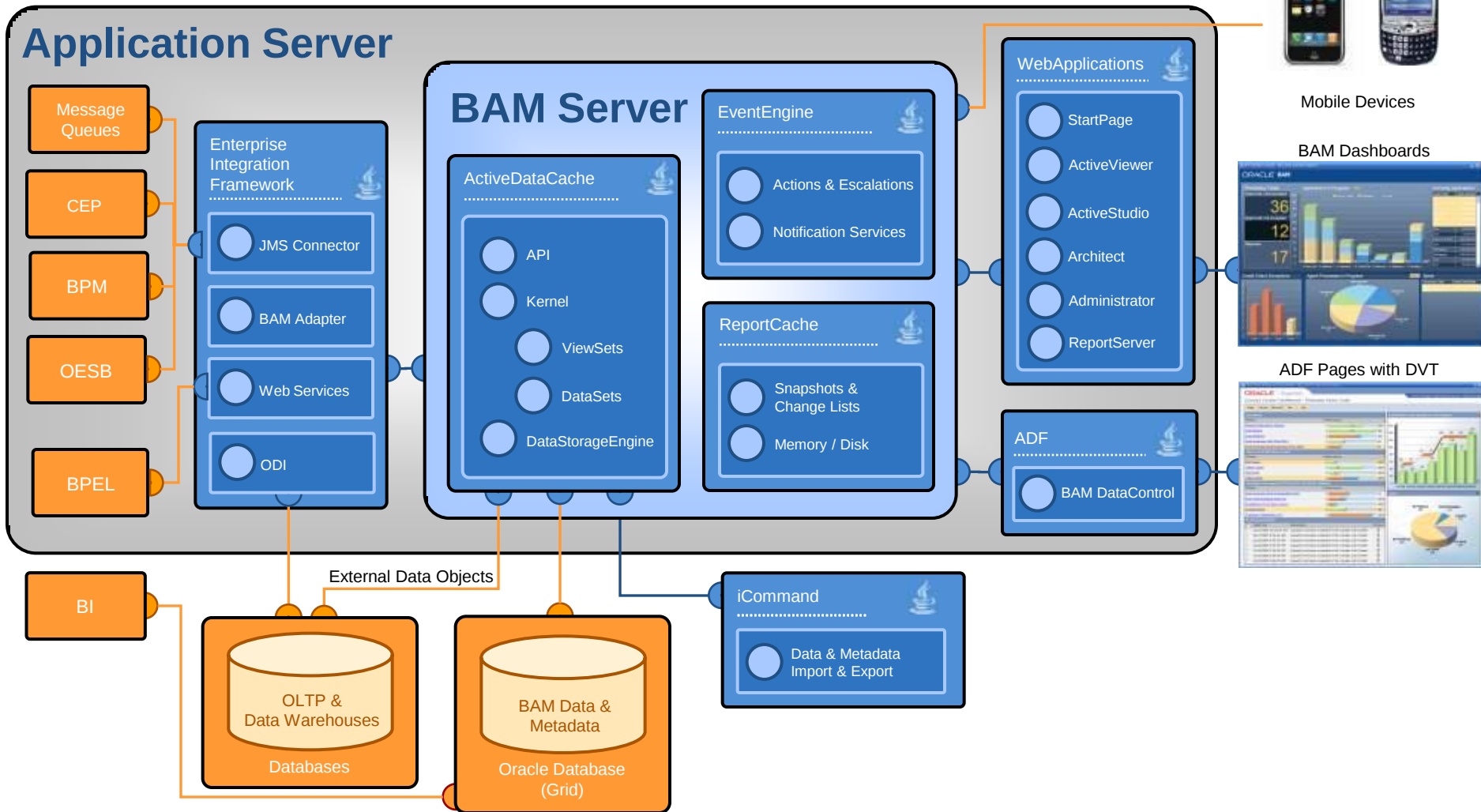


BAM 主要功能

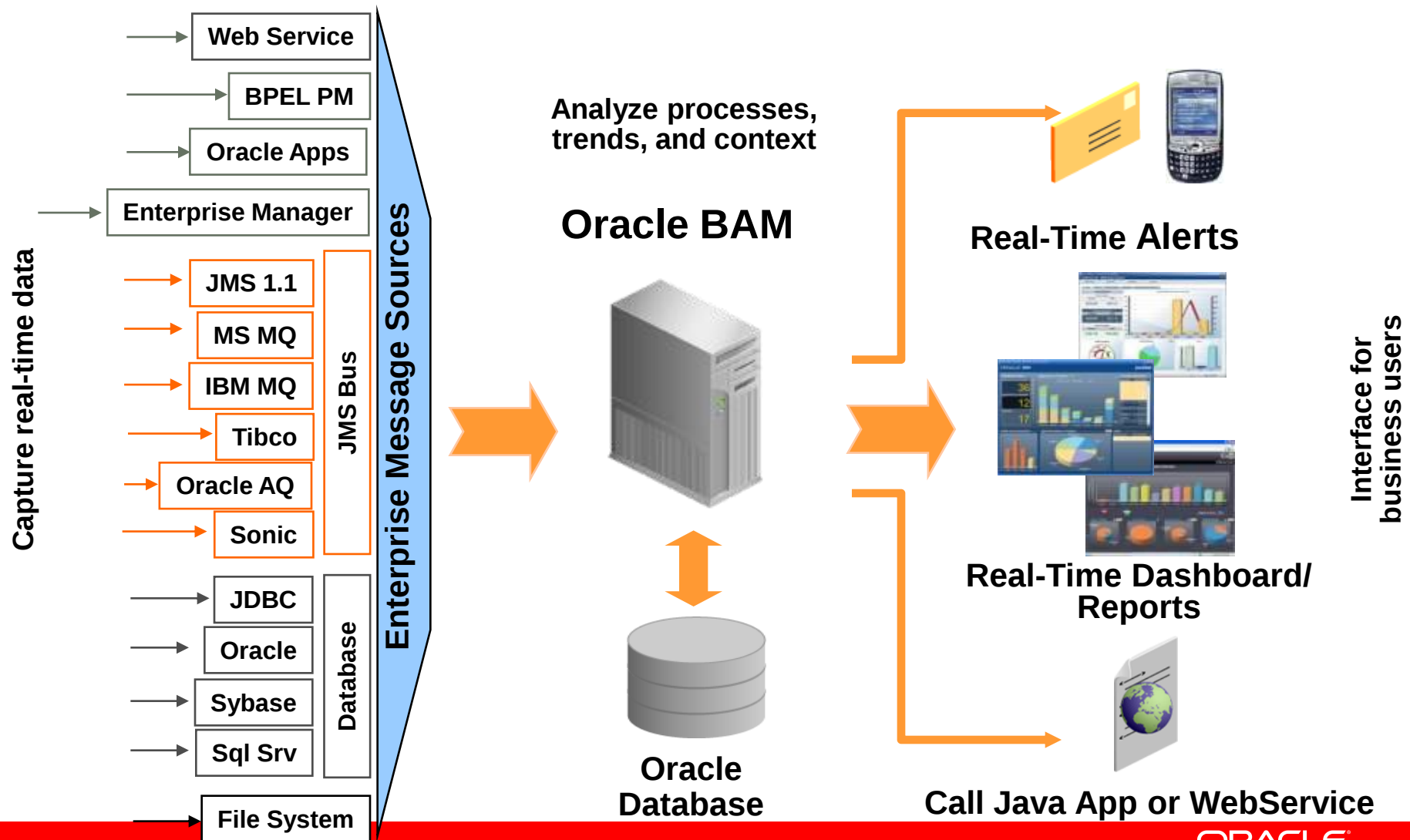
- 实时监测 业务流程和服务
 - Key Performance Indicators (KPIs)
 - Service-Level Agreements (SLAs)
- 分析事件
 - 关联事件 和 KPIs
 - 趋势导向
 - 警告用户瓶颈所在，并给出解决方案
- 在一定条件下采取行动
 - Event-driven
 - 实时面板
 - 集成BPEL 和Web services



BAM 架构



BAM 的数据源可以是...





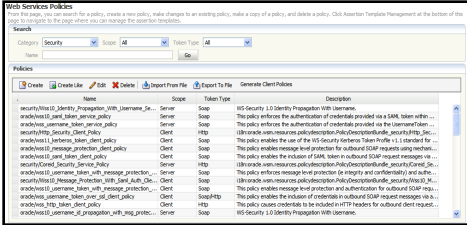
Oracle Web Services Manager :

保护你的SOA资产



WSM 基础架构

WS-Security, WS-ReliableMessaging, WS-Policy

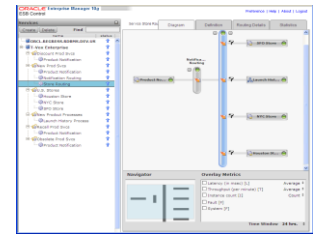


Web Services Manager

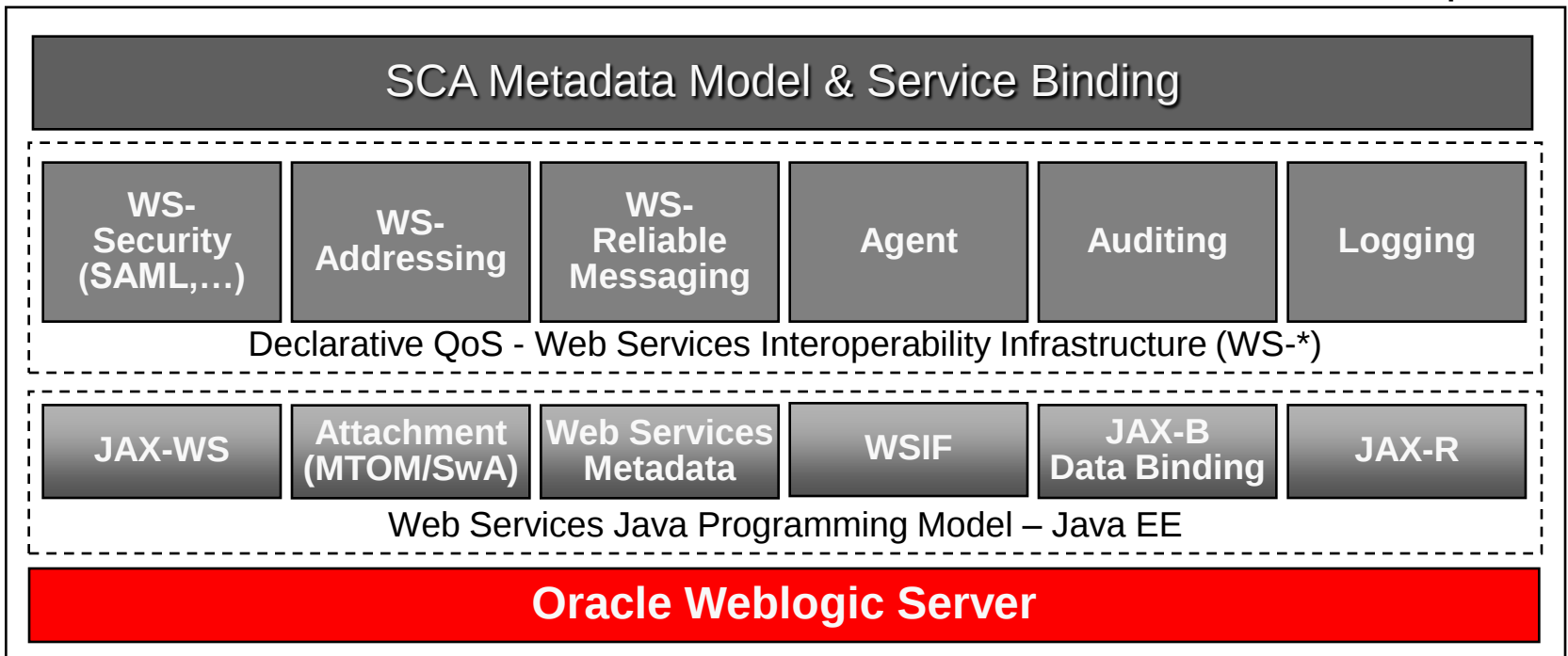
HTTP SOAP

HTTP REST

**JMS
SOAP**

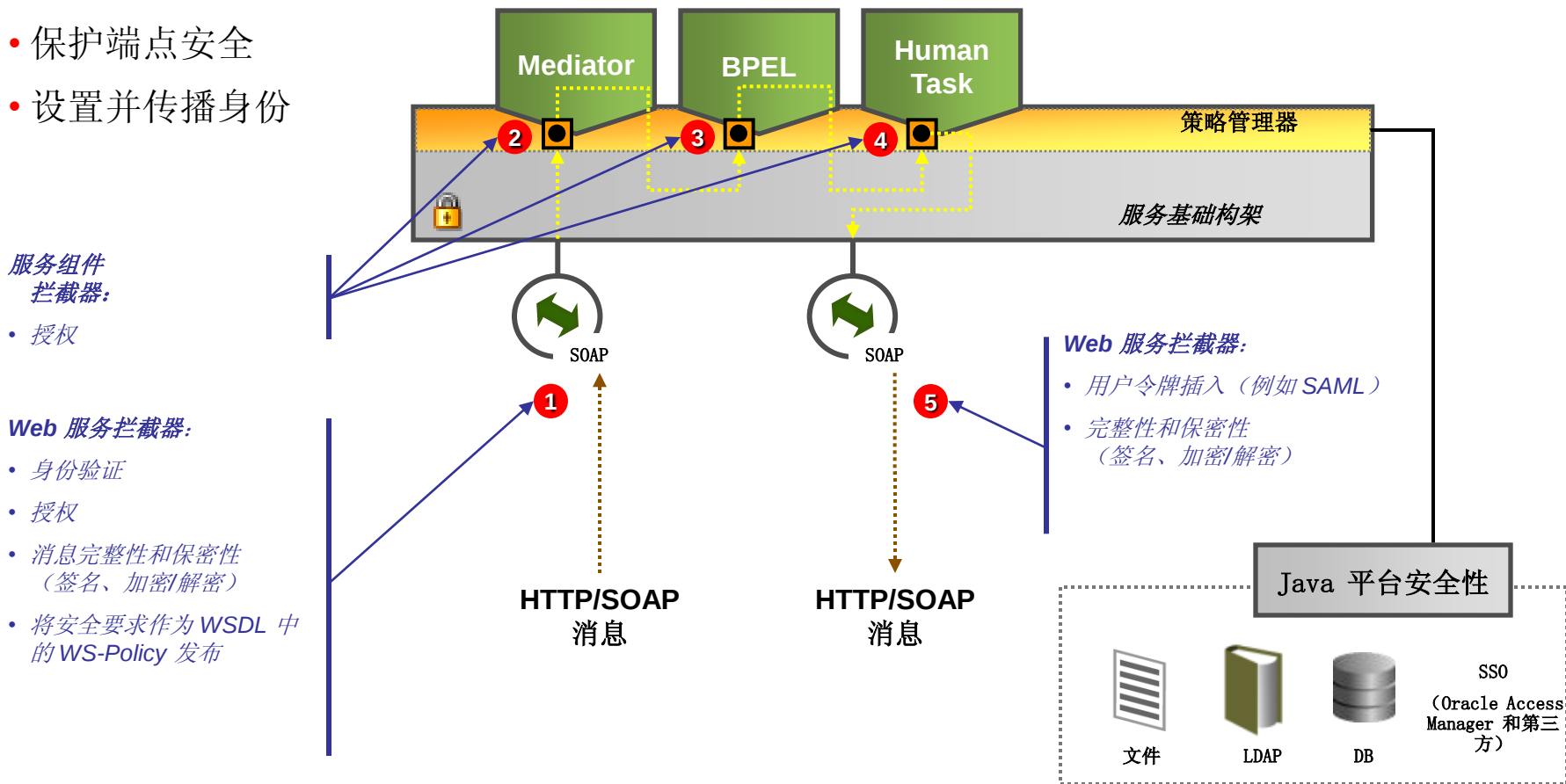


Web Services Development With JDeveloper



WSM: 全局性安全策略管理器

- 将流程逻辑从安全问题中清晰地独立出来
- 保护端点安全
- 设置并传播身份



WSM: 支持标准

- Java EE 5 JAX-WS policy annotations
- SOAP 1.1 and 1.2
- SOAP with Attachments 1.1 and 1.2
- SOAP Message Transmission Optimization Mechanism (MTOM) (based on SOAP 1.2)
- WS-Security 1.0 and 1.1
- WS-Security SOAP With Attachments (SWA) Profile 1.1
- WS-SecurityPolicy 1.1
- WS-Policy 1.2
- WS-PolicyAttachment 1.1
- Service Component Architecture (SCA) Policy Framework v1
- WS-I Basic Profile 1.2
- WS-I Basic Security Profile 1.1
- UDDI v3
- WS-ReliableMessaging 1.0 (February 2005 version) and 1.1 (June 2007 version)
- WS-MetadataExchange 1.1 (August 2006 version)
- WS-Addressing 1.0 (in conjunction with WSDL 1.1)

策略管理

- Security, reliability, addressing, management and MTOM policies
- Pre-defined policies
- Reusable policies
- Custom policies
- Generate client policies
- CRUDQ
- Policy Advertisement in WSD and WS-MEX
- Policy versioning and rollback
- Policy auditing
- Policy export and import
- Policy impact analysis

ORACLE Enterprise Manager 11g Grid Control

Home > Web Services Policies > Edit Policy

Logged in as admin

Page Refreshed Aug 13, 2007 11:40:41 AM PDT

Validate Cancel Save

Policy Information

* Name: security/Wss10_Saml_Token_Service_Policy_Copy

Category: Security Enabled ☒

Description: i18n:oracle.wsm.resources.policydescription.PolicyDescriptionBundle_security/Wss10_Saml_Token_Service_Policy_PolyDescKey

Attachment Attributes

Scope: Server

Token Type: Soap

Assertion Information

Name	Category	Type	Silent	Enforced
Log Message	security/logging	Logging	Yes	Yes
WSecurity SAML Token	security/authentication	wss10-saml-token	No	Yes

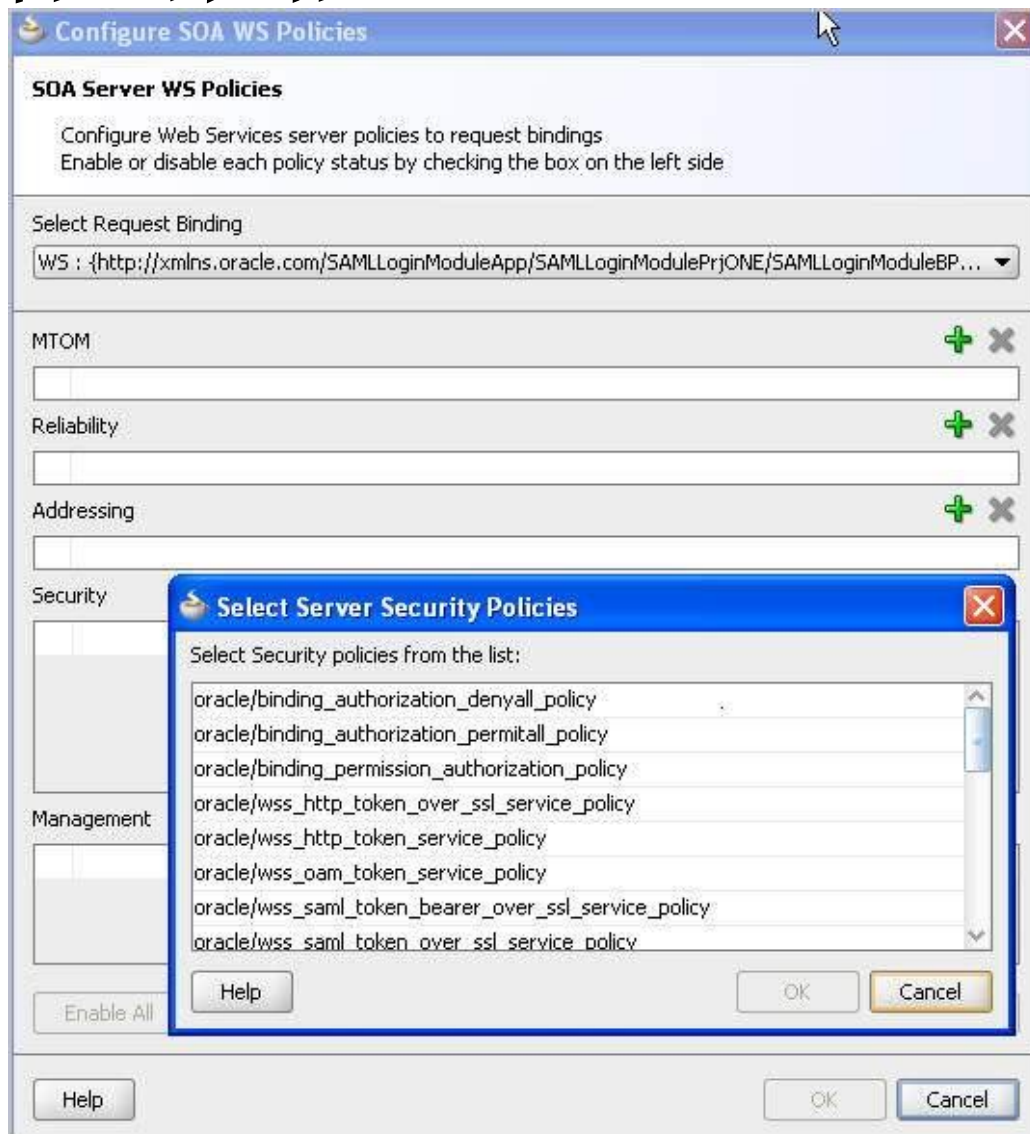
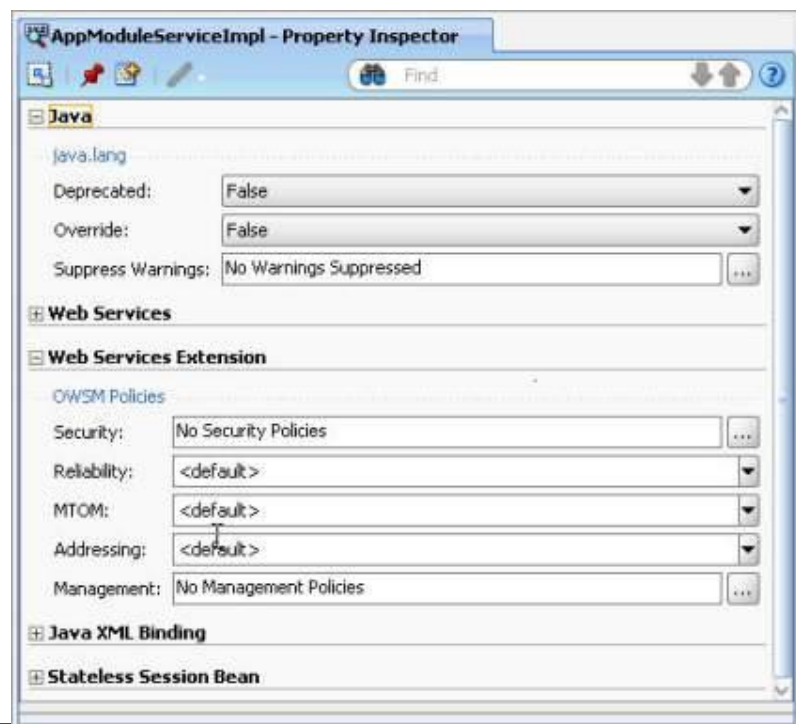
Assertion Details

Description: (No assertion description available)

Create Create Like Edit Delete Import From File Export To File Generate Client Policies

Name	Scope	Token Type	Description
security/Wss10_Identity_Propagation_With_Username_Se...	Server	Soap	WS-Security 1.0 Identity Propagation With Username.
oracle/wss10_saml_token_service_policy	Server	Soap	This policy enforces the authentication of credentials provided via a SAML token within ...
oracle/wss_username_token_service_policy	Server	Soap	This policy enforces the authentication of credentials provided via the UsernameToken ...
security/Http_Security_Client_Policy	Client	Http	i18n:oracle.wsm.resources.policydescription.PolicyDescriptionBundle_security/Http_Sec...
oracle/wss11_kerberos_token_client_policy	Client	Soap	This policy enables the use of the WS-Security Kerberos Token Profile v1.1 standard for ...
oracle/wss10_message_protection_client_policy	Client	Soap	This policy enables message level protection for outbound SOAP requests using mechani...
oracle/wss10_saml_token_client_policy	Client	Soap	This policy enables the inclusion of SAML token in outbound SOAP request messages via ...
security/CoreId_Security_Service_Policy	Server	Http	i18n:oracle.wsm.resources.policydescription.PolicyDescriptionBundle_security/CoreId_Se...
oracle/wss10_username_token_with_message_protection...	Server	Soap	This policy enforces message level protection (ie integrity and confidentiality) and auth...
security/Wss10_Message_Protection_With_Saml_Auth_Clie...	Client	Soap	i18n:oracle.wsm.resources.policydescription.PolicyDescriptionBundle_security/Wss10_M...
oracle/wss10_username_token_with_message_protection...	Client	Soap	This policy enables message level protection and authentication for outbound SOAP requ...
oracle/wss_username_token_over_ssl_client_policy	Client	Soap/Http	This policy enables the inclusion of credentials in outbound SOAP request messages via a...
oracle/wss_http_token_client_policy	Client	Http	This policy causes credentials to be included in HTTP headers for outbound client request...
oracle/wss10_username_id_propagation_with_msg_protect...	Server	Soap	WS-Security 1.0 Identity Propagation With Username.

通过 JDeveloper 管理策略



通过 EM 管理策略

Web Services Monitoring Home > Web Services Port > Policy Attachment
↑ /jjarwu_j2ee0730farm1_FarmRoot/jjarwu_j2ee0730farm1_FarmRoot

Policy Attachment

From this page, you can attach policies to and detach policies from a Web service.

Attached Policies

Policy Name	Category	Scope	Protocol	Description
security policy 1	security	Server Bindings	SOAP Only	1 this is a loong desc 1 this is a loong desc 1 this is a loong desc 1 this
RM policy 12	rm	Generic		12 this is a loong desc 1 this is a loong desc 1 this is a loong desc 1 thi
logging policy 2	management	Generic		2 this is a loong desc 1 this is a loong desc 1 this is a loong desc 1 this

Attach

Detach

Available Policies

Search Category: any

Policy Name	Category	Scope	Protocol	Description
security policy 3	security	Server Bindings	SOAP Over HTT	3 this is a loong desc 1 this is a loong desc 1 this is a loong desc 1 this
security policy 4	security	Server Bindings	HTTP Only	4 this is a loong desc 1 this is a loong desc 1 this is a loong desc 1 this
security policy 5	security	Client Bindings	SOAP Only	5 this is a loong desc 1 this is a loong desc 1 this is a loong desc 1 this
security policy 6	security	Client Bindings	SOAP Over HTT	6 this is a loong desc 1 this is a loong desc 1 this is a loong desc 1 this
security policy 7	security	Server Bindings	SOAP Over HTT	7 this is a loong desc 1 this is a loong desc 1 this is a loong desc 1 this

Expense Application: Bulk Attachment

Select Subjects

Help

Cancel

Continue

Select subjects from subject table for policies to be attached to.

Subjects

Subject Type: any Support Attach: any

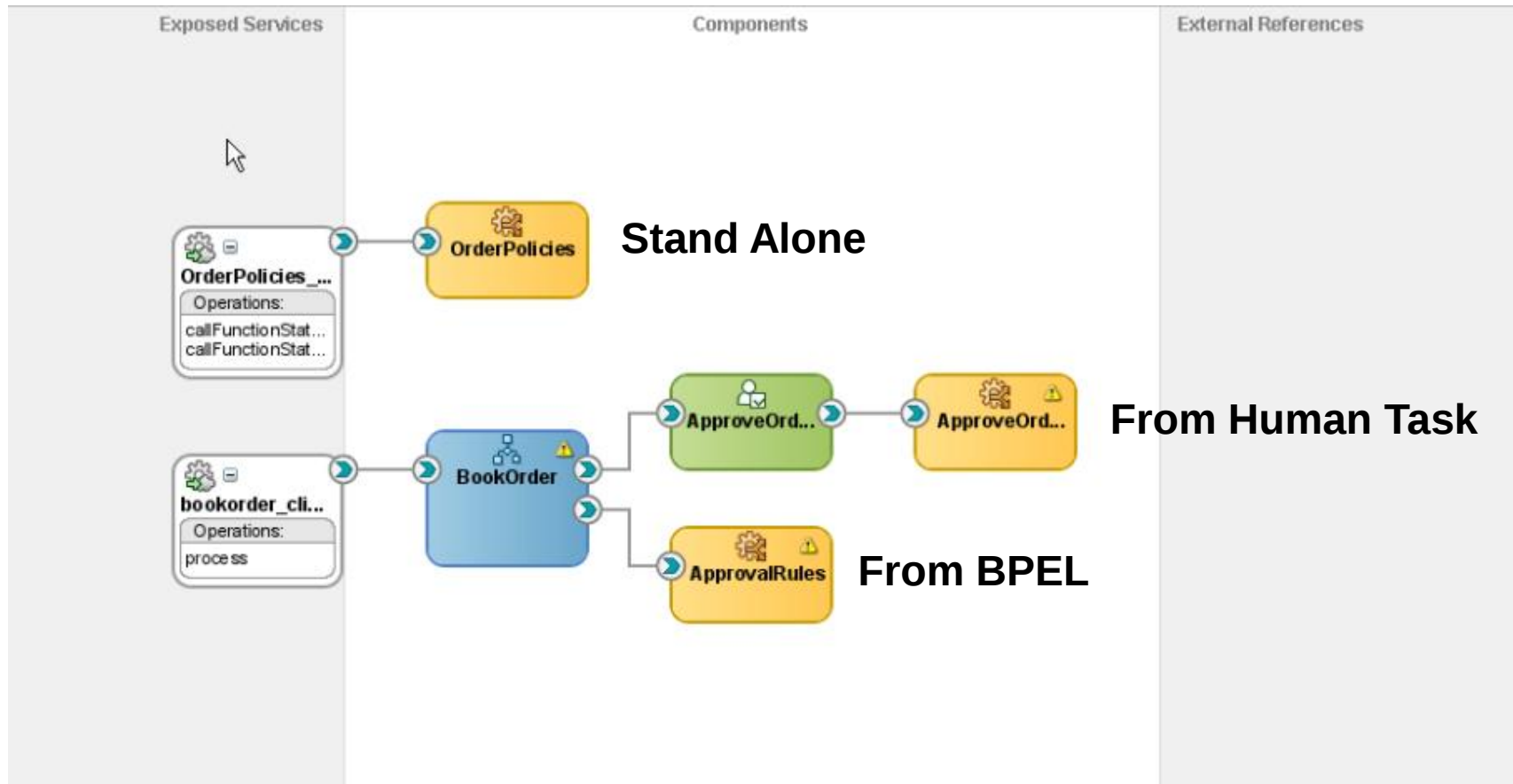
Subject Name: Name Search

Name	Type	Support Attach-to Value
ExpenseReport:Auditing	SCA-Component	component
ExpenseReport:Daily Report	WS Endpoint	binding.server.soap.http
ExpenseReport:Monthly Report	WS Endpoint	binding.client.rmi
ExpenseReport:Quarterly Report	WS Endpoint	binding.server.soap.jms
ExpenseReport:Report Service(soap)	SCA-Service	binding.server.soap
ExpenseReport:Reporting	SCA-Component	binding.client.soap
ExpenseReport:Weekly Report	WS Endpoint	binding.server.http
ExpenseReport:Yahoo myYahoo service(soap)	SCA-Reference	binding.client.soap
ExpenseReport:web service port(jms)	WS Endpoint	binding.server.jms
ExpenseReport:web service port(soap)	WS Endpoint	binding.server.soap
ExpenseReport:web service port(soap)	Service Ref	binding.client.soap

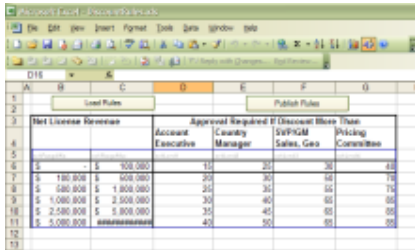
Oracle Business Rules: 动态管理商业规则



Business Rules in SOA Composite

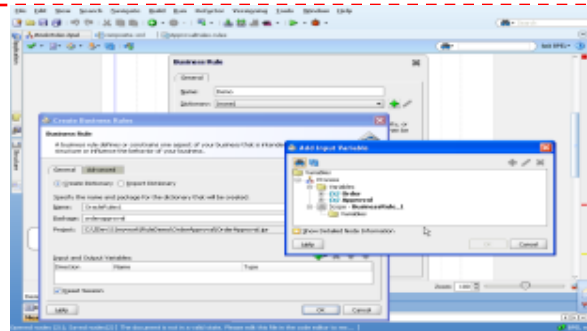


Oracle Business Rules



	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								

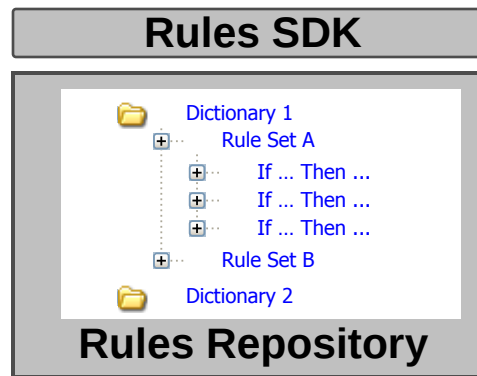
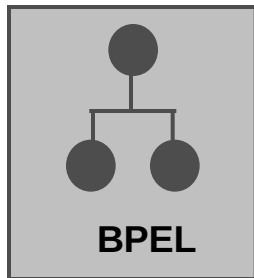
Custom Author



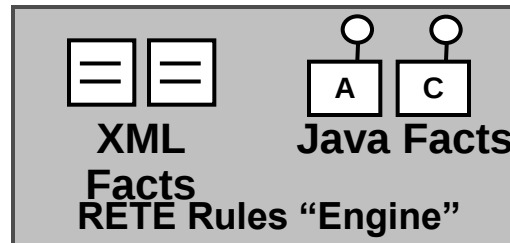
Oracle Rule Author



Custom Author



Decision
Service



Rules API
(JSR 94)



演示

SOA管理（BAM 和 OER）





Oracle SOA管理解决方案是什么？

Oracle SOA 管理解决方案

Enterprise Repository

- Asset/artifact management
- Impact/dependency analysis
- Compliance reporting
- Service reuse
- Lifecycle management
- Federation: artifact stores, policies, runtime metrics ...

SOA Integration

- Infrastructure support: SOA, BPEL, Service Bus...
- Integration with dev tools: IDEs, SCMs, Ant Build, etc.
- Policy Management and transaction tracing embedded in Oracle SOA Suite 11g
- UDDI for “Best of Breed” runtime tooling integration

SOA Governance Suite

Enterprise Repository

Enterprise Manager

Web Services Manager

Service Registry

Web Services Manager

- Run-time governance
- Policy-based security and access control

EM Management Pack Plus for SOA

- Management of production processes and services
- Production metrics
- Management of SLAs
- Composite application monitoring & modeling

Service Registry

- UDDI v3 implementation
- Auto-synchronized w/repository
- Service discovery
- Endpoint management

更多信息

- <http://www.oracle.com/technology/products/soa/soasuite/index.html>
- <http://www.oracle.com/technology/products/integration/service-bus/index.html>



問答



ORACLE IS THE INFORMATION COMPANY