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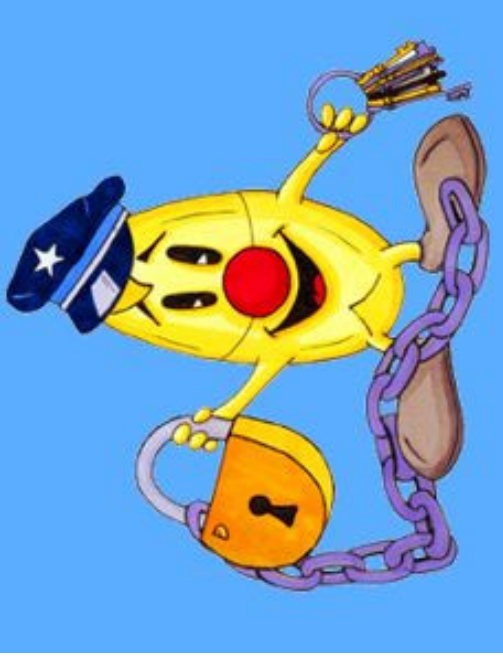
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**Web Services Manager in Action:
zentrale Sicherheitsplattform für WS**

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Leitender Systemberater

Agenda

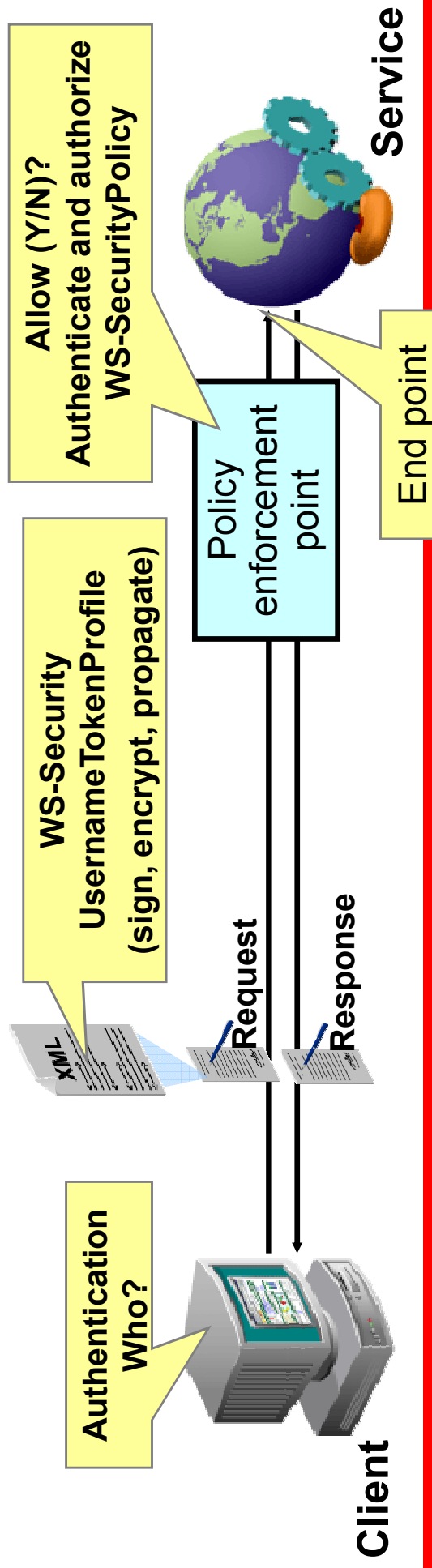
- Web Services Security
- Oracle Web Service Manager
- Samples
- OWSM vs OEG
- DEMO
- Summary



Web Service Security

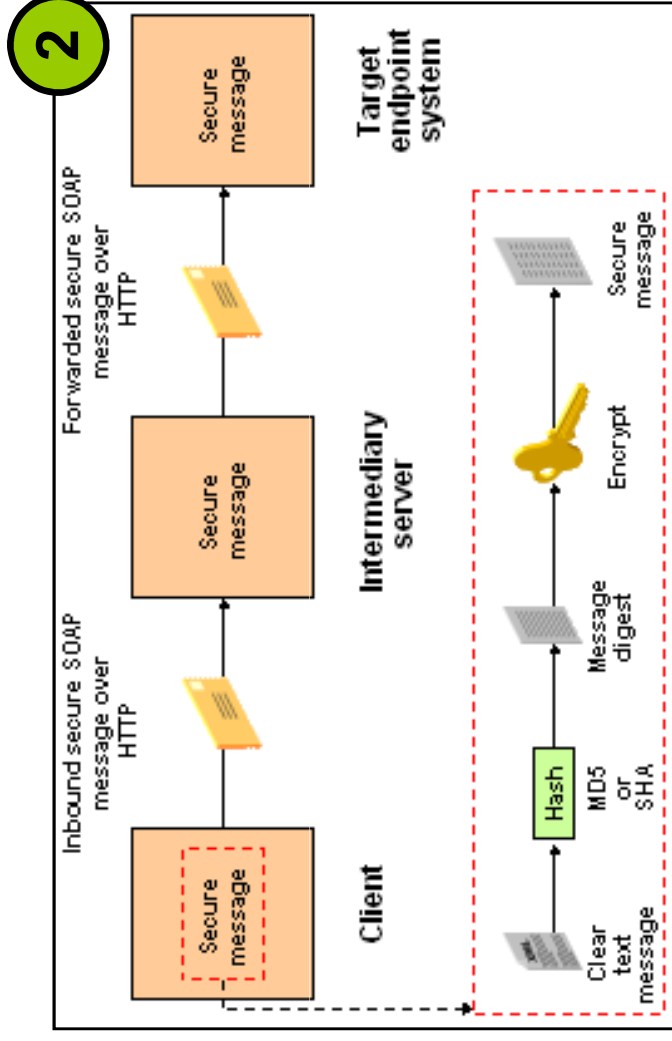
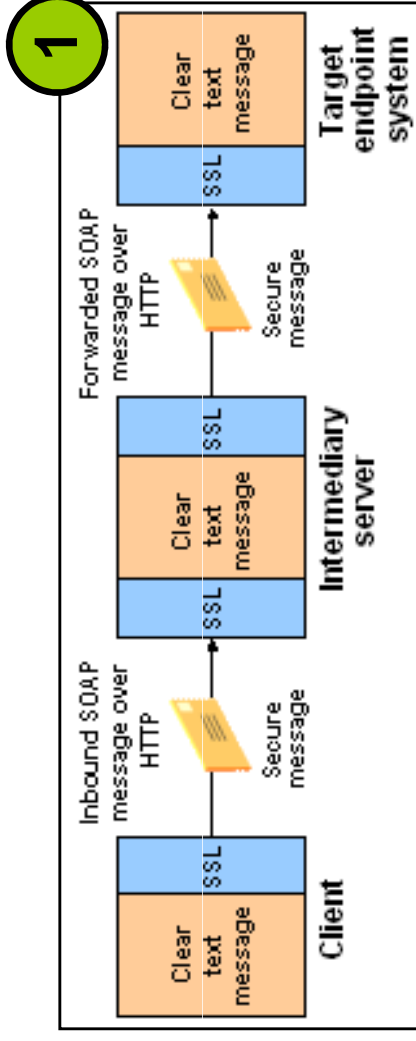
Securing Web services using WS-Security standards:

- Supported by WS-SecurityPolicy standards, among others
- Applied to service end points, to provide:
 - Authentication and authorization
 - Signing and encrypting the whole message or parts thereof
 - Integrity (reliable messaging), confidentiality, and propagation of credentials



Web Services Security Approaches

- The standard ways of securing Web services are:
 - Protocol based:
 - Secure sockets layer (SSL)
 - Secure HTTP (S-HTTP)
 - Message based:
 - XML digital signature
 - XML encryption
 - Security Assertion Markup Language (SAML)



WS-Security Fundamentals

- Authentication: Incorporated by using security tokens:
 - Username token
 - X.509 certificates
 - SAML assertions
- Confidentiality:
 - Supports the W3C XML encryption standard
 - Supports standard key exchange mechanisms
 - Enables encryption to be applied in parts
- Integrity:
 - W3C XML signature standard
 - Signature can be applied in parts

Oracle Web Services Manager 11g

What it does:

Secures services across your entire SOA infrastructure using a unified, consistent and centrally managed policy infrastructure

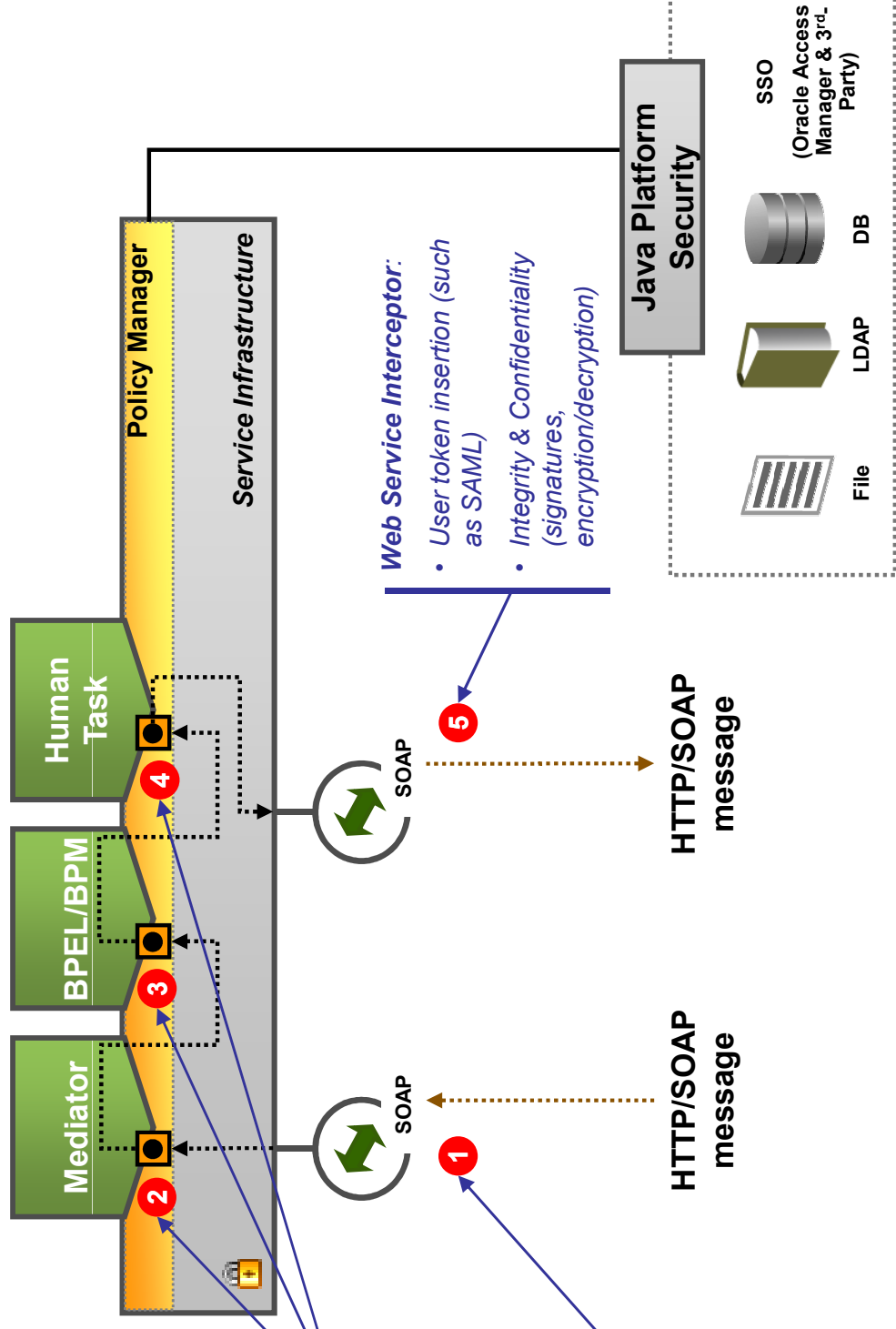
How it works:

Simply define, and apply policies, apply at design time or at runtime, apply locally or globally.



Global Policy Management: Oracle WSM Policy Manager

- Clearly separates process logic from security concerns
- Secures endpoints
- Sets and propagate identity



Service Component Interceptors:

- Authorization

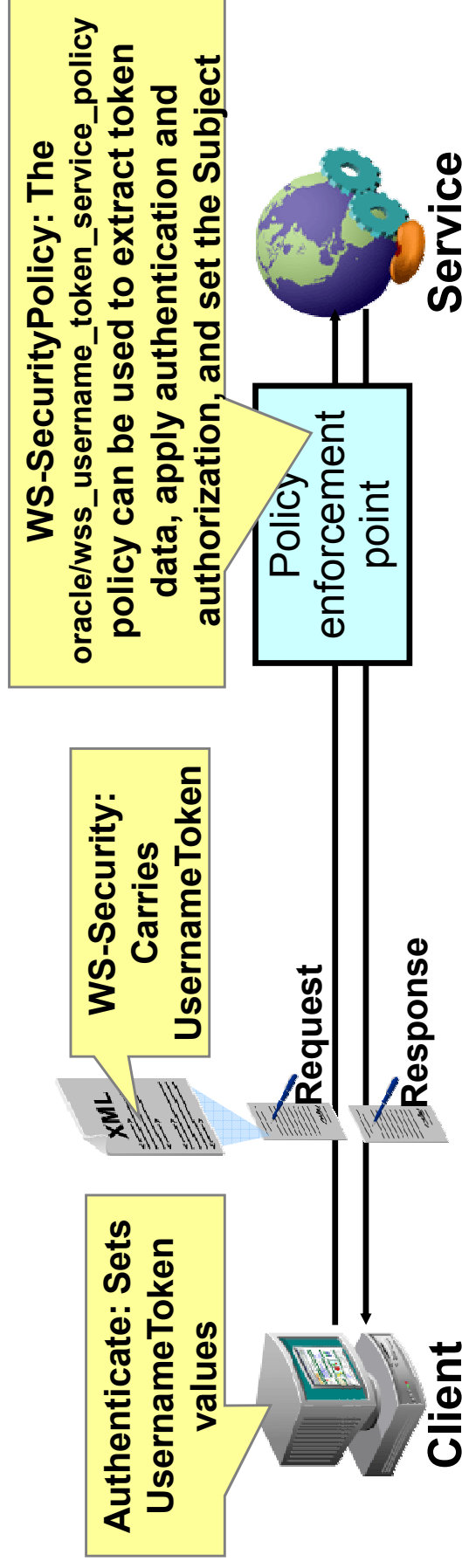
Web Service Interceptor:

- Authentication
- Authorization
- Message Integrity & Confidentiality (signatures, encryption/decryption)
- Publish security requirements as WS-Policy in WSDL

OWSM Security Policies

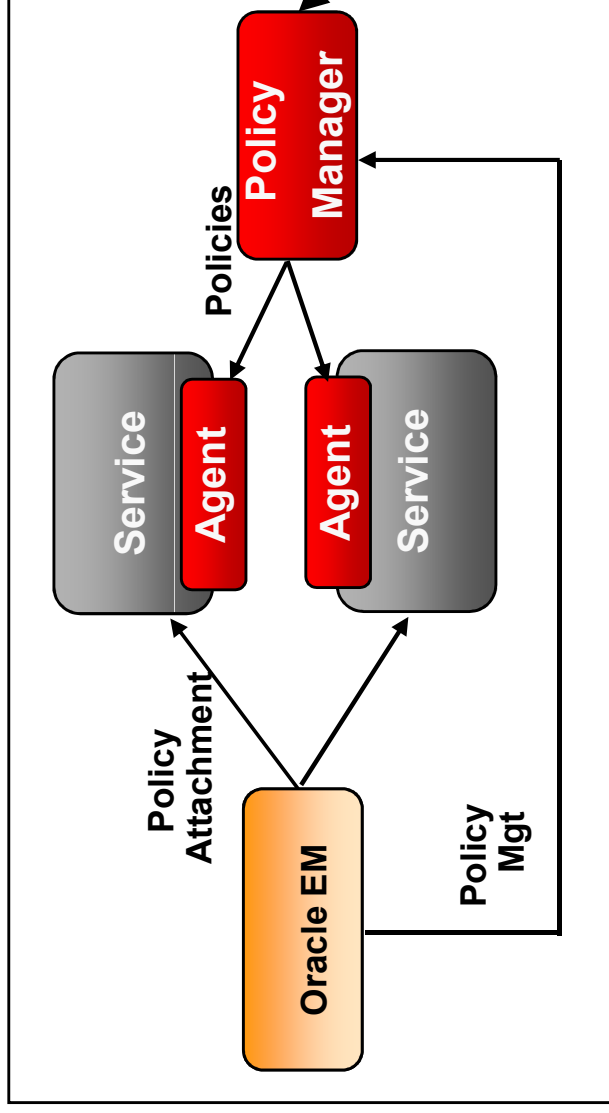
Oracle Web Server Manager policies are:

- oracle/wss_username_token_service_policy
 - oracle/wss11_saml_token_client_policy
 - oracle/wss11_message_protection_service_policy
 - oracle/wss11_username_token_with_message_protection_service_policy
- ...

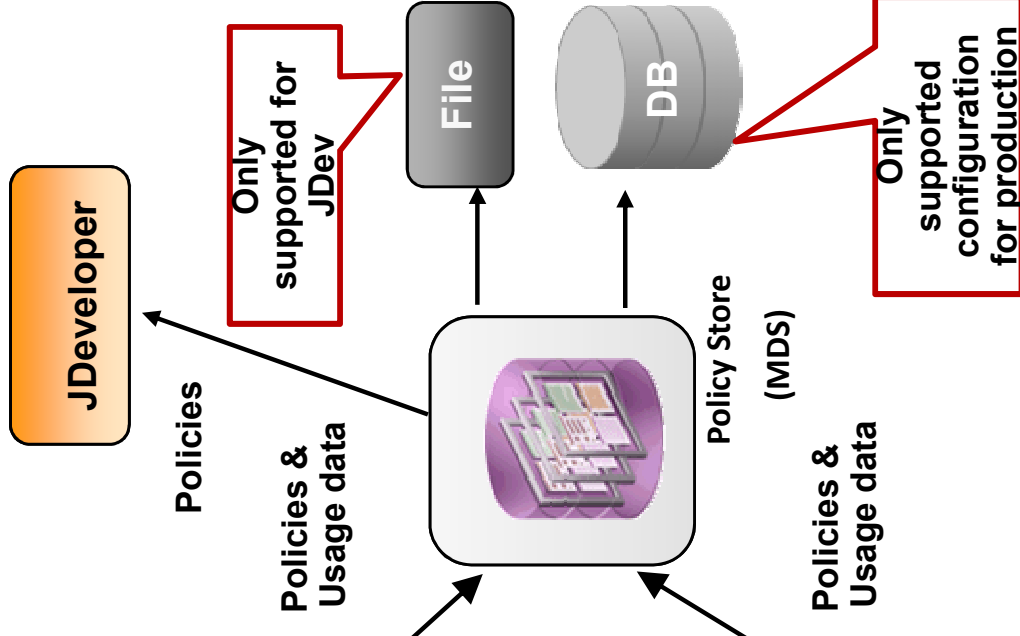
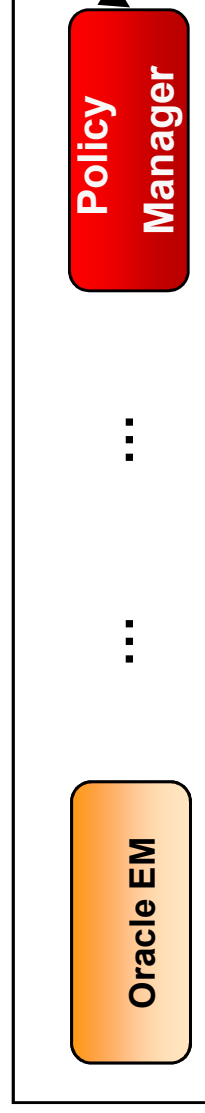


Deployment Architecture

SOA Domain #1

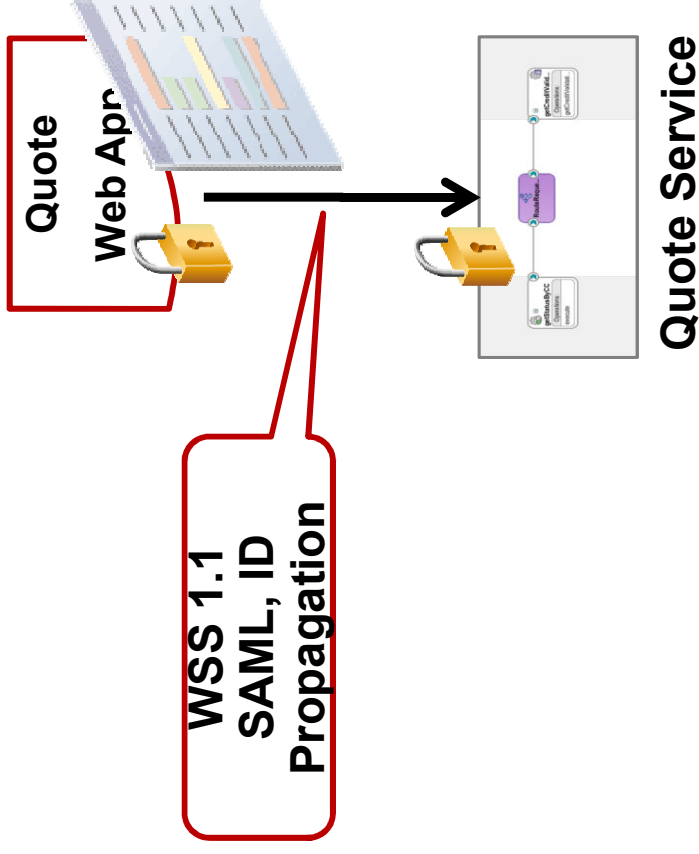
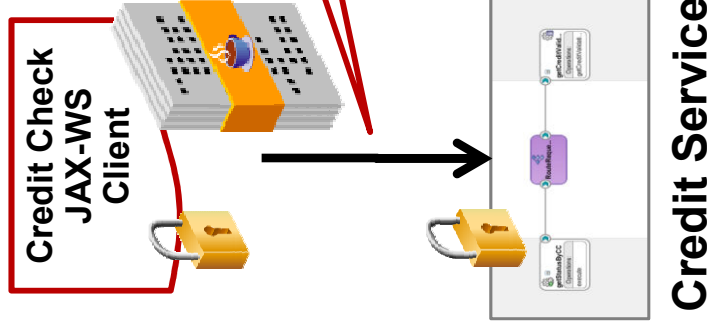


SOA Domain #2



Sample: Start Business Process

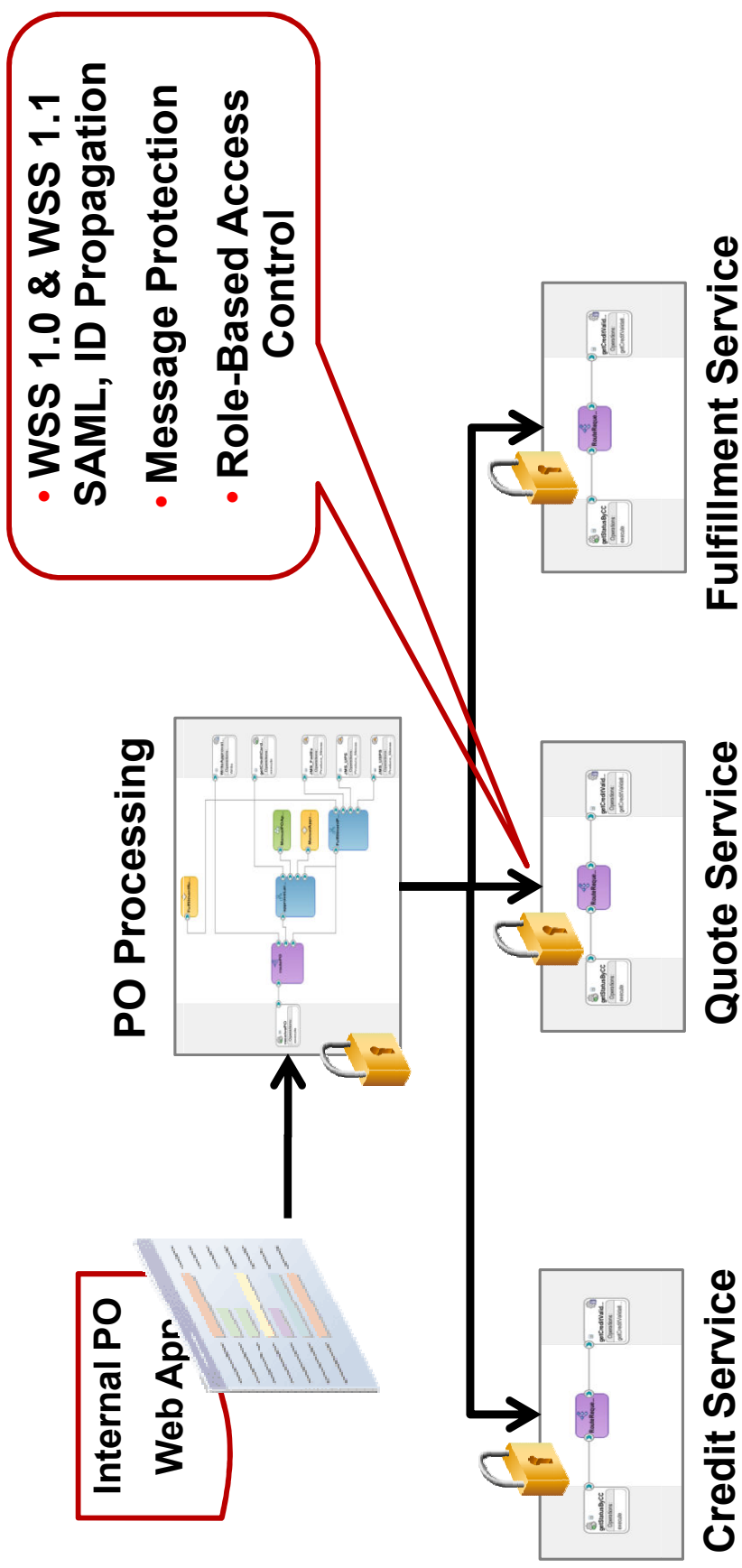
Web Services Security



 All end points secured by
OWSM Policy

Sample: Intermediate Business Process

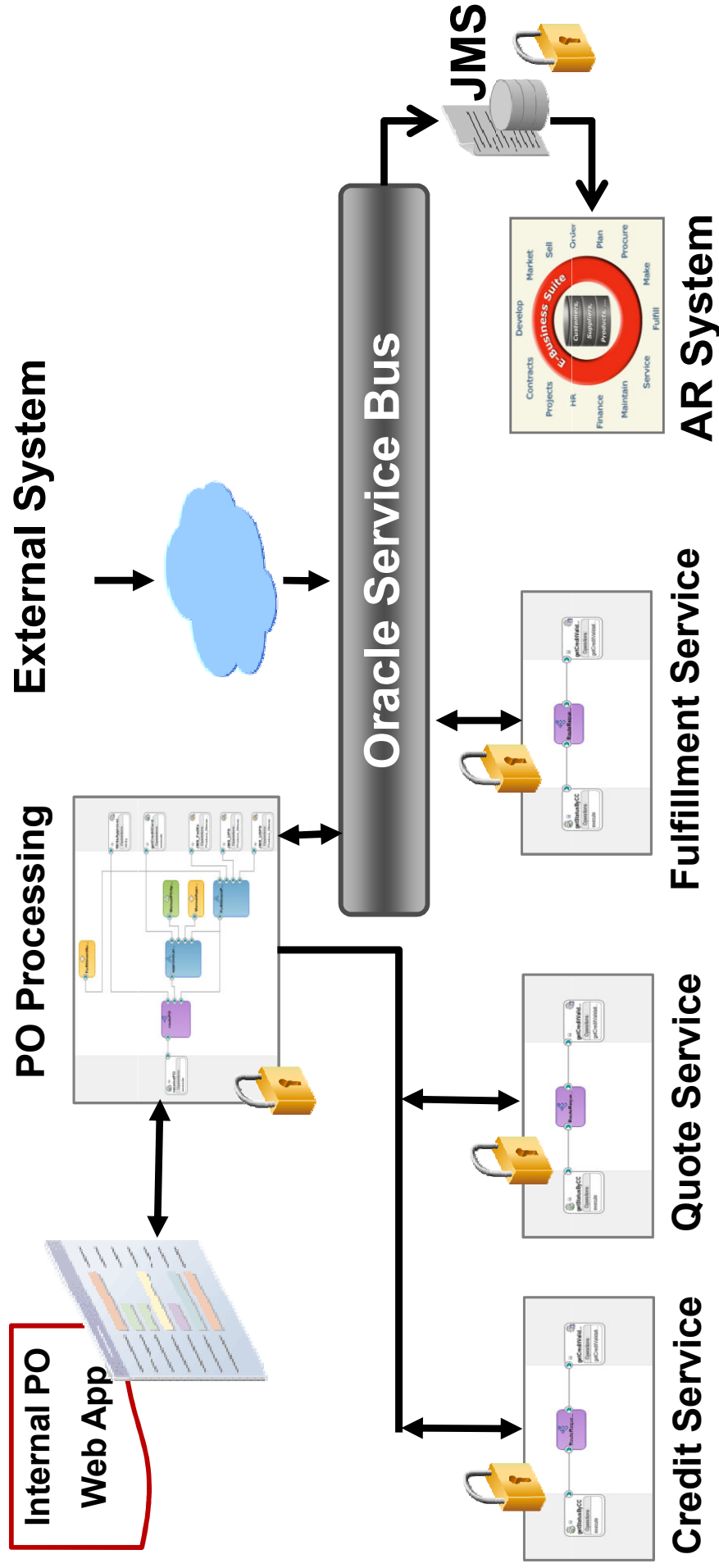
SOA Security



 All end points secured by
OWSM Policy

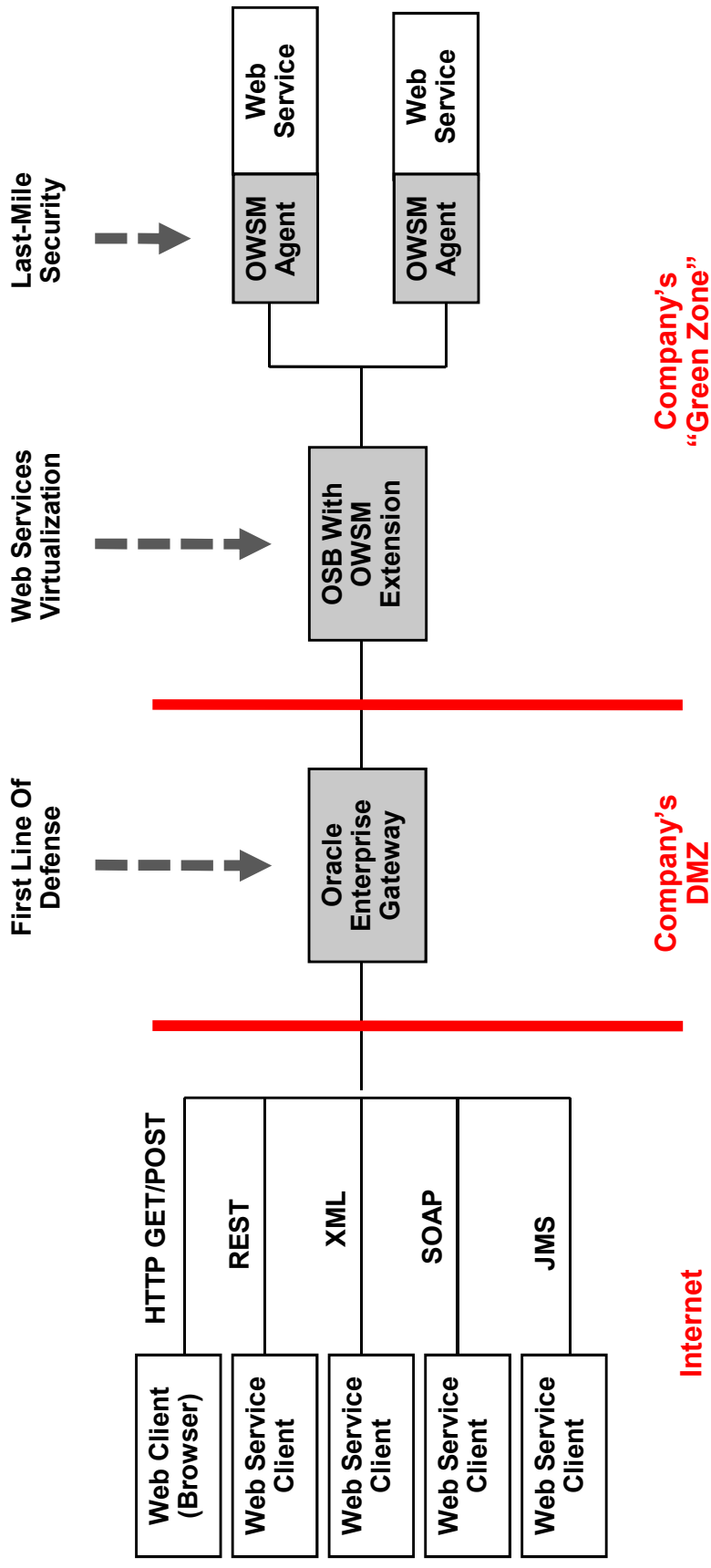
Sample: End Business Process

SOA & OSB Security

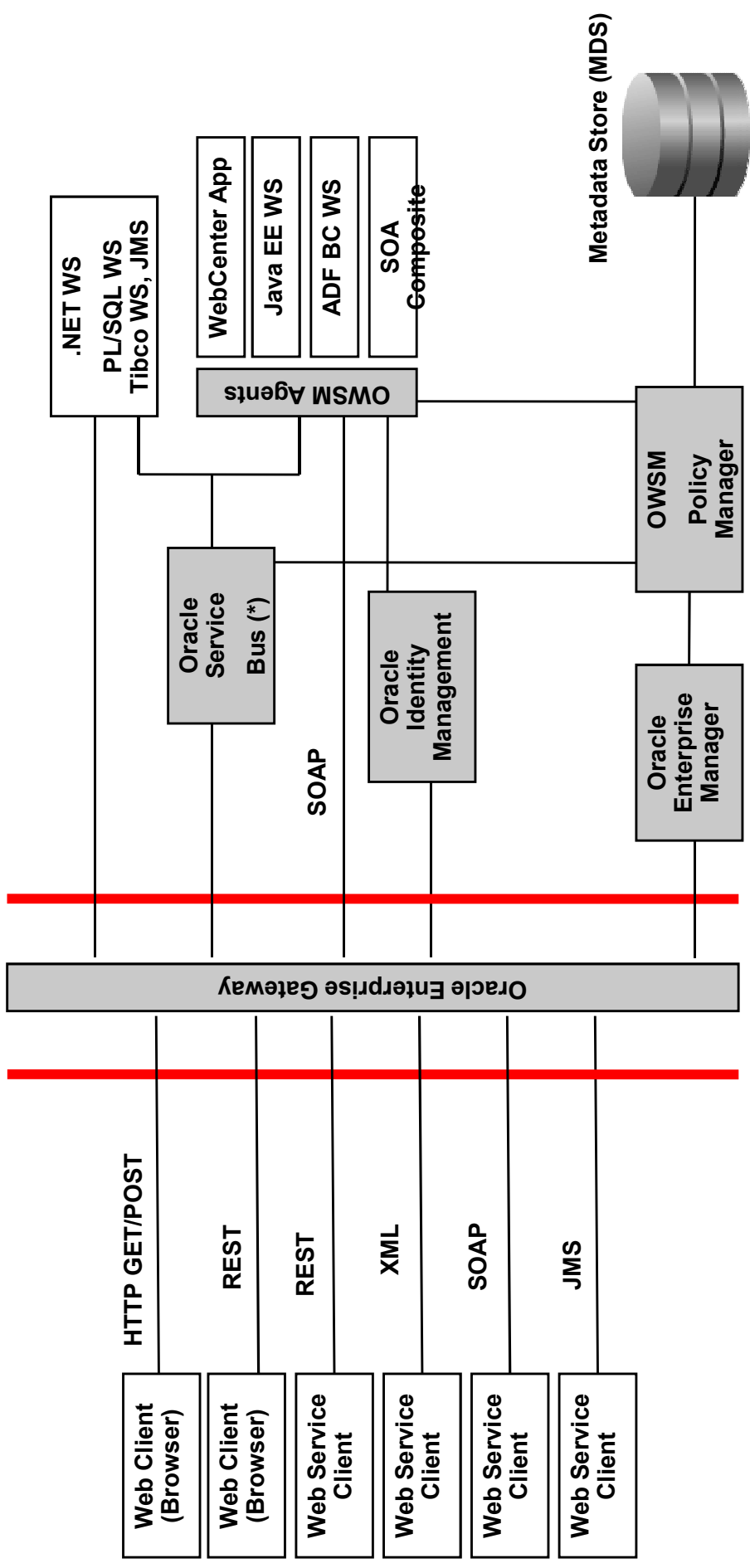


All end points secured by
OWSM Policy

Oracle Enterprise Gateway



Oracle Enterprise Gateway Deployment

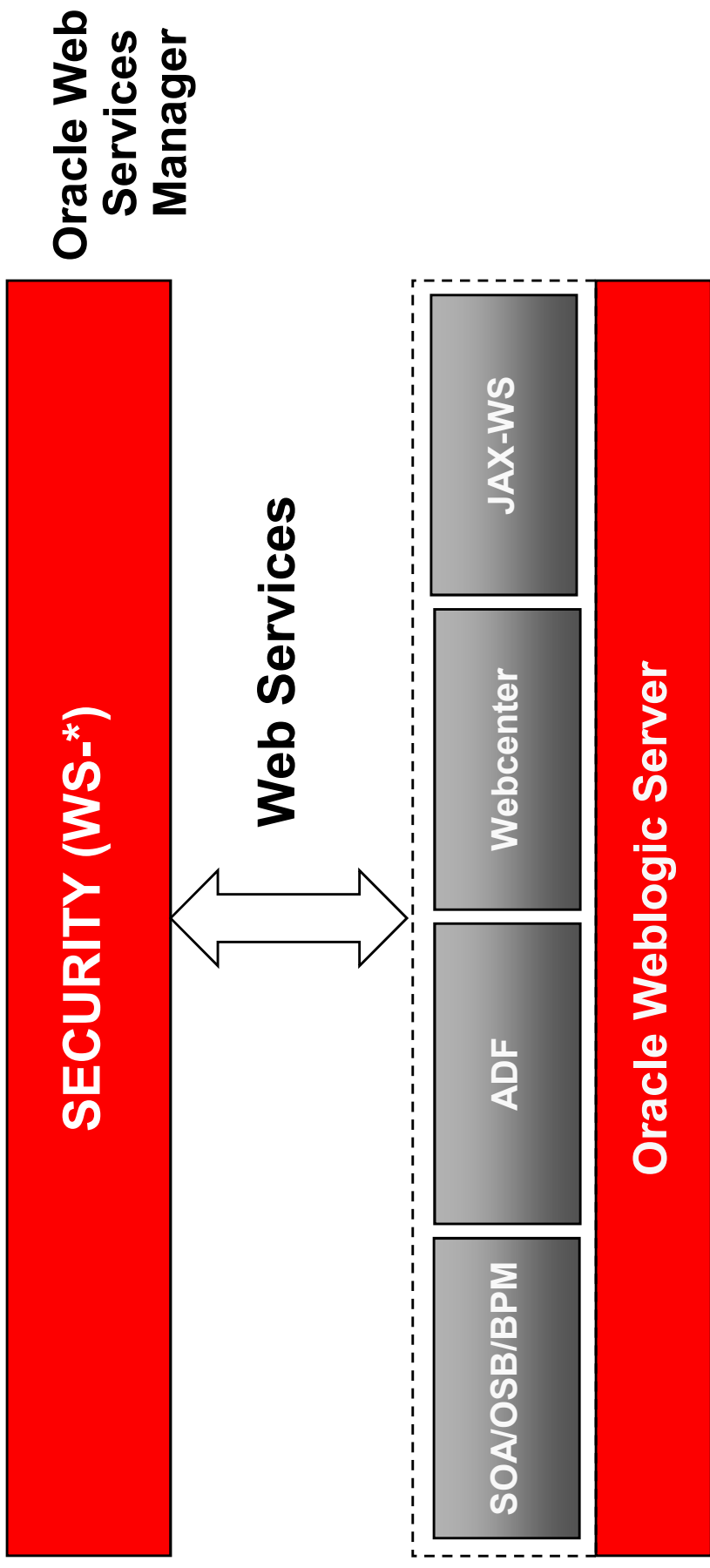


(*): OSB can be with or without OWSM extension

DEMO

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Summary



Hardware and Software

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