

Oracle Enterprise Architecture

IT Strategies from Oracle



People. Process. Portfolio.

ORACLE®

Overview of IT Strategies from Oracle Reference Library of Architecture Best Practices

IT Strategies from Oracle (ITSO)

What is it?

- A reference library of EA and solution architectures
 - Written by Oracle architects
 - Endorsed by Oracle product development
- Reference architectures covering Oracle products
 - Yet, product and vendor neutral
 - Spans horizontal technology and industry verticals
 - Includes Oracle product mapping
- Pragmatic guidance and approaches for applying important technology strategies
 - SOA, BPM, EDA, ...

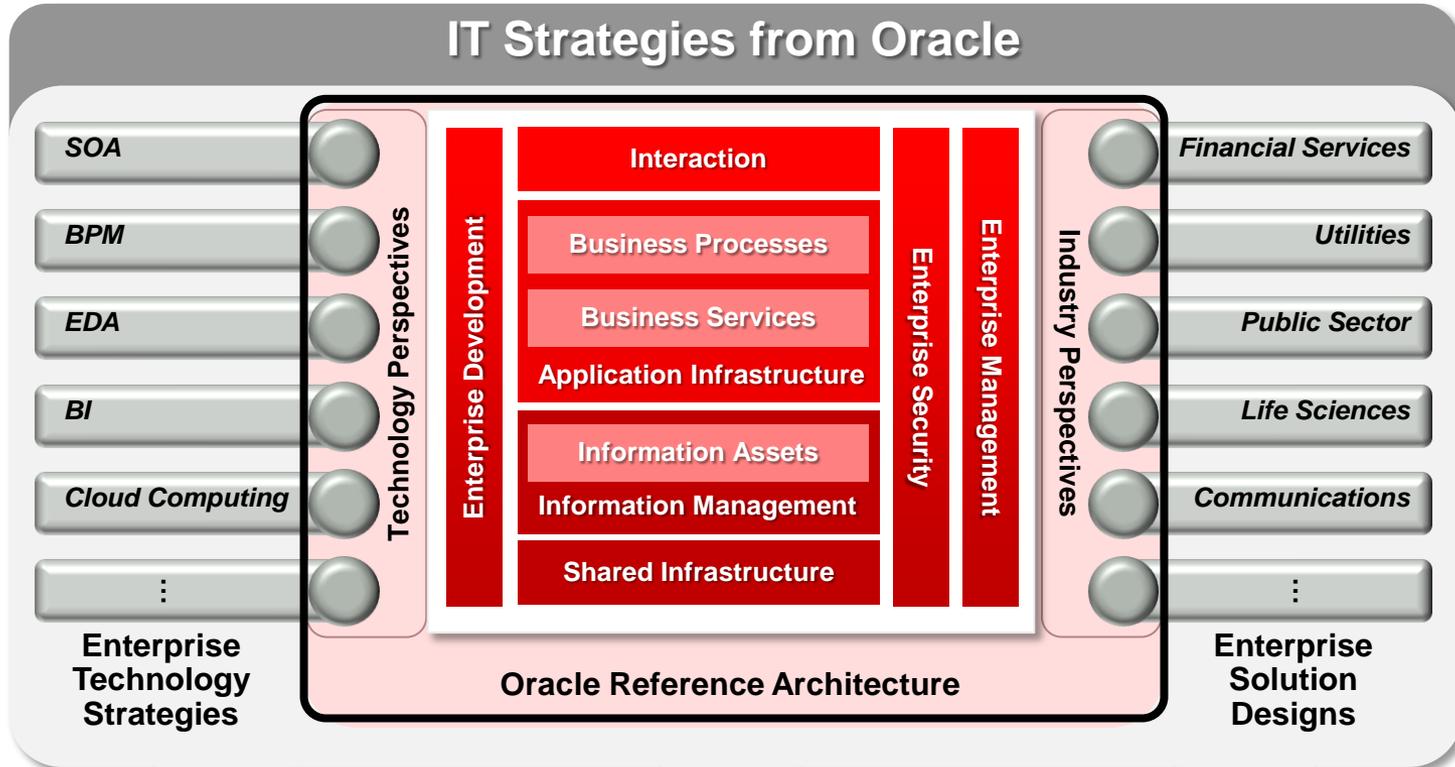
IT Strategies from Oracle

How can you use it?

- Helps organize the complex product landscape
 - Cross-product reference architecture
 - Augments product documentation
- Holistic approach to technology adoption
 - Not just a tactical product deployment
 - Increase your understanding, capability, and competency
- Reduces risk
 - Proven architecture, proven solution approach
- It's Free!
 - Free download at: www.oracle.com/goto/itstrategies

IT Strategies from Oracle

A Reference Library of Technology Strategy



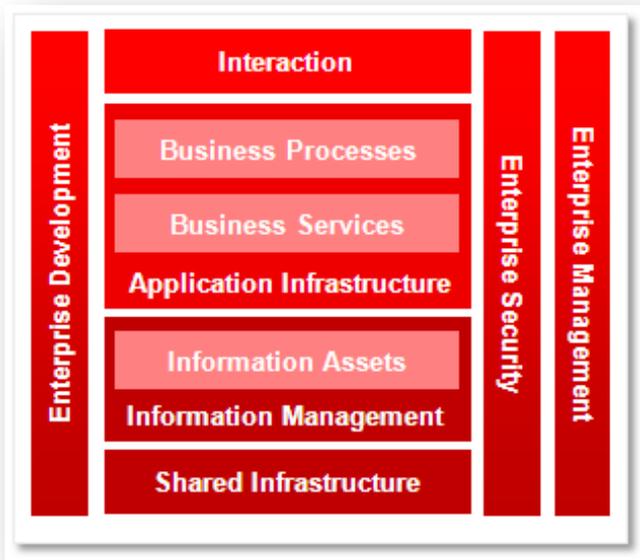
- ❖ Technology Architectures
- ❖ Practitioner Guides
- ❖ Maturity Models

- ❖ Architecture Concepts
- ❖ Principles & Guidelines
- ❖ Architecture Views
- ❖ Component Drilldowns
- ❖ Product Mappings

- ❖ Industry Architectures
- ❖ Industry Solutions
- ❖ Technology Patterns

Oracle Reference Architecture

What is a Reference Architecture?



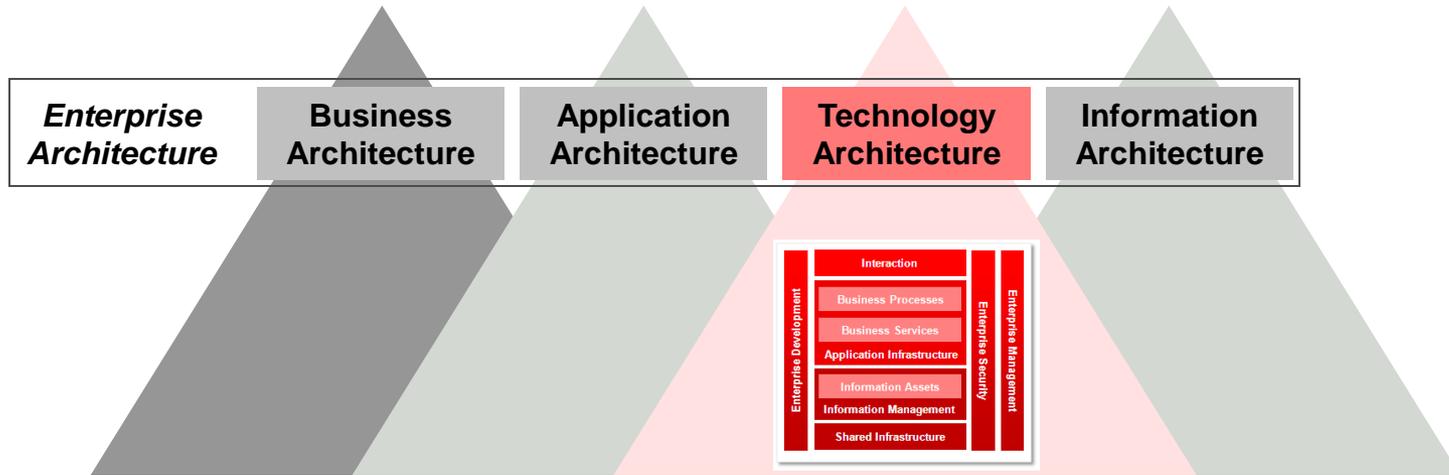
Oracle Reference Architecture

- Applicable to heterogeneous environments
- Independent of specific products or versions
- Consistent usage of concepts and terms
- Oracle Reference Architecture includes:
 - Declarative, asset-oriented development
 - End-to-end security
 - End-to-end monitoring and management

Supporting

- Modern, user-centric interfaces
- Business services and business processes hosted on robust, full-featured application infrastructure
- Information assets managed holistically across the enterprise
- Shared network, storage, and compute infrastructure supporting dynamic resource allocation

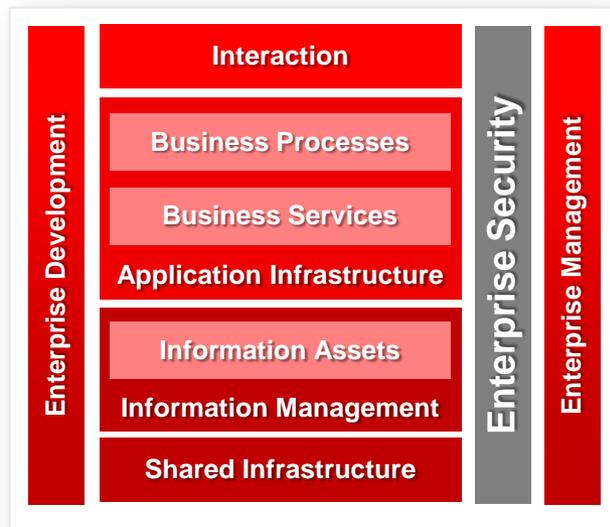
ORA & Enterprise Architecture



- ORA defines a Technology Architecture
 - Supports customer and industry-specific business, application, and information architectures
- ORA is not an Enterprise Architecture Framework
 - Can be used with EA frameworks, such as OEAF, TOGAF, DoDAF,...

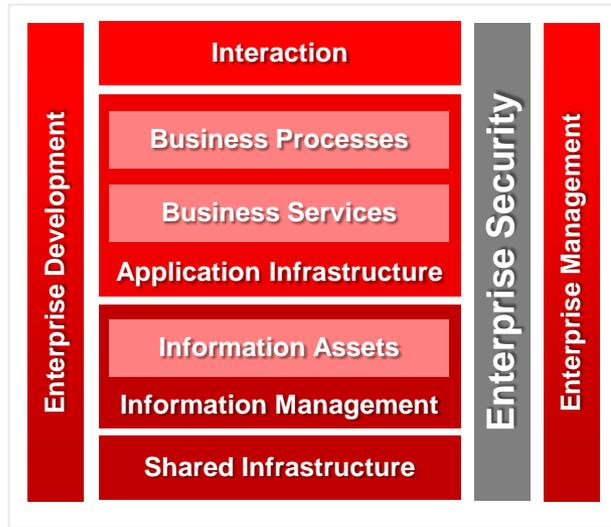
Oracle Reference Architecture

An Example: Security



- Concepts & Capabilities
- Standards
- Conceptual Architecture
- Logical Architecture
- Product Mapping
- Deployment

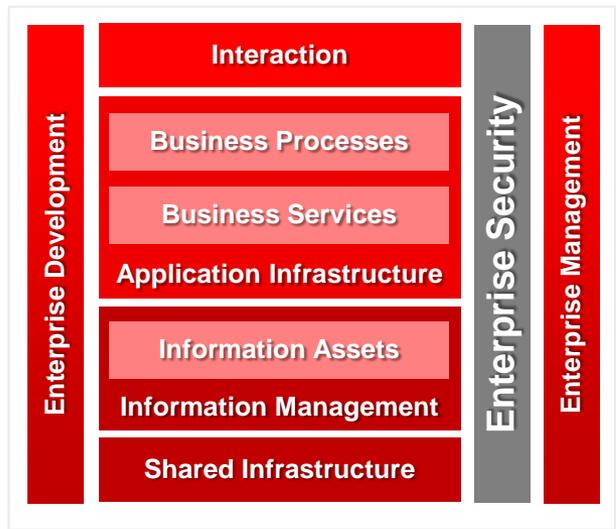
Security



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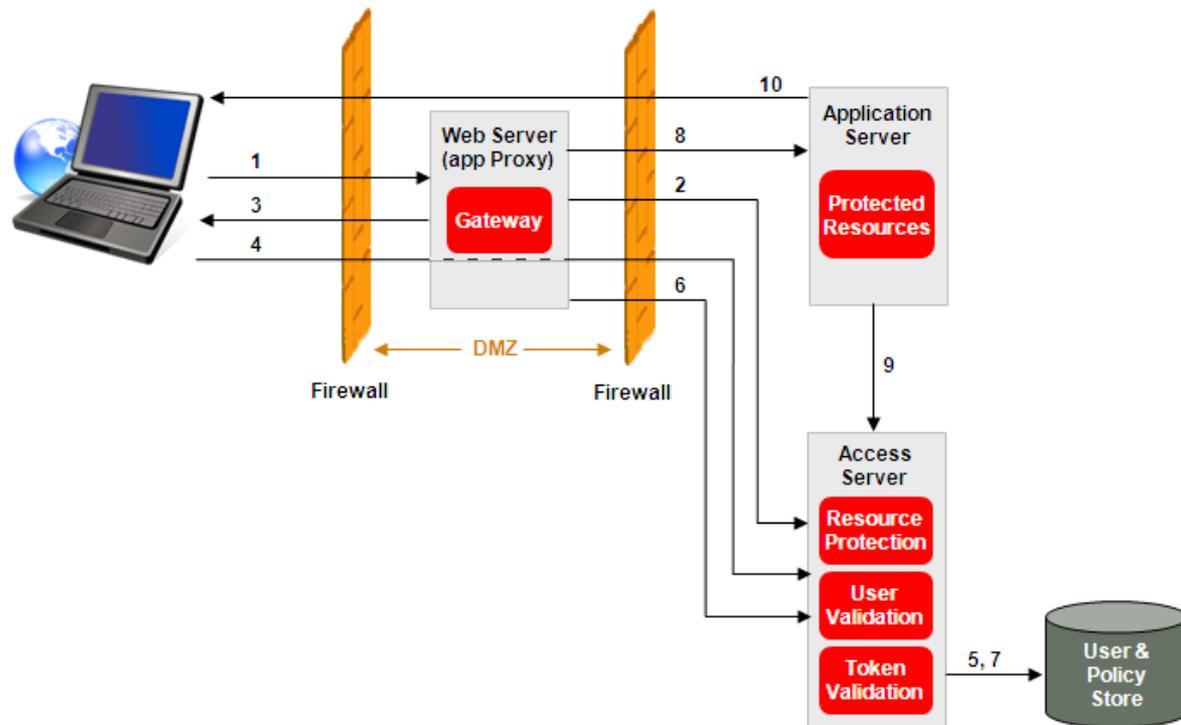
- Concepts & Capabilities

Security

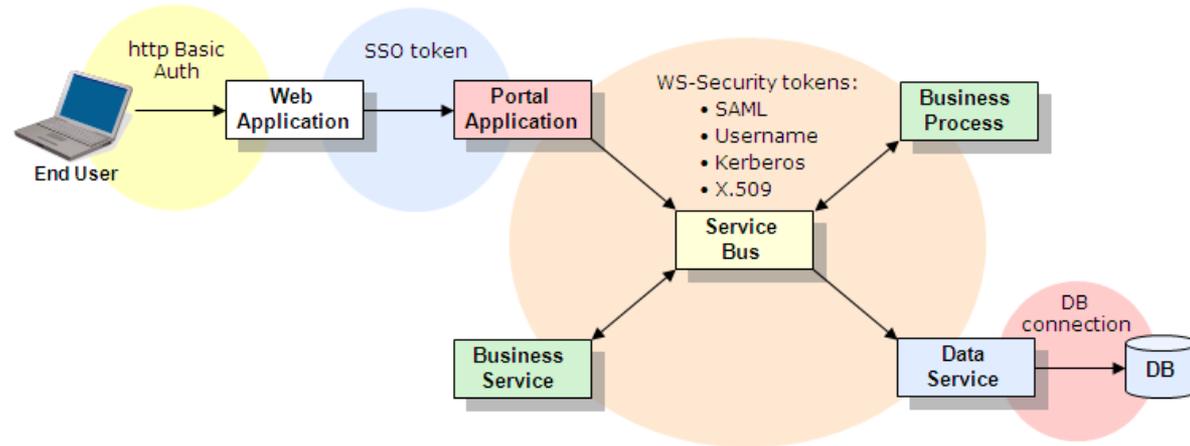
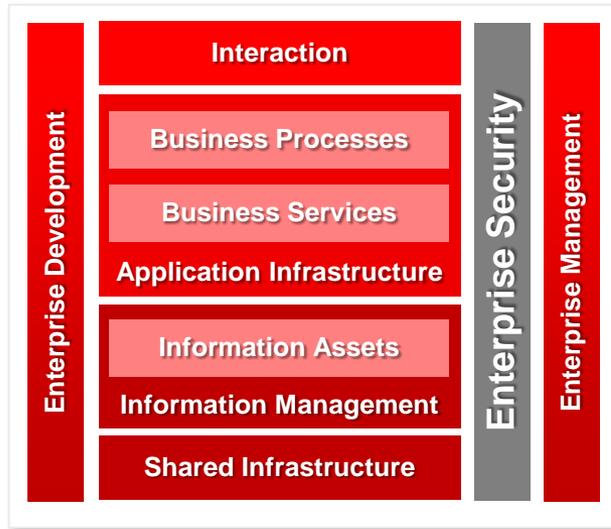


Contents Include:

- Concepts & Capabilities
- Single Sign-on



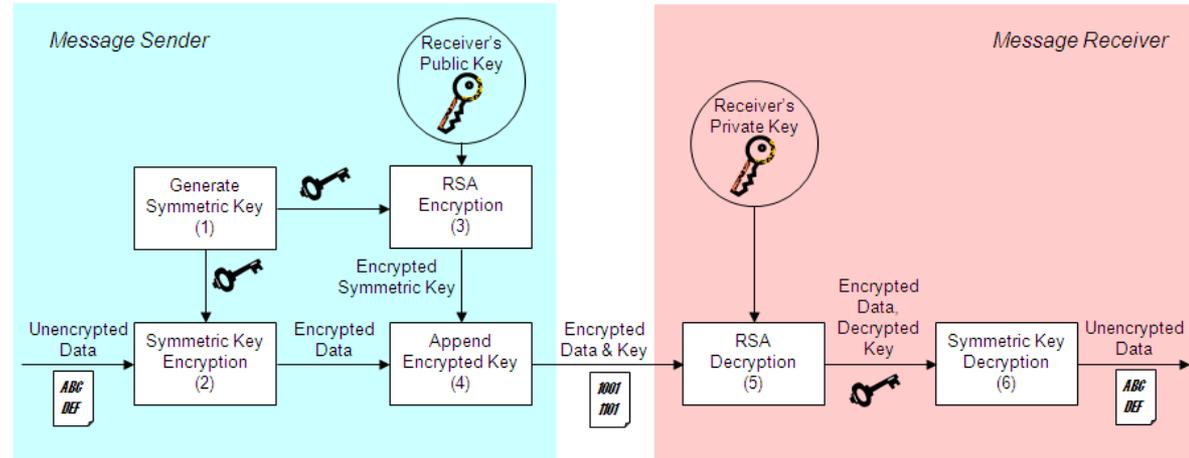
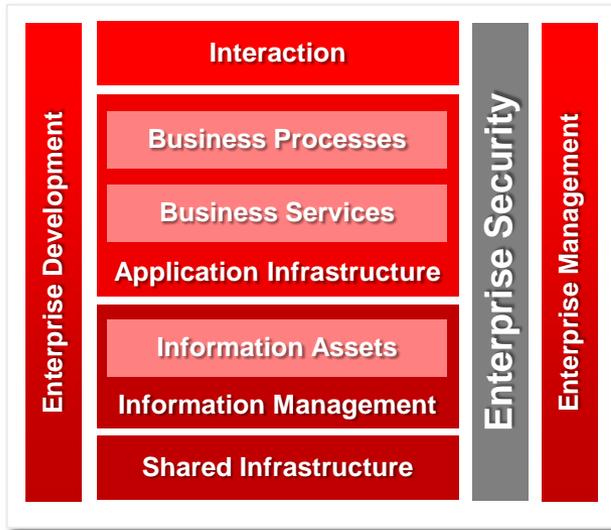
Security



Contents Include:

- Concepts & Capabilities
 - Single Sign-on
 - Identity Propagation

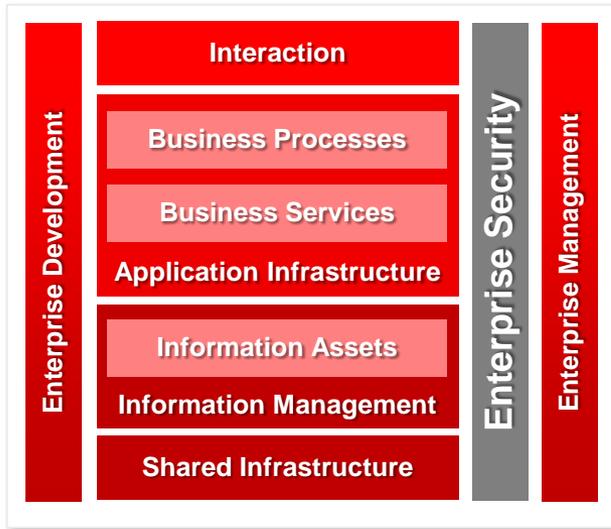
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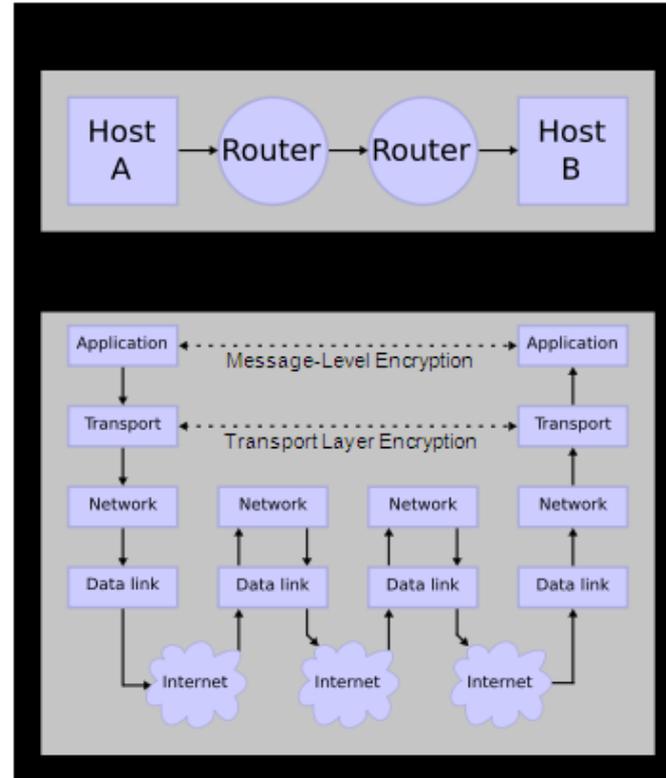
- Concepts & Capabilities
 - Single Sign-on
 - Identity Propagation
 - Key Exchange

Security

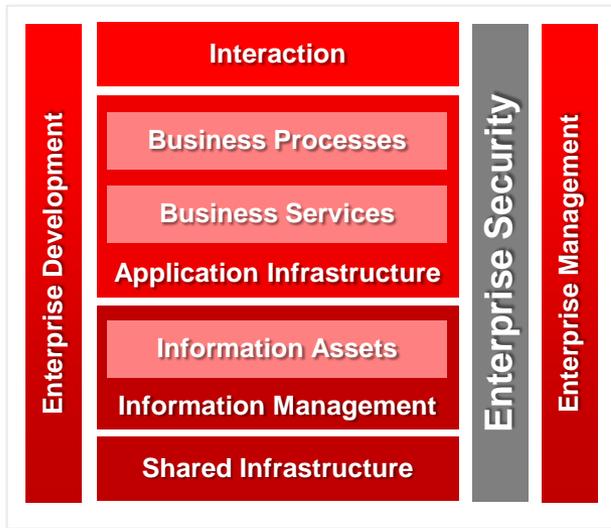


Contents Include:

- Concepts & Capabilities
 - Single Sign-on
 - Identity Propagation
 - Key Exchange
 - Encryption

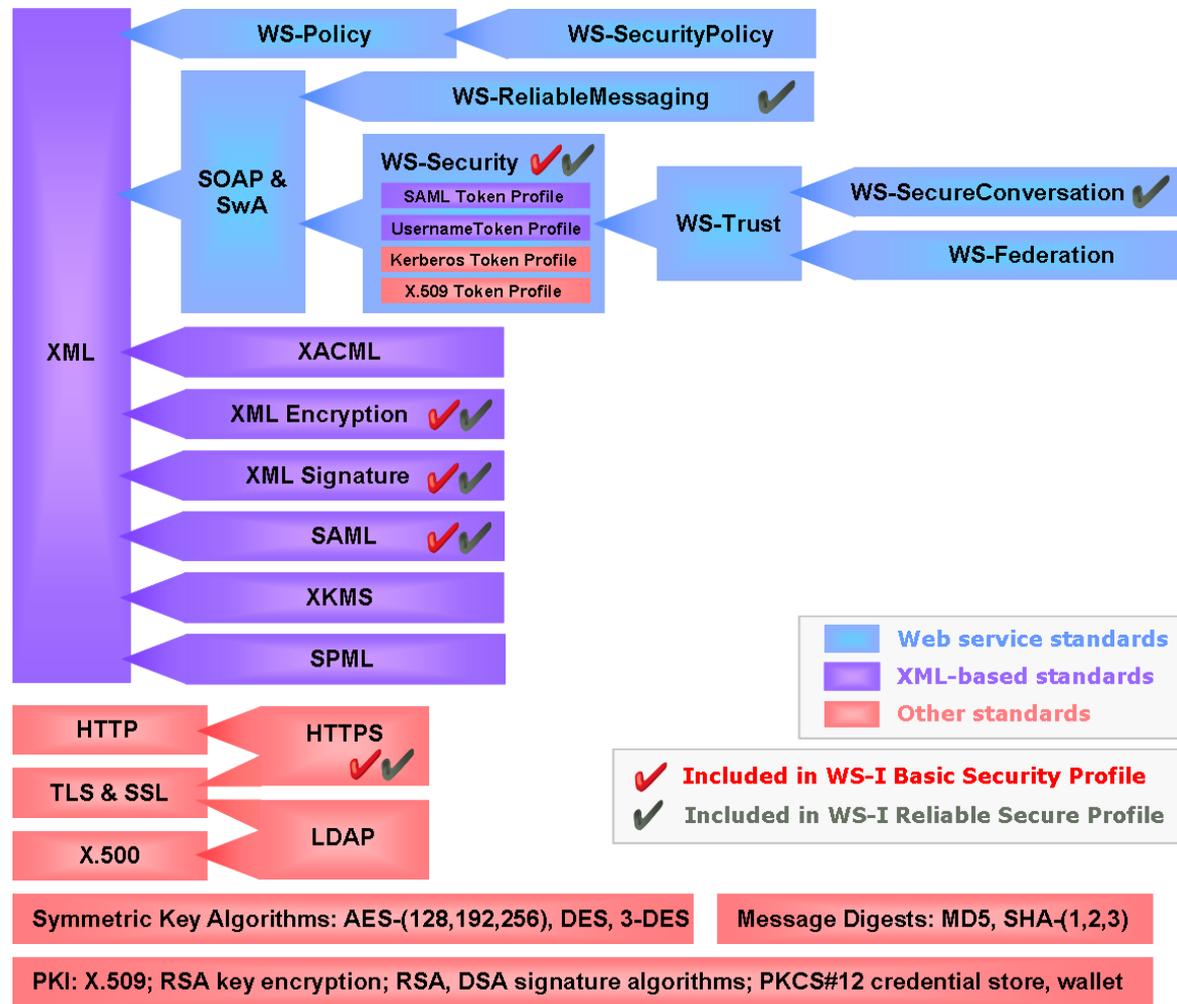


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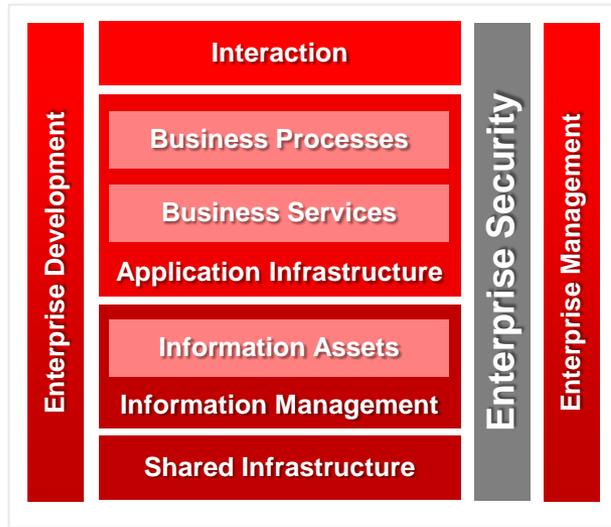


Contents Include:

- Concepts & Capabilities
- Standards



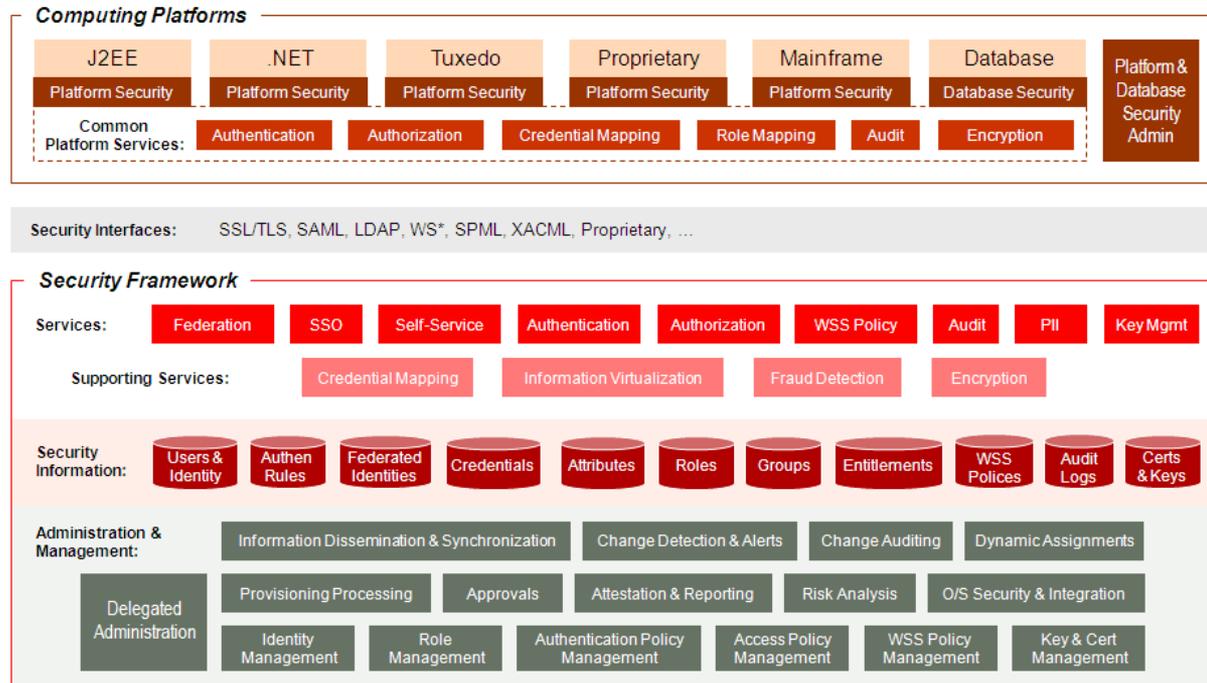
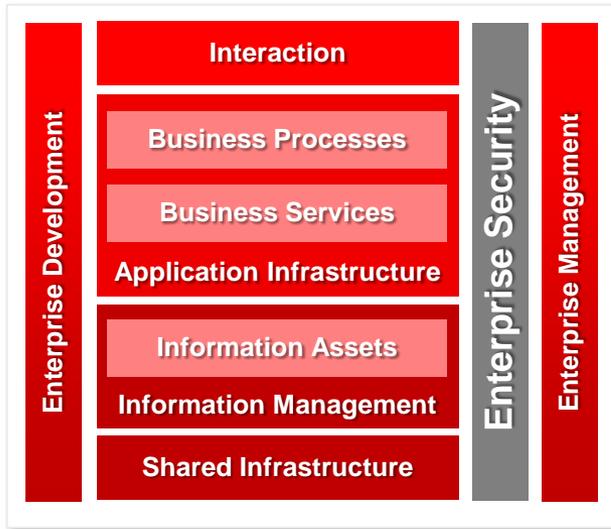
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Contents Include:

- Concepts & Capabilities
- Standards
- Conceptual Architecture

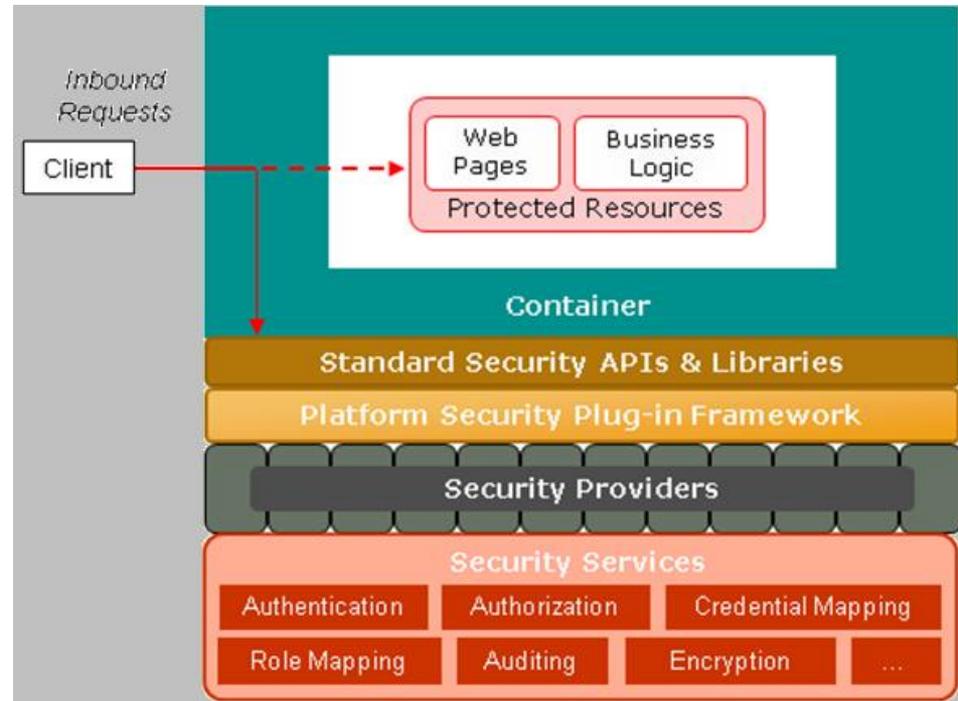
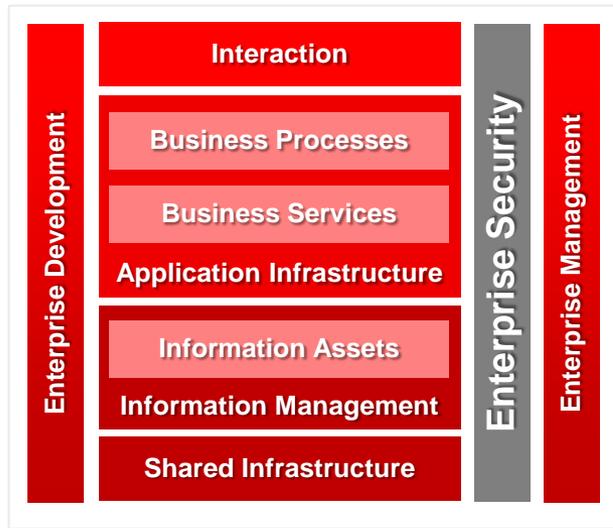
Security



Contents Include:

- Concepts & Capabilities
- Standards
- Conceptual Architecture
 - Security Framework

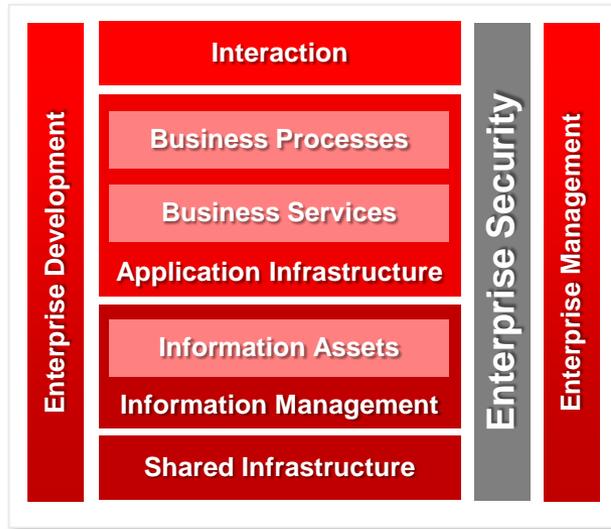
Security



Contents Include:

- Concepts & Capabilities
- Standards
- Conceptual Architecture
 - Security Framework
 - Container Based Security

Security

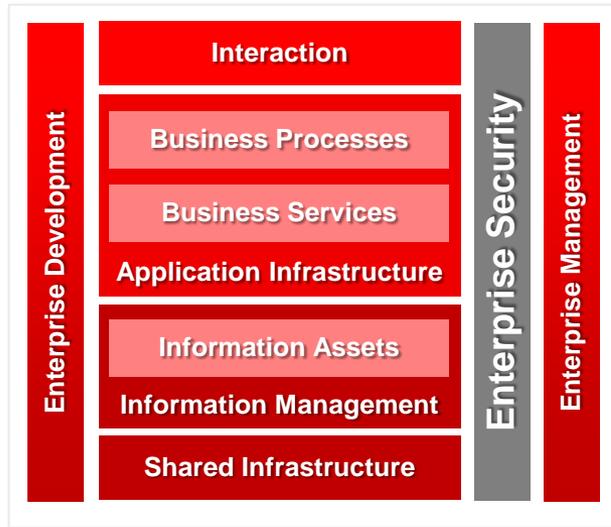


Contents Include:

- Concepts & Capabilities
- Standards
- Conceptual Architecture
 - Security Framework
 - Container Based Security
 - In-Depth Database Security



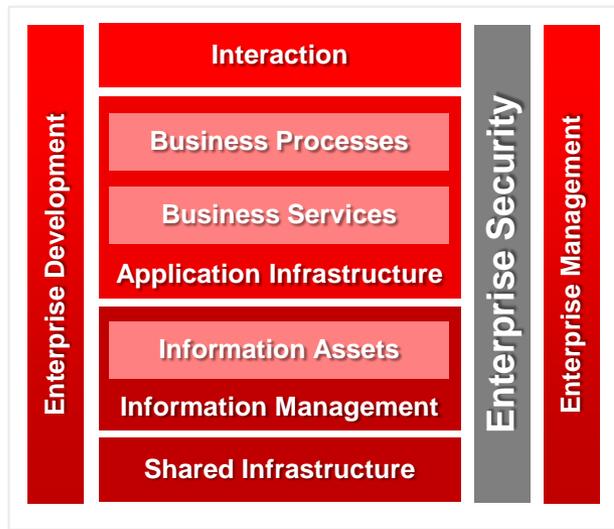
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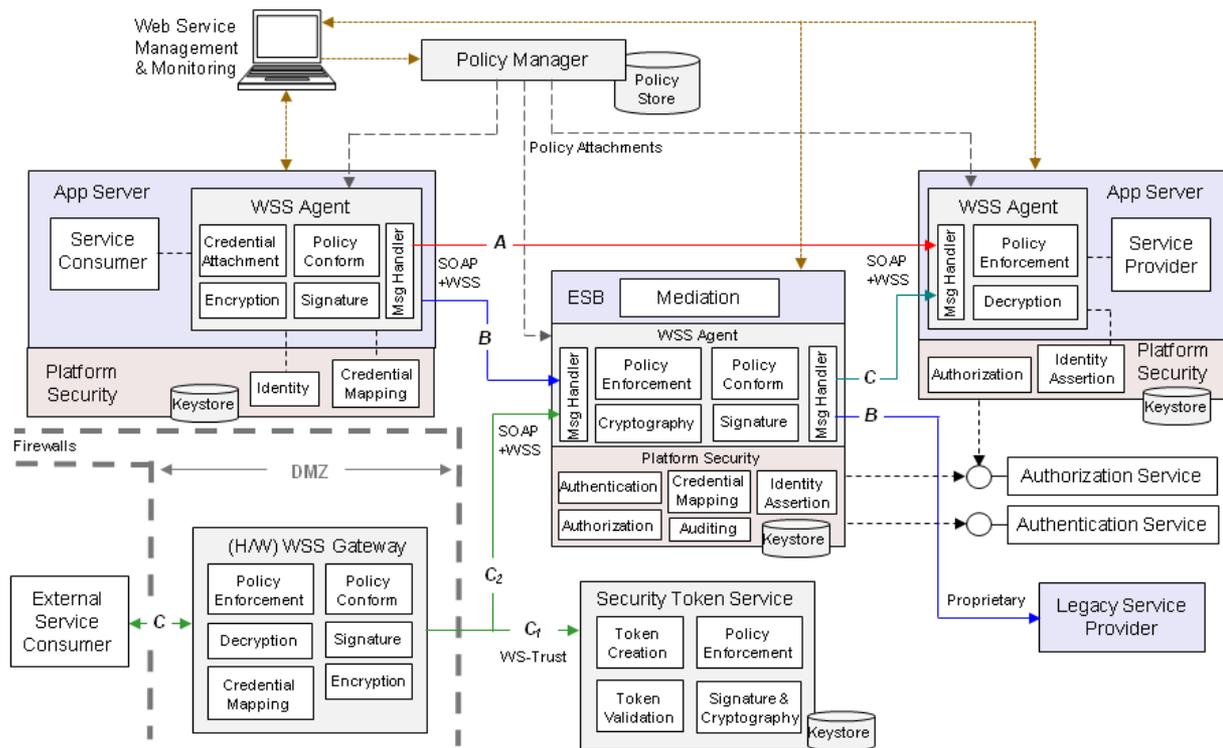
- Concepts & Capabilities
- Standards
- Conceptual Architecture
- Logical Architecture

Security

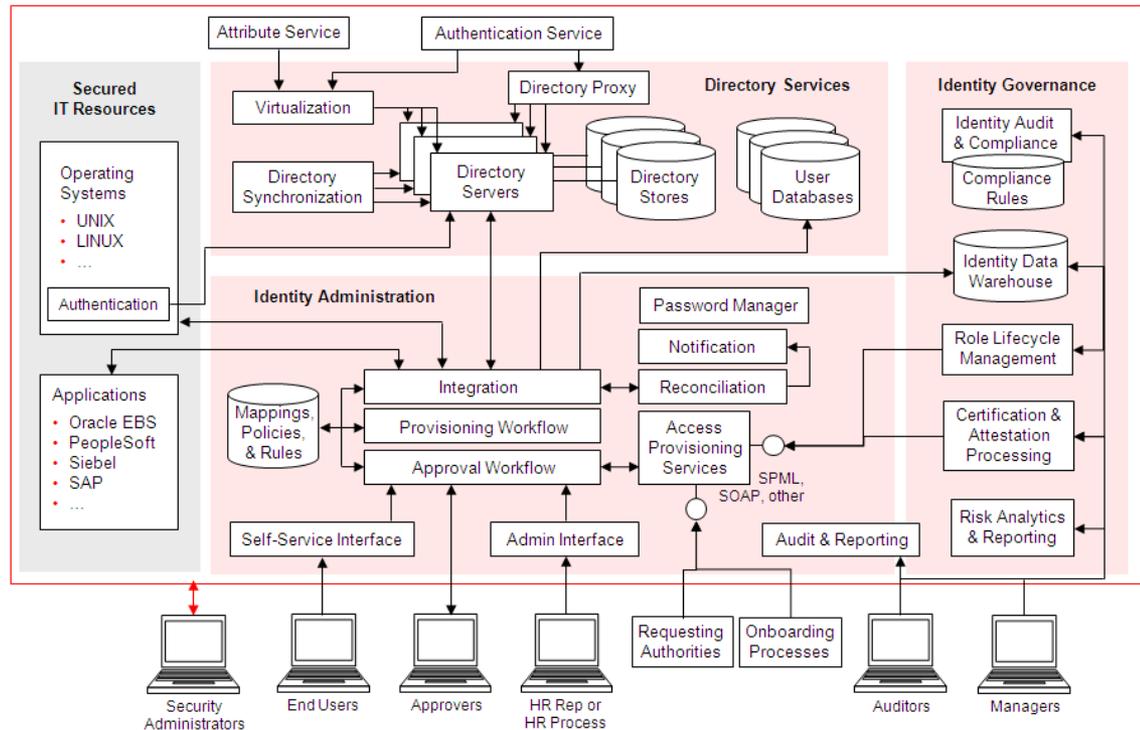
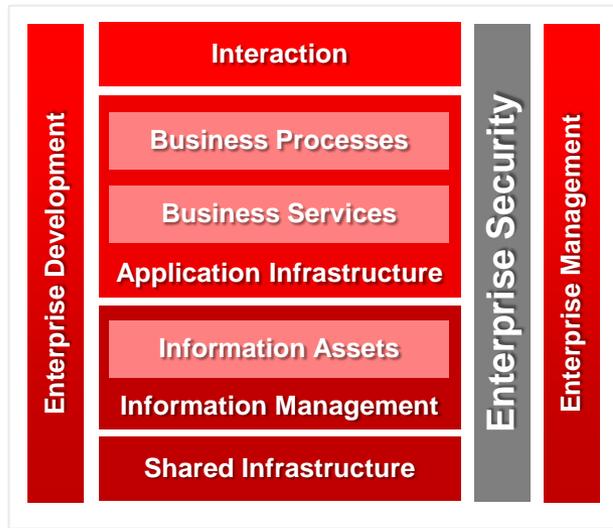


Contents Include:

- Concepts & Capabilities
- Standards
- Conceptual Architecture
- Logical Architecture
 - Web Service Security



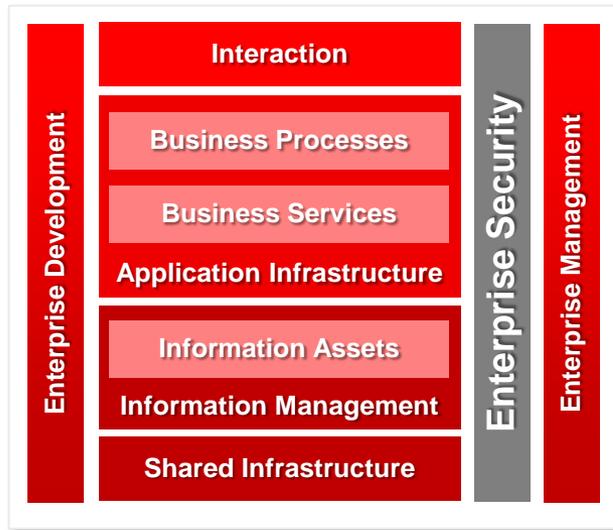
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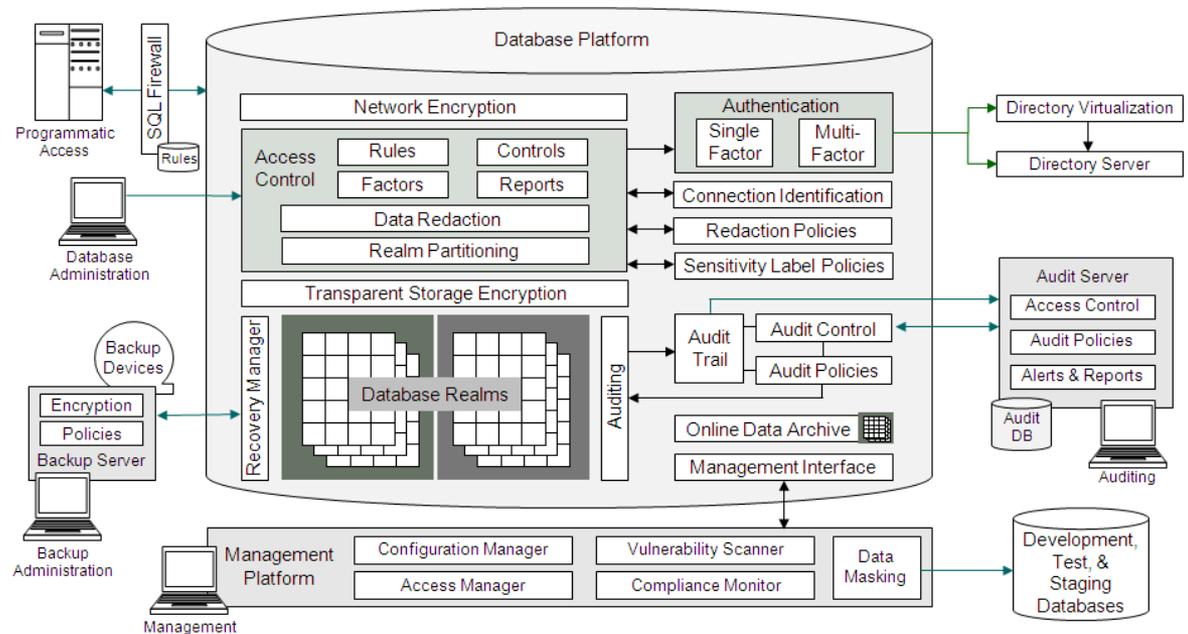
- Concepts & Capabilities
- Standards
- Conceptual Architecture
- Logical Architecture
 - Web Service Security
 - Identity Management

Security

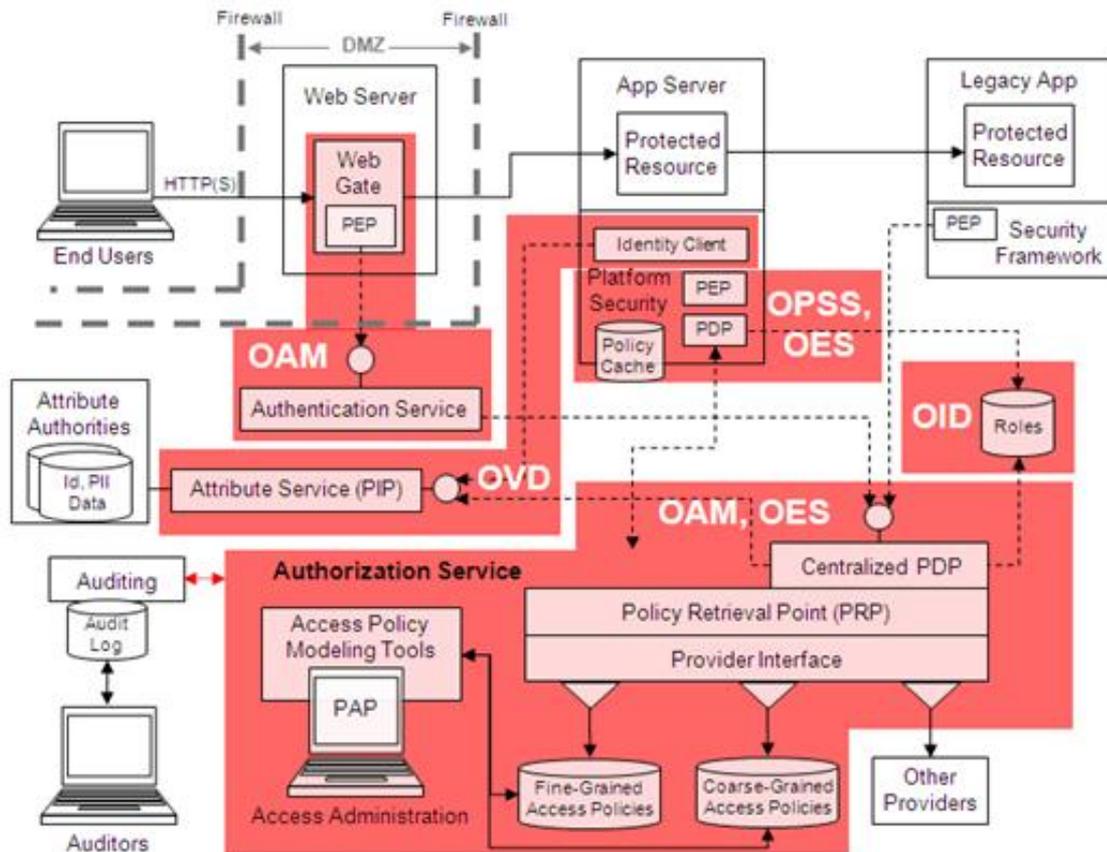
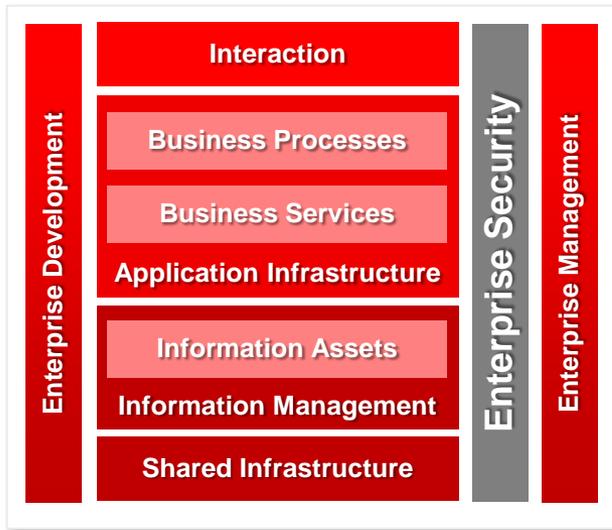


Contents Include:

- Concepts & Capabilities
- Standards
- Conceptual Architecture
- Logical Architecture
 - Web Service Security
 - Identity Management
 - Database Security



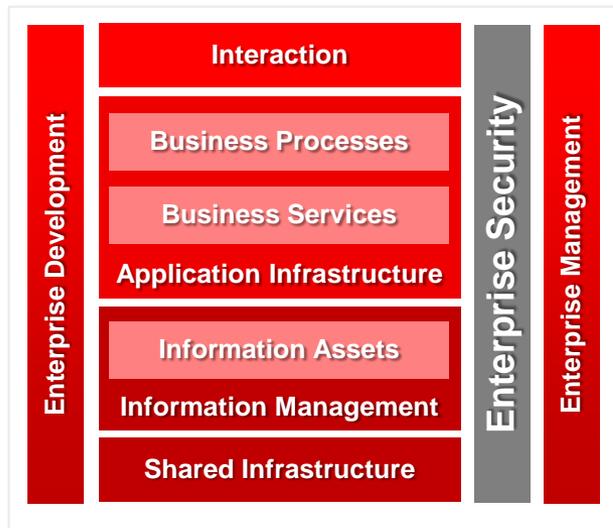
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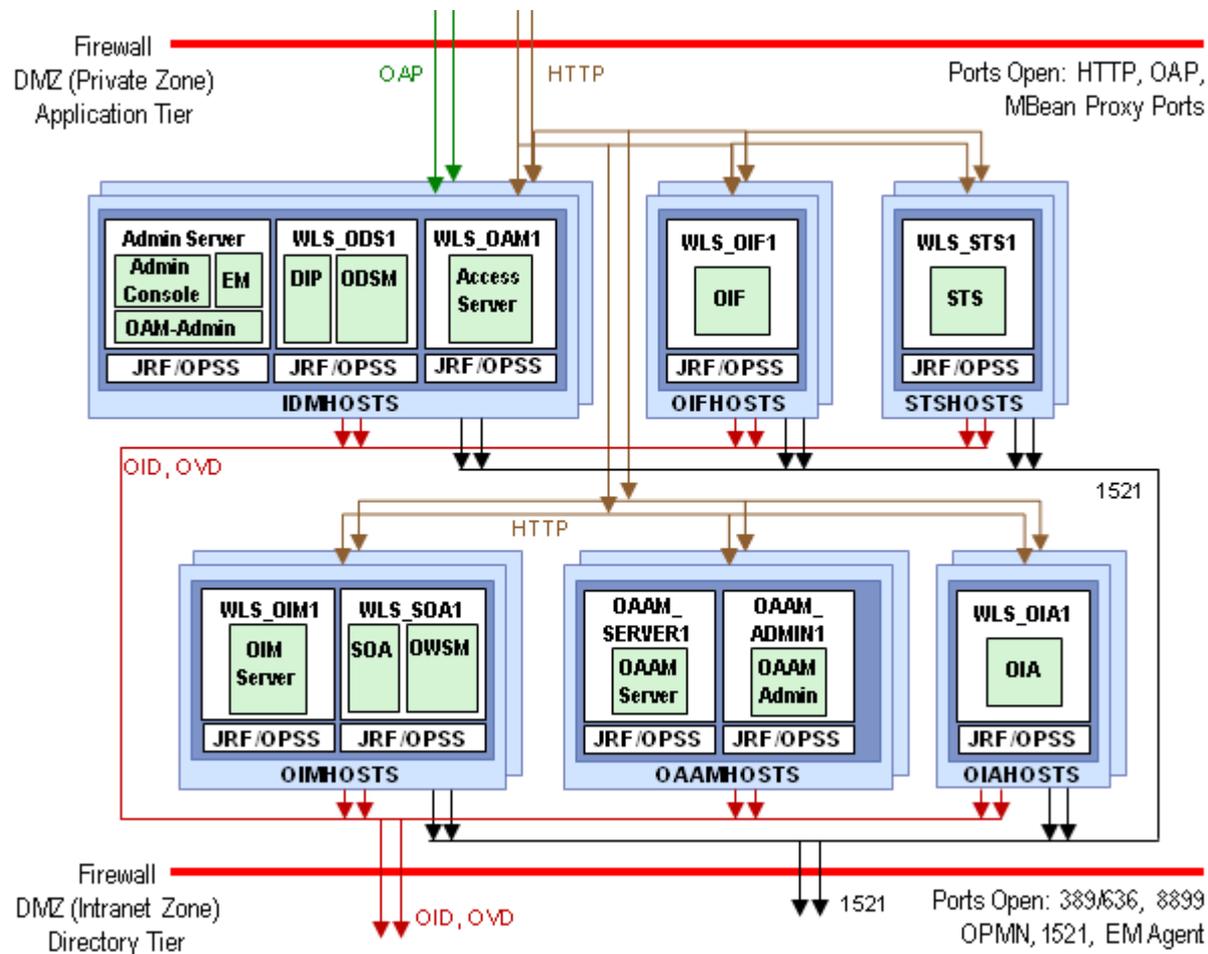
- Concepts & Capabilities
- Standards
- Conceptual Architecture
- Logical Architecture
- Product Mapping

Security



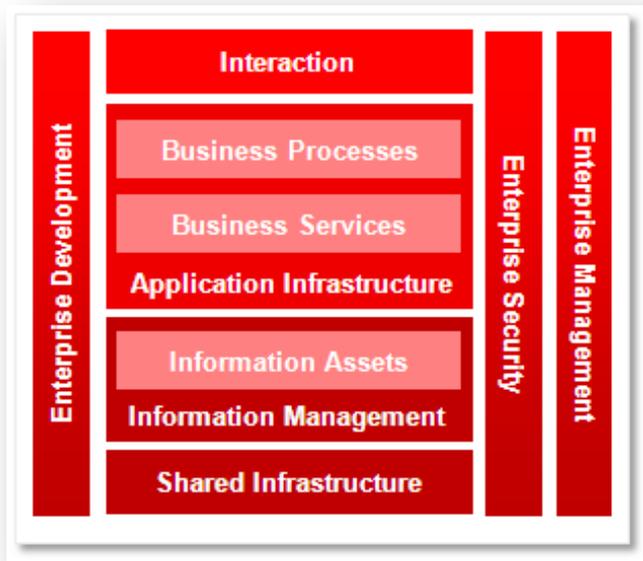
Contents Include:

- Concepts & Capabilities
- Standards
- Conceptual Architecture
- Logical Architecture
- Product Mapping
- Deployment



Oracle Reference Architecture

Material Currently Available

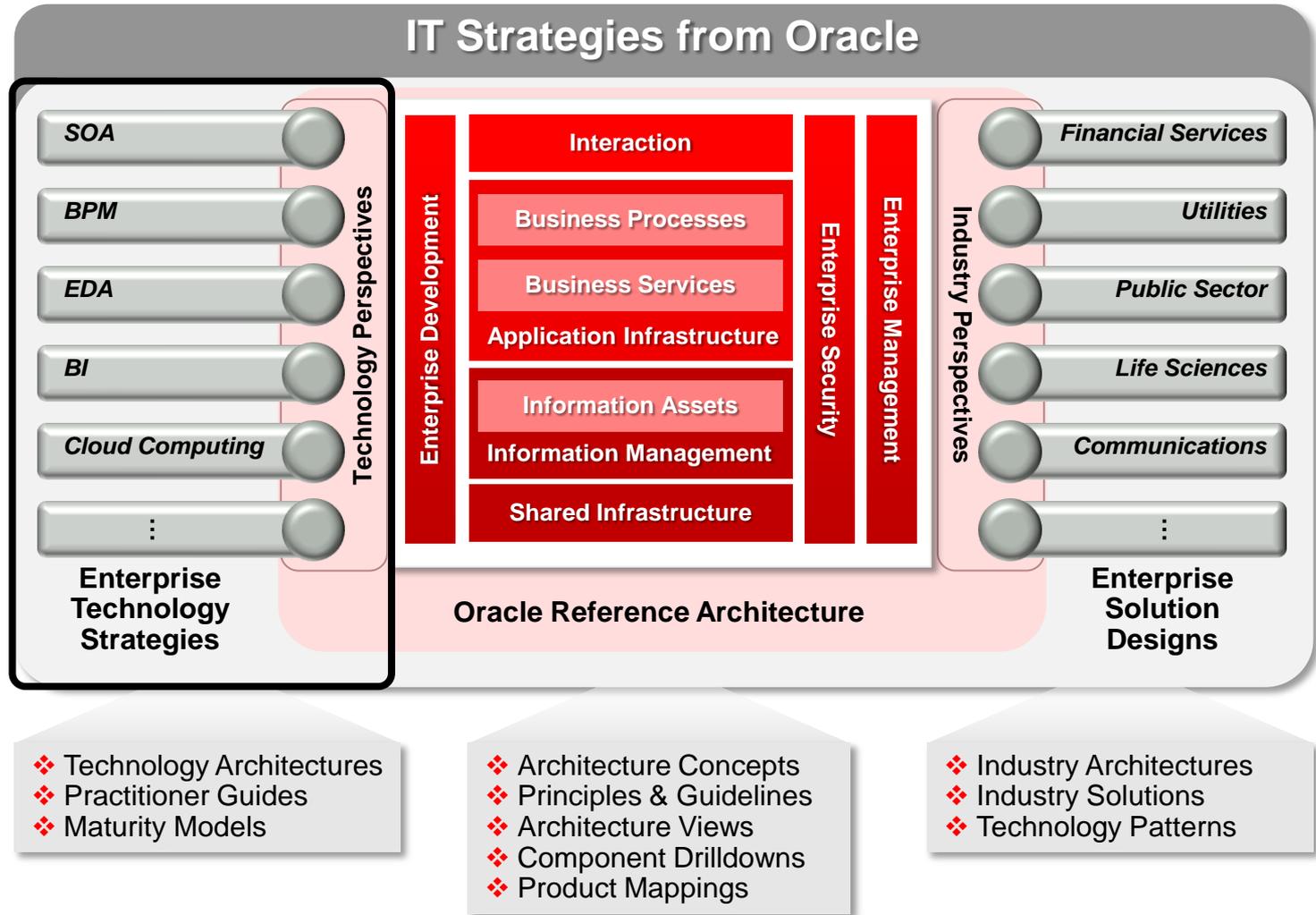


Documents

- ORA Application Infrastructure Foundation
- ORA Software Engineering
- ORA Monitoring and Management
- ORA Security
- ORA Service-Oriented Integration
- ORA and Service Orientation
- Master Glossary

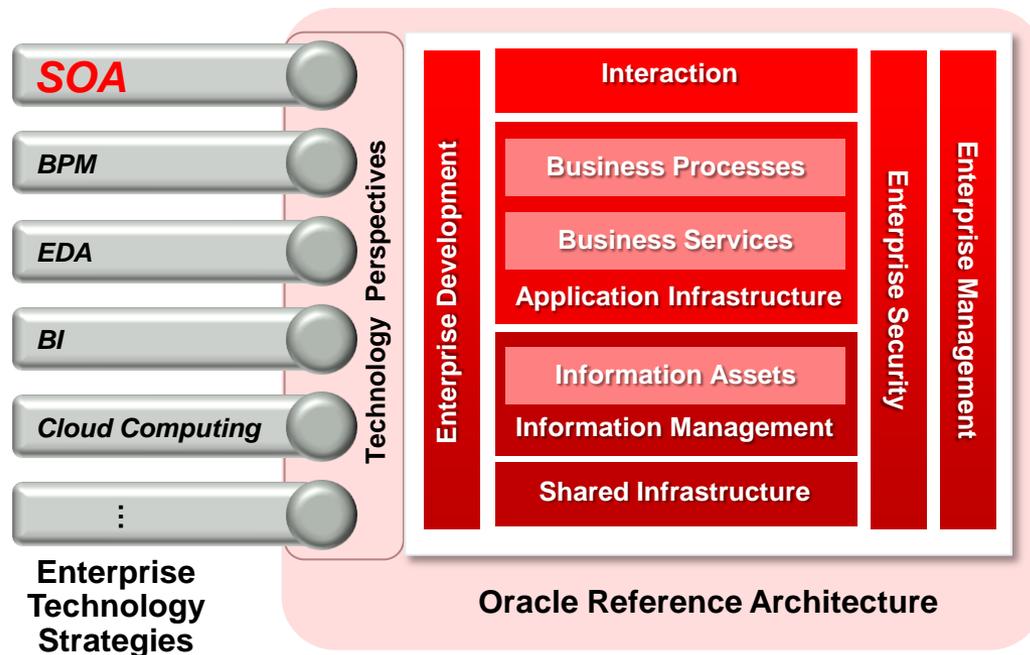
IT Strategies from Oracle

A Reference Library of Technology Strategy



SOA ORA Perspective

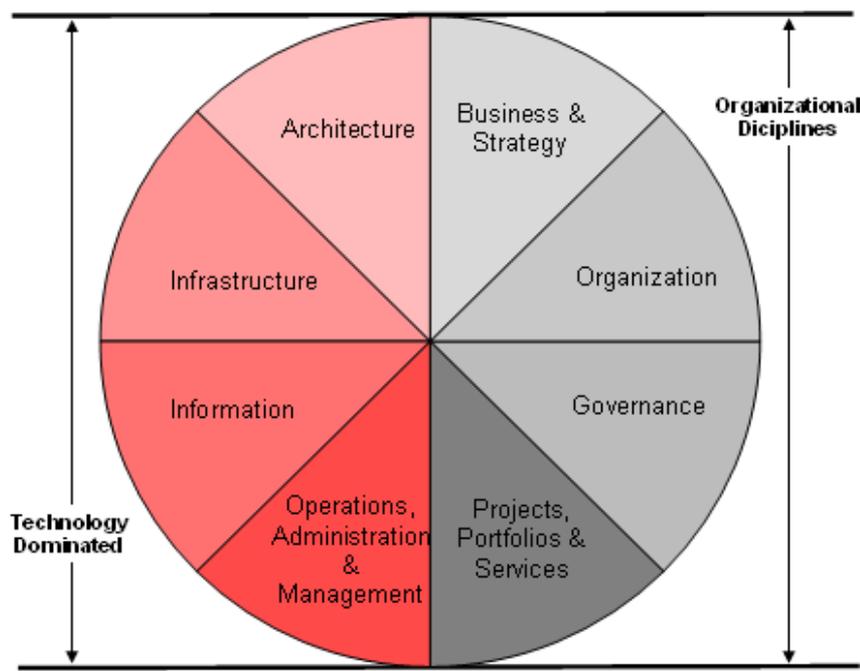
- **SOA Foundation** presents important basic concepts of SOA that are instrumental to building applications for a SOA environment. It covers topics including the **definition of a service, service layering, service types, the service model, composite applications, invocation patterns, and standards** that apply to SOA.



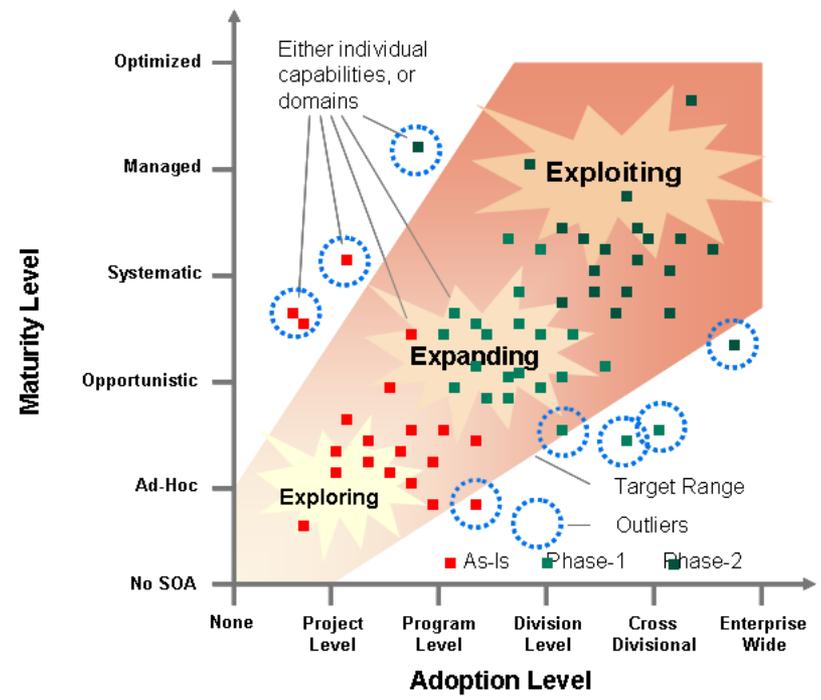
- **SOA Infrastructure** describes the role of infrastructure and the capabilities it provides, including **mediation, service discovery, security, monitoring, and management**. It offers an array of views to define infrastructure for SOA, including **logical and physical views, as well as technology and product mapping**.

SOA Maturity Model

Capability Domains



Measurement Model



Comprehensive guidelines for structure, assessment, measurement, and management

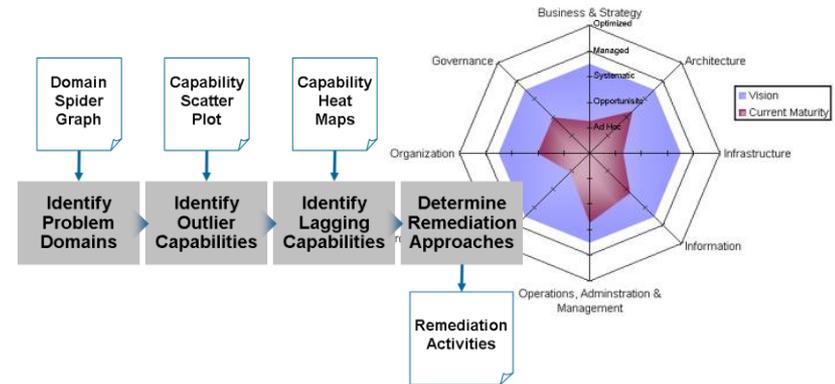
SOA Practitioner Guides

- Provides advice for creating your own specific approach
 - Addresses alternatives and offers choices and tradeoffs
 - Offers pragmatic guidance based on experience

SOA Practitioner Guides

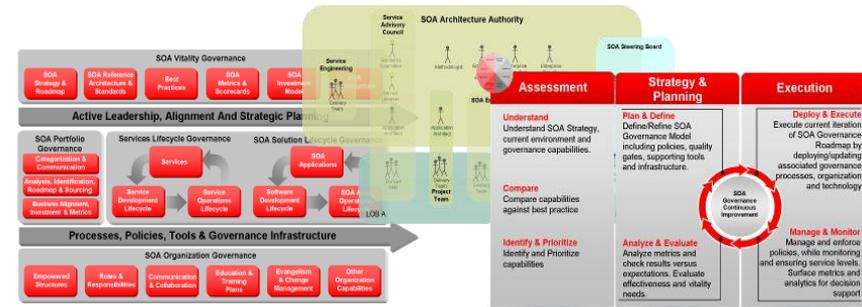
• Creating an SOA Roadmap

Offers a structured, iterative methodology to help you stay focused on business results and mitigate technology and organizational risk.



• Framework for SOA Governance

Offers a comprehensive approach to Enterprise SOA governance policies and procedures covering assets, processes, technologies, standards, roles and more.



• Determining ROI of SOA through Reuse

Provides an approach for estimating the reuse value of software assets contained in a typical portfolio.

Estimated time required to use an asset for single use - Estimated time required to use an existing asset = Predicted net hours saved by the consumer

Estimated time required to build an asset for single use - Estimated time required to use an existing asset = Predicted net hours saved by the consumer

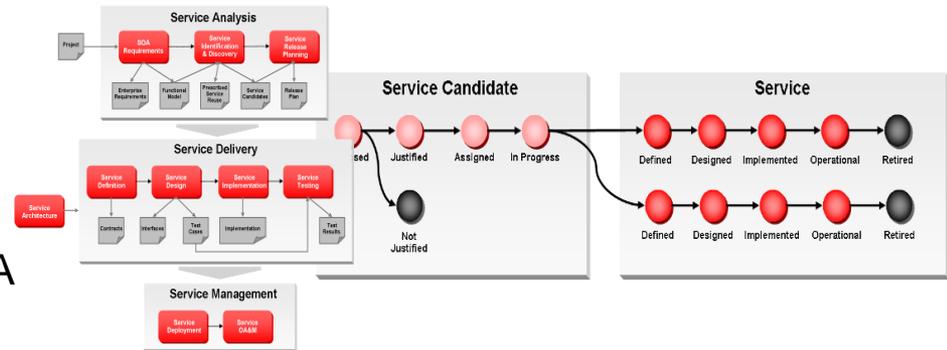
Variables	Industry Benchmark	Organization Specific
Assets	Services	
Production Investment	20%	20%
Consumption Factor	5%	16%
Early Reuse Rate		53%
Number of projects that will be exposed to these		75

Asset Name	Service Analysis (Hours)					Total	Hours to reuse variable version	Consumption Factor	Predicted Net Hours Saved by Consumer	# Assets Reuse Opportunities	Potential Reuse Value
	SOA Identification	Service Release Planning	Service Design	Service Implementation	Service Test						
Security Service	120	8	40	20	80	268	276	27.6	242.4	11	\$27,260
Card Payment	120	8	40	20	80	268	276	27.6	242.4	11	\$27,260
Card Billing	90	6	30	15	60	201	206	20.6	180.4	8	\$18,040

SOA Practitioner Guides

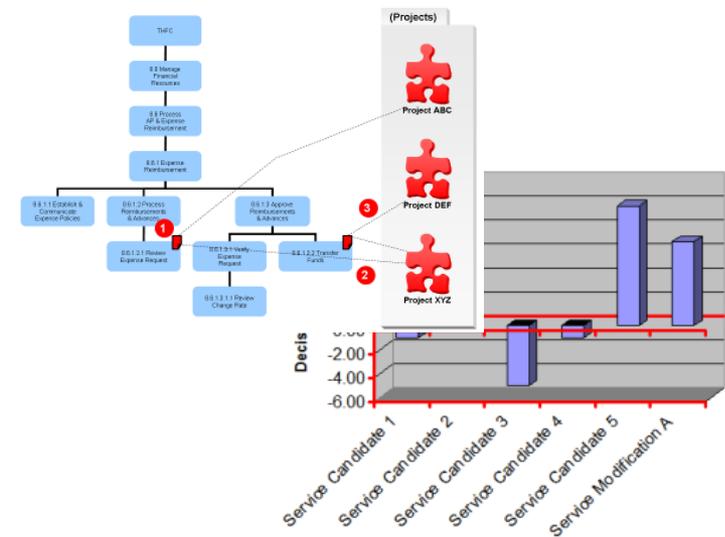
- Software Engineering in an SOA Environment**

Offers an efficient work management approach for the unique requirements of SOA engineering.



- Identifying and Discovering Services**

Offers a pragmatic approach for collecting the necessary information for identifying proper services and facilitating service reuse.



Enterprise Technology Strategies

SOA Material Currently Available

Documents

- Oracle's Approach to SOA
- ORA SOA Foundation
- ORA SOA Infrastructure
- Framework for SOA Governance
- Creating an SOA Roadmap
- Determining ROI of SOA through Reuse
- Software Engineering in an SOA Environment
- SOA Maturity Model Whitepaper

Tools *

- SOA Maturity Model Capabilities Spreadsheet
- SOA Maturity Model Scoring Spreadsheet
- Service Selection Framework
- Project Selection Framework
- Reuse ROI Spreadsheet
- SOA ROI Spreadsheet

* Not available on the external web site

Enterprise Technology Strategies

BPM Material Currently Available

Documents

- ORA BPM Foundation
- ORA BPM Infrastructure
- Creating a BPM Roadmap

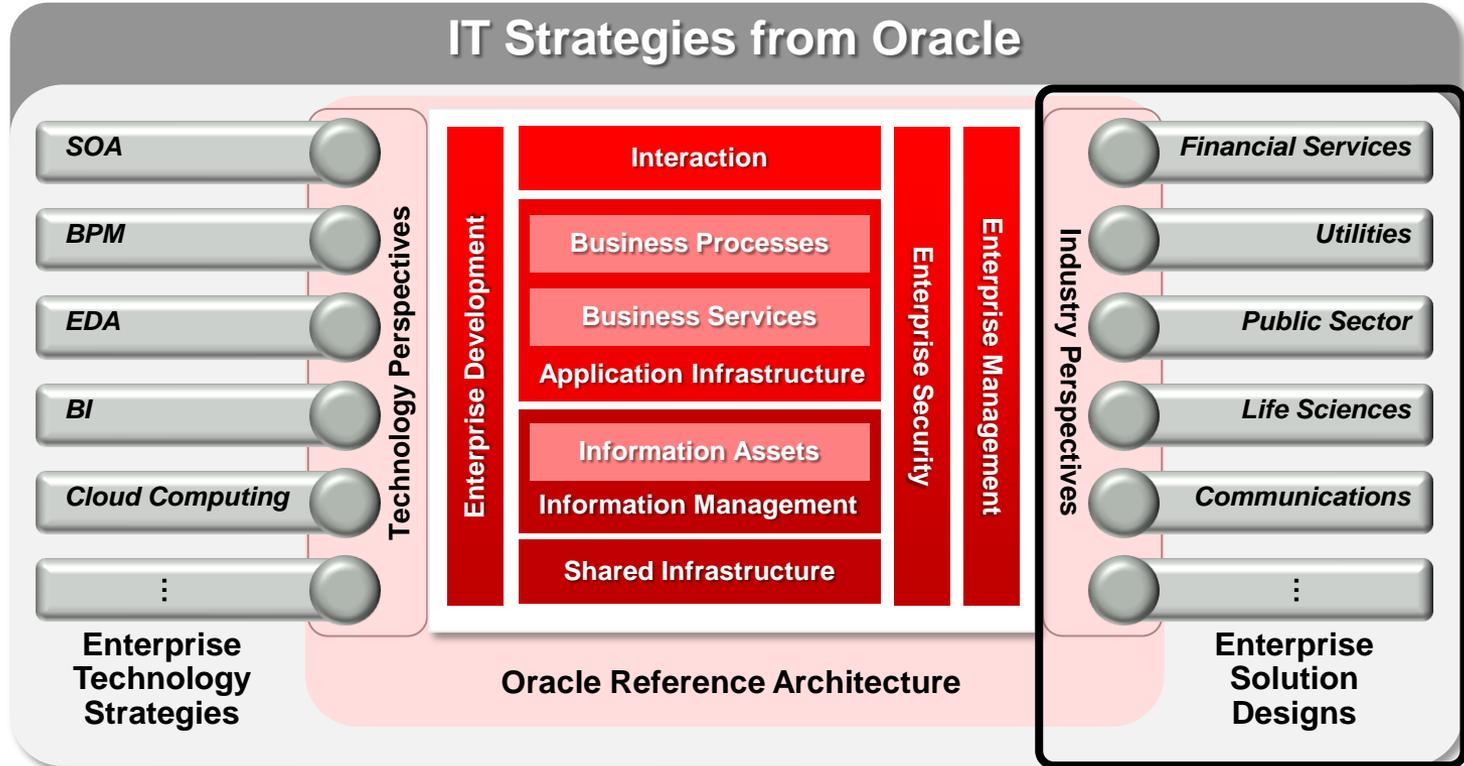
Tools *

- BPM Maturity Model Capabilities Spreadsheet
- BPM Maturity Model Scoring Spreadsheet
- Process Selection Framework
- BPM ROI Spreadsheet

* Not available on the external web site

IT Strategies from Oracle

A Reference Library of Technology Strategy



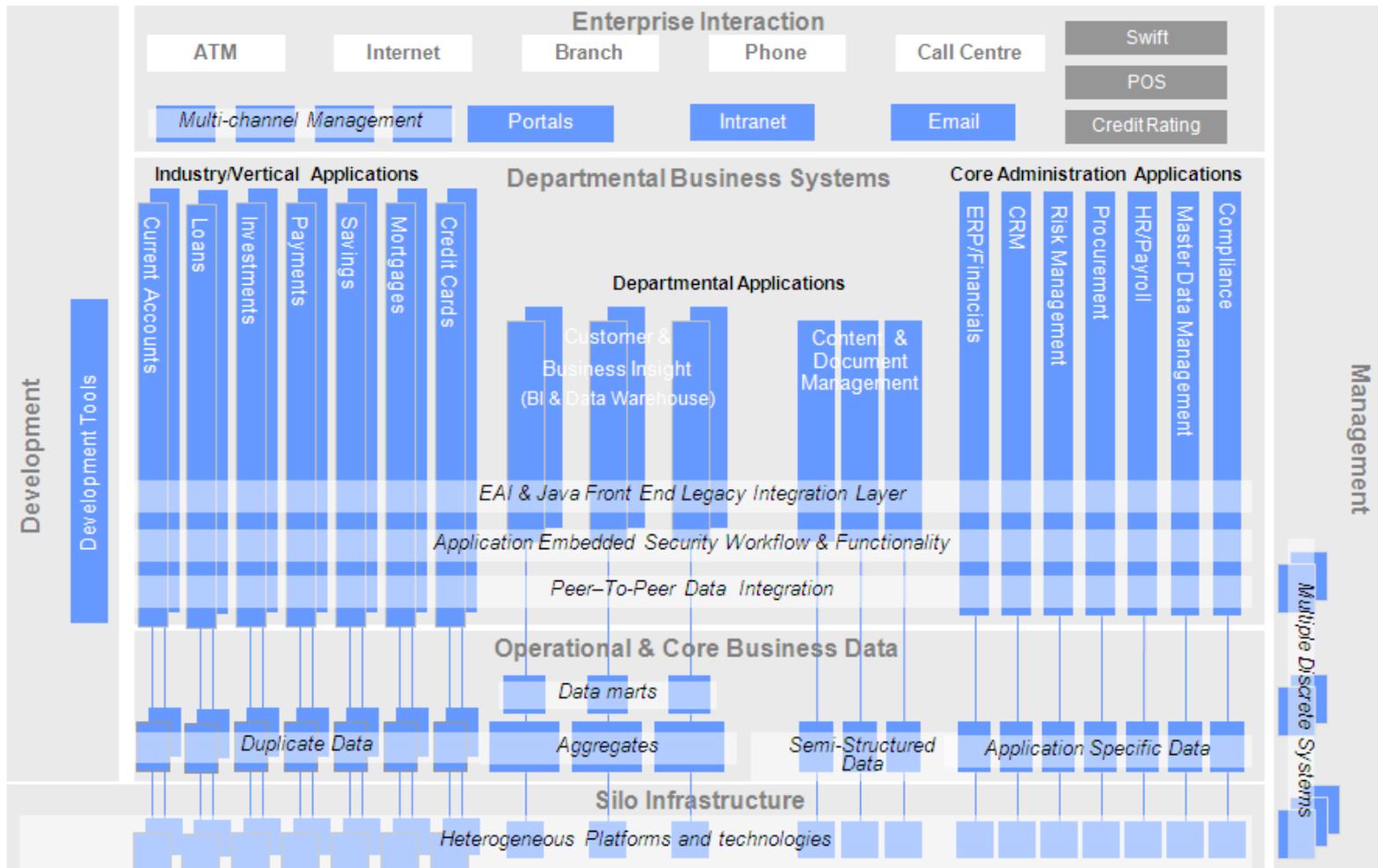
- ❖ Technology Architectures
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- ❖ Product Mappings

- ❖ Industry Architectures
- ❖ Industry Solutions
- ❖ Technology Patterns

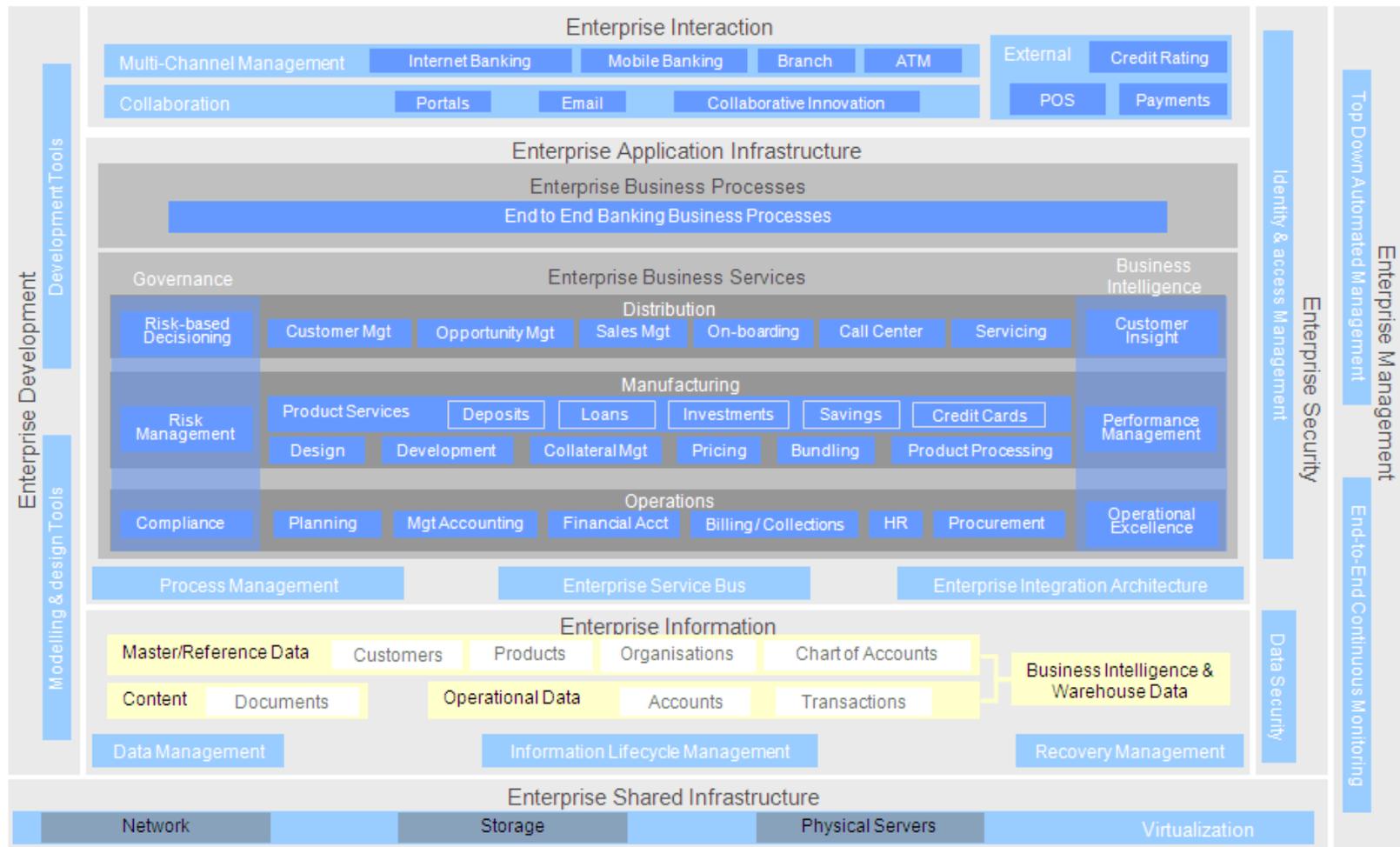
Retail Banking Ref. Architecture

- Characterizes current state of industry capabilities



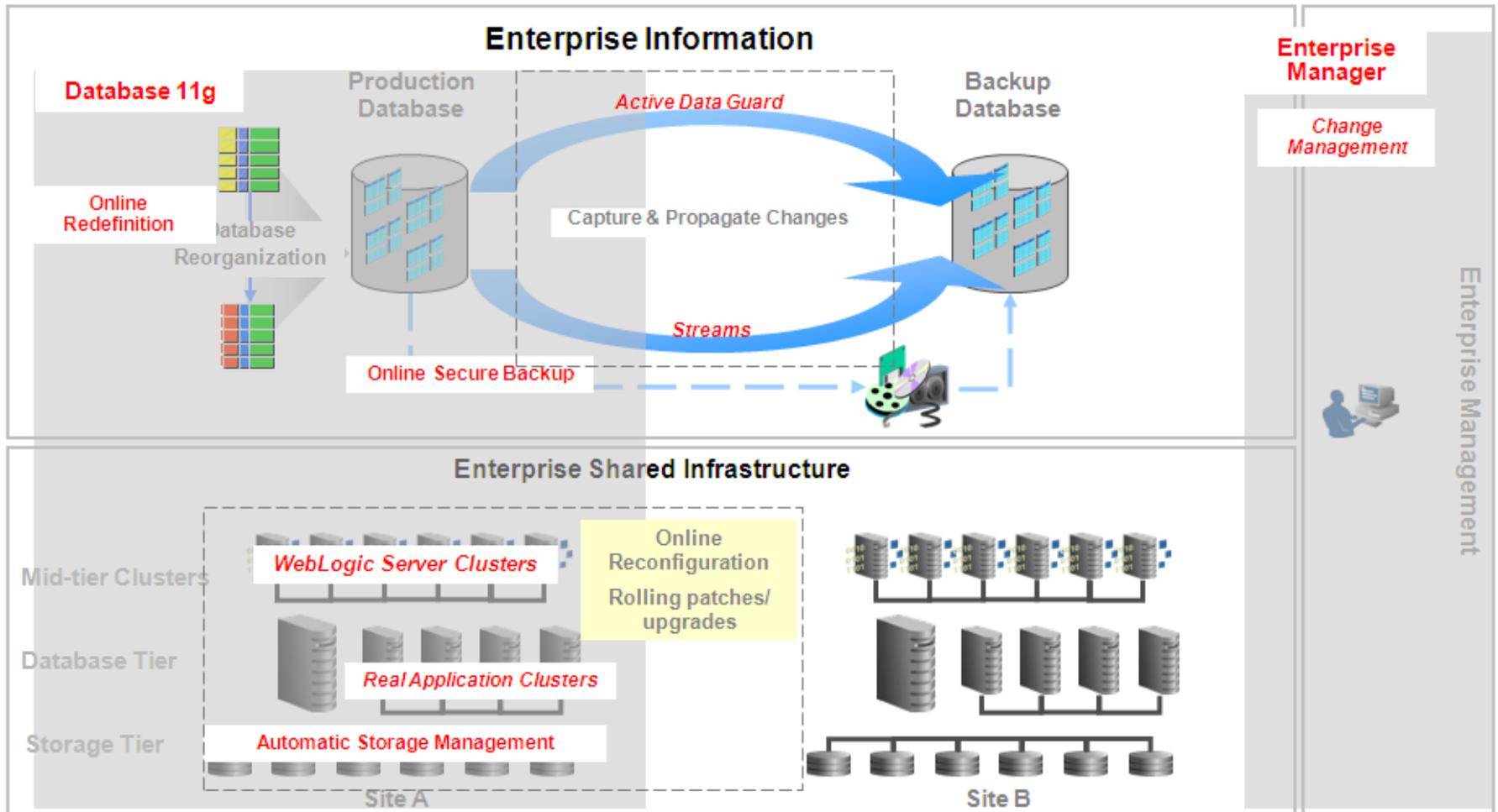
Retail Banking Ref. Architecture

- Articulates an architecture vision and future state based on ORA



Retail Banking Ref. Architecture

- Includes applicable Oracle Technology Patterns to support the future state



Enterprise Solutions Designs

*Material Currently Available**

Industry Reference Architectures

- Retail Banking
- Utilities
- Upstream Oil & Gas
- iGovernment
- Natural Resources – Mining
- Life Sciences

Industry Solutions

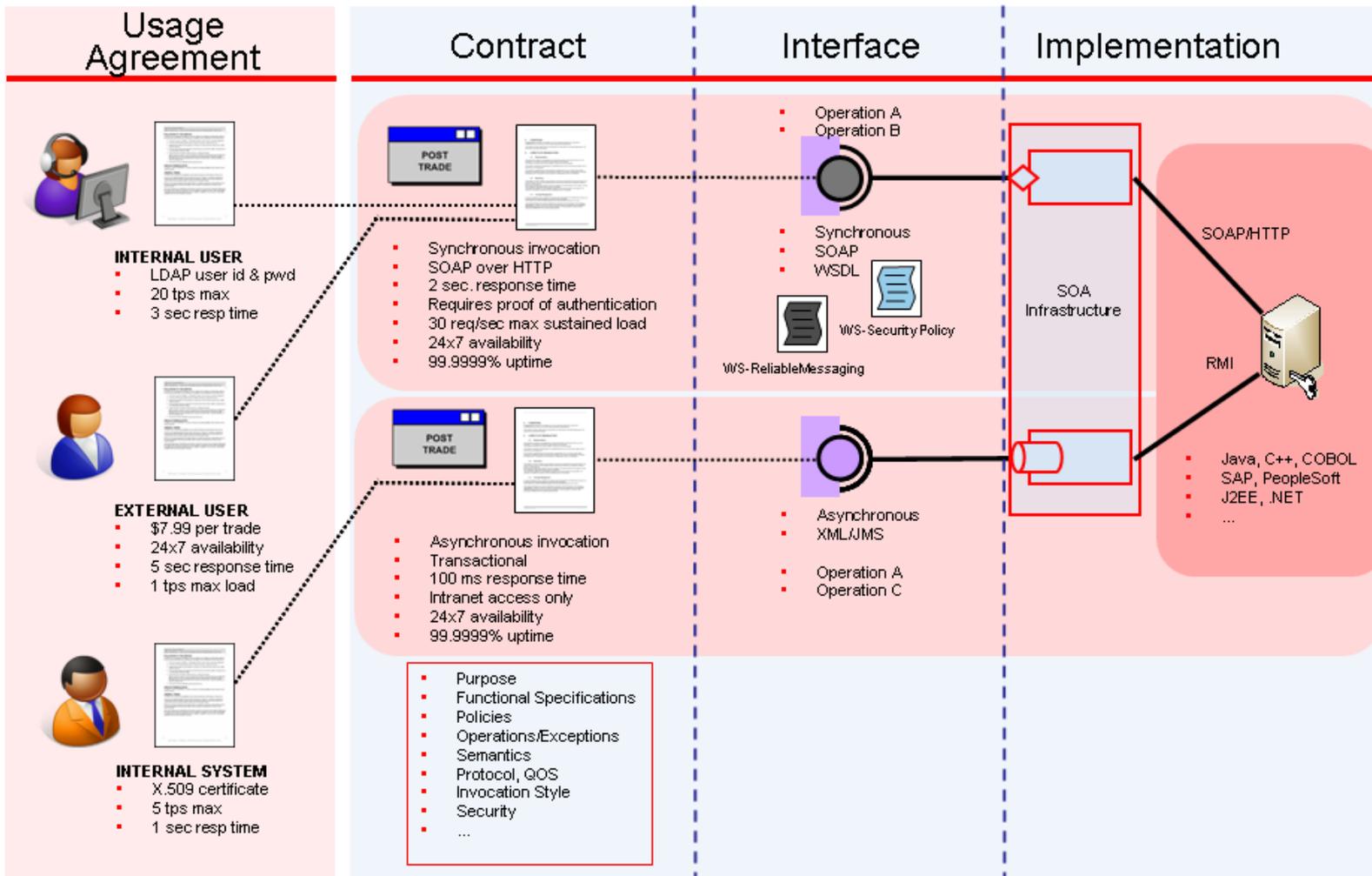
- Retail Banking:
Bank-in-a-box
- Smart Metering
and Smart Grid
- Digital Oil Fields
- Smart Cities

* Not available on the external web site. Please contact your Oracle account team

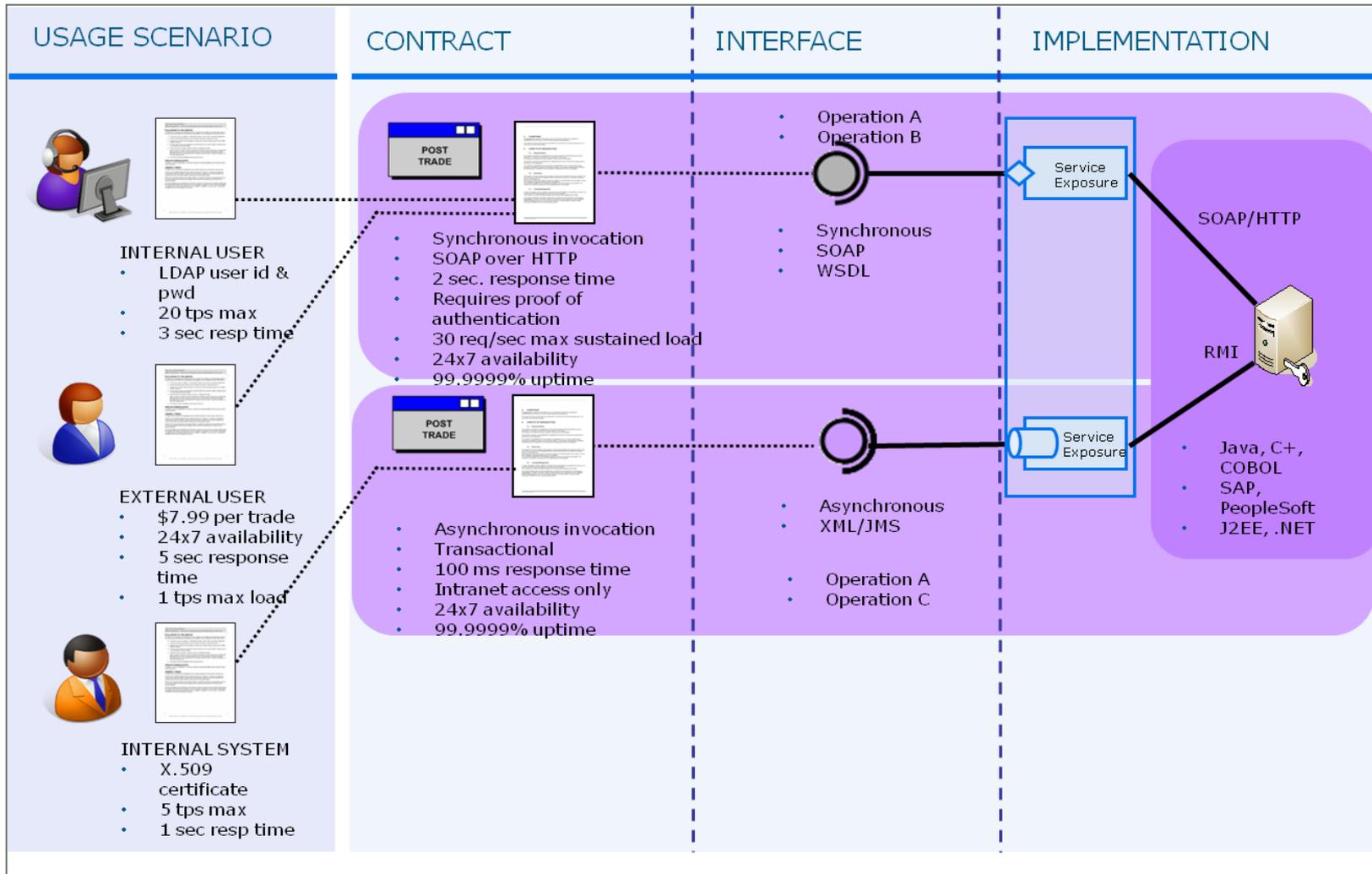
ITSO Material Intended Use

- Reference Architectures
provide guidance for creating your own architectures
 - Every IT environment is different
 - They are not intended to be blindly adopted
- Practitioner Guides
provide advice for creating your own specific approach
 - Address specific issues associated with technology adoption
 - Provide pragmatic guidance
 - Not an end-to-end methodology
 - See Oracle Unified Method (OUM) for a complete method

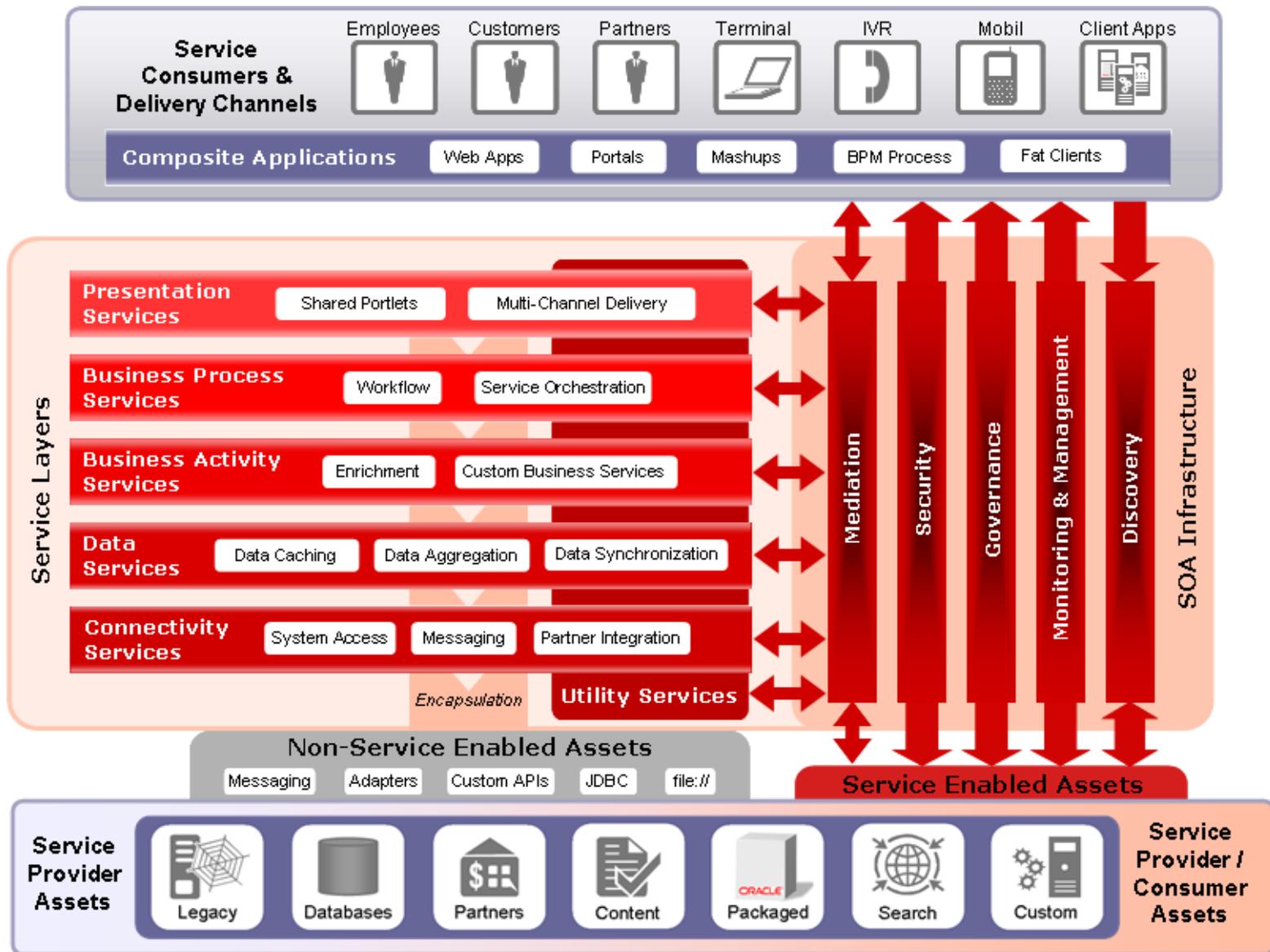
ORA SOA Foundation Document



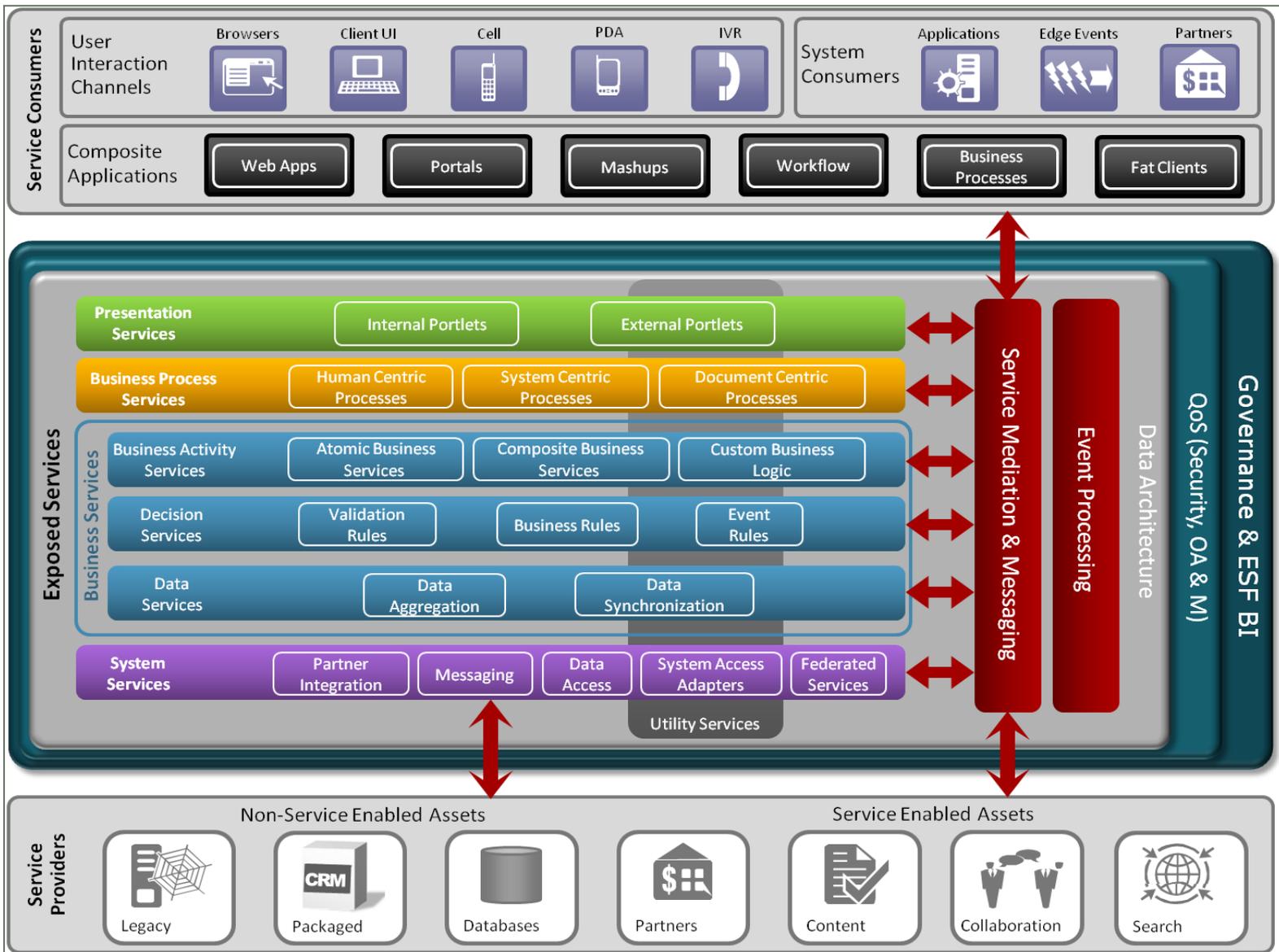
Derived Customer Document



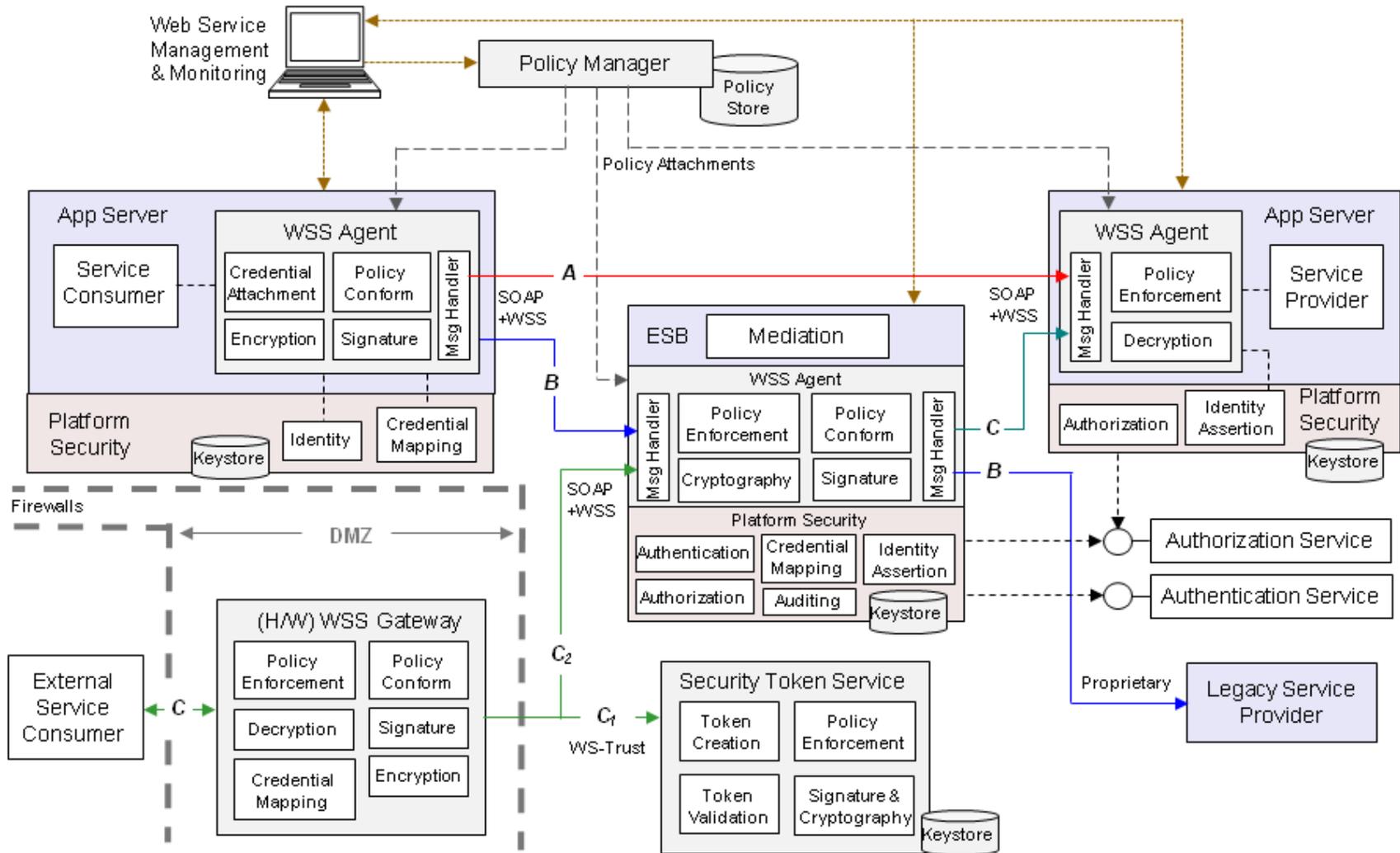
ORA SOA Infrastructure Document



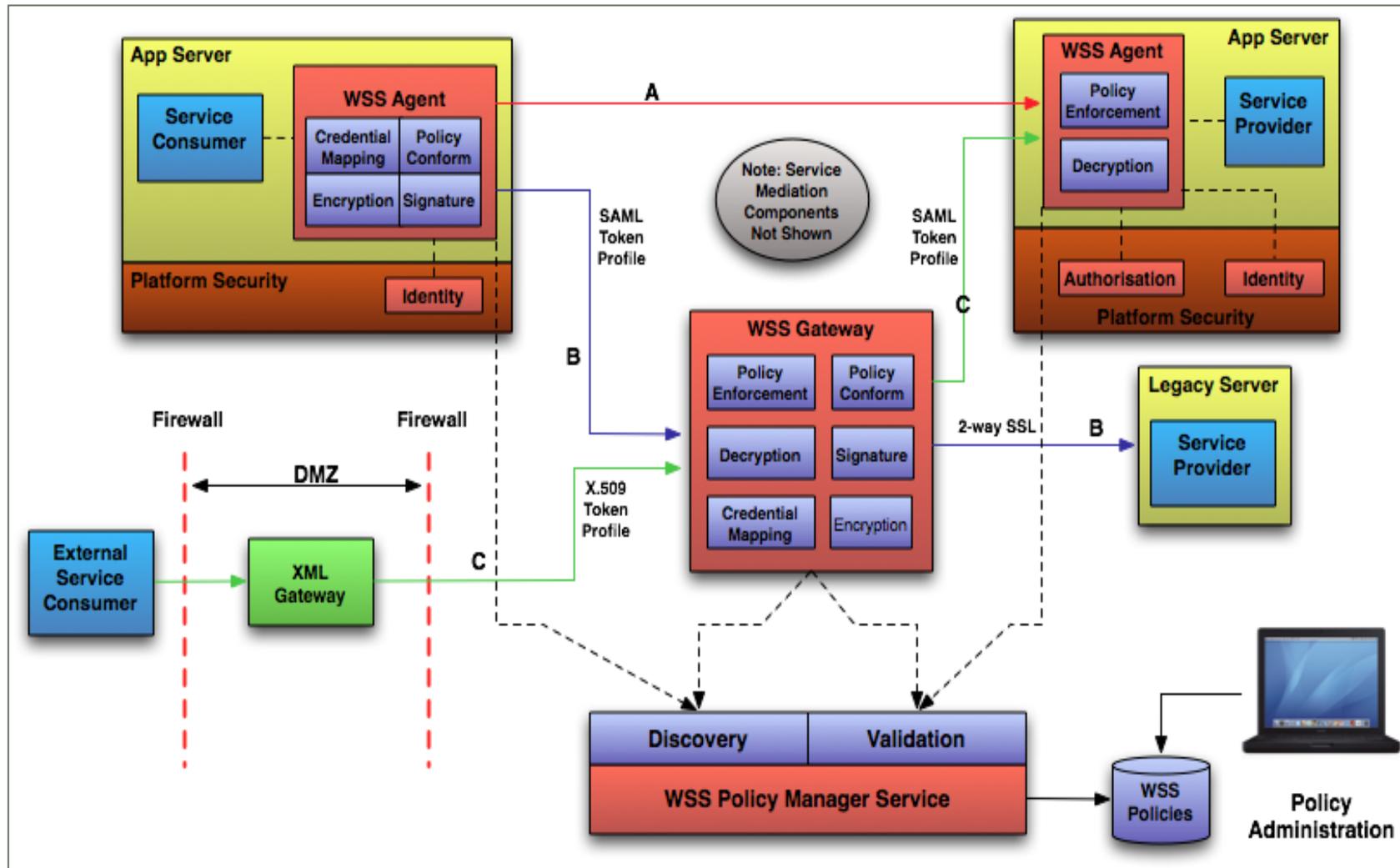
Derived Customer Document



ORA Security Document



Derived Customer Document

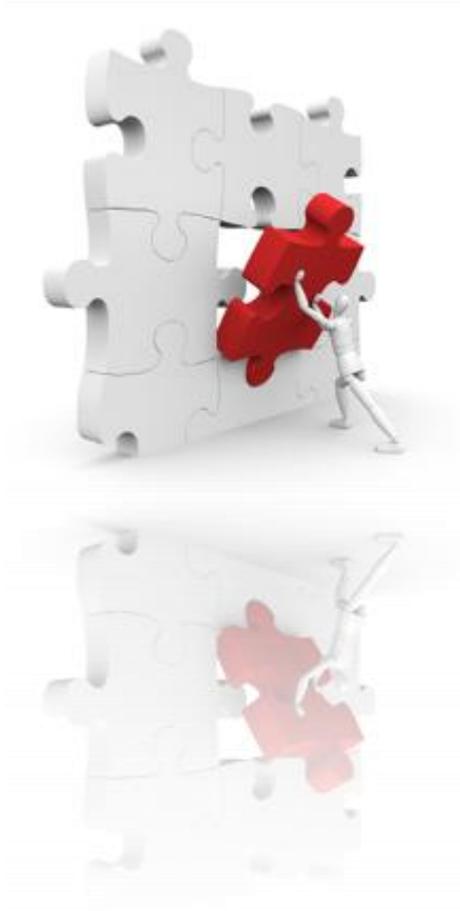


IT Strategies from Oracle

Summary

- A Reference Library of Technology Strategy
 - **Authorized Oracle Reference Architectures**
Material that will help you define your reference architectures
 - **Best Practice Practitioner Guides**
Practical planning and implementation advice
- An Expanding Library
 - Visit www.oracle.com/goto/itstrategies to obtain documents

To Learn More



- Visit www.oracle.com/goto/itstrategies
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- Visit the Oracle.com. Choose “I am an Architect” and “Topics” and “EA”
- Blog along with our Oracle Enterprise Architects at blogs.oracle.com
- Contact your Oracle Account Team

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