Oracle Reference Architecture and Oracle Cloud

Anbu Krishnaswamy Anbarasu
Enterprise Architect

Global Enterprise Architecture Program

Social. Mobile. Complete.

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Program Agenda

- IT Strategies from Oracle (ITSO) and Oracle Reference Architecture
- ORA Cloud Reference Architecture
- Case Study: Oracle Cloud Architecture
- Hybrid Cloud Use Cases
- Summary

IT Strategies from Oracle (ITSO) and Oracle Reference Architecture

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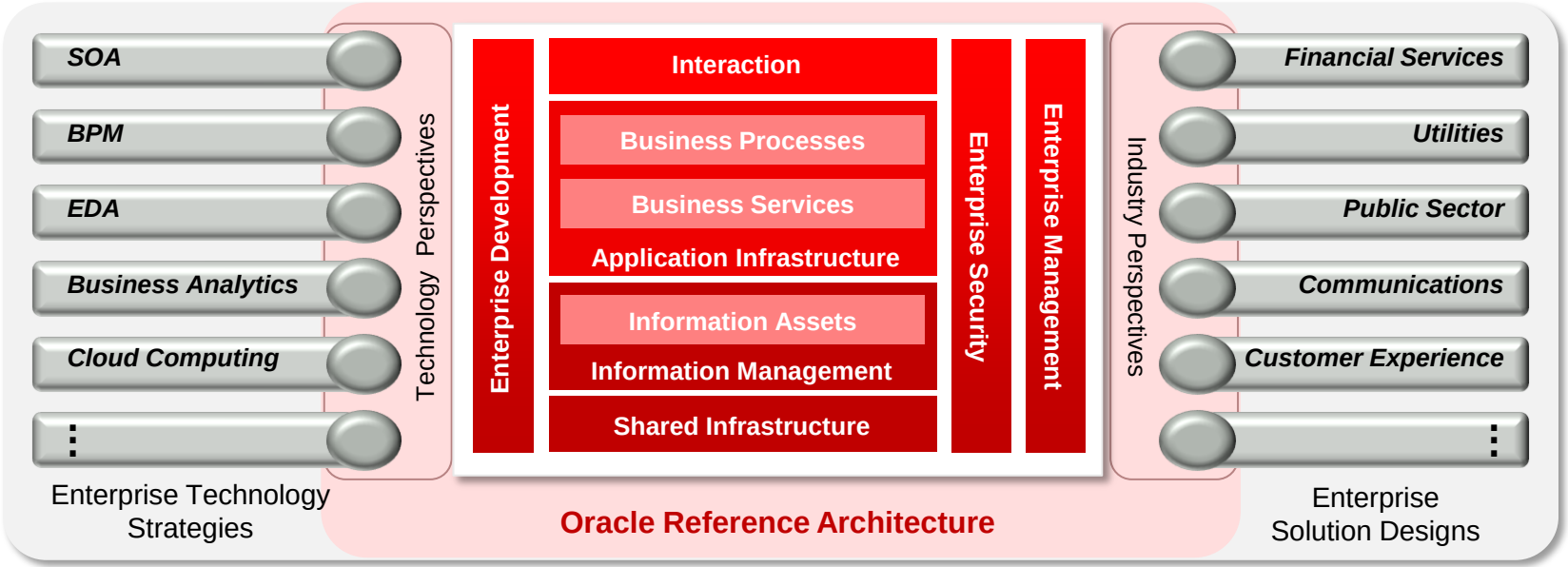
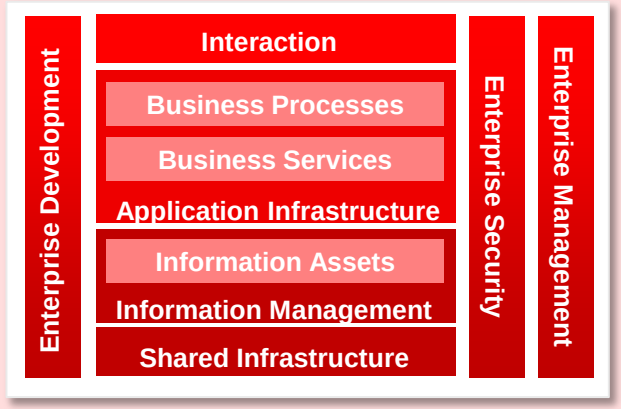
IT Strategies from Oracle



Oracle Reference Architecture (ORA)



Oracle Reference Architecture

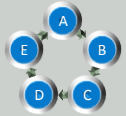
- Architecture Concepts
- Principles & Guidelines
- Architecture Views
- Component Drilldowns
- Product Mappings

- Single, unified reference architecture across the (Oracle) technology space
- Supports architecture entry point
- Built on sound architecture principles
- Product agnostic, yet complementary to Oracle
- Modular & extensible
  - Content builds out over multiple iterations
  - New technologies and strategies incorporated over time, extending the core material
  - Accommodates future strategies

Enterprise Technology Strategy (ETS)

Practitioner Guides

Maturity Model



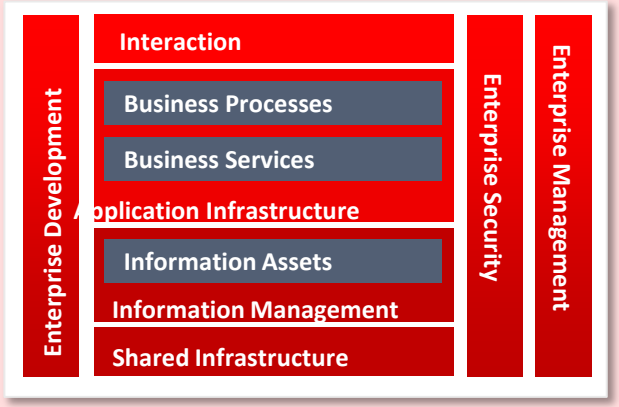
Method Development

Customer Enablement

Field Enablement

Tools

ORA Perspective



Oracle Reference Architecture

ORA - Cloud Reference Architecture

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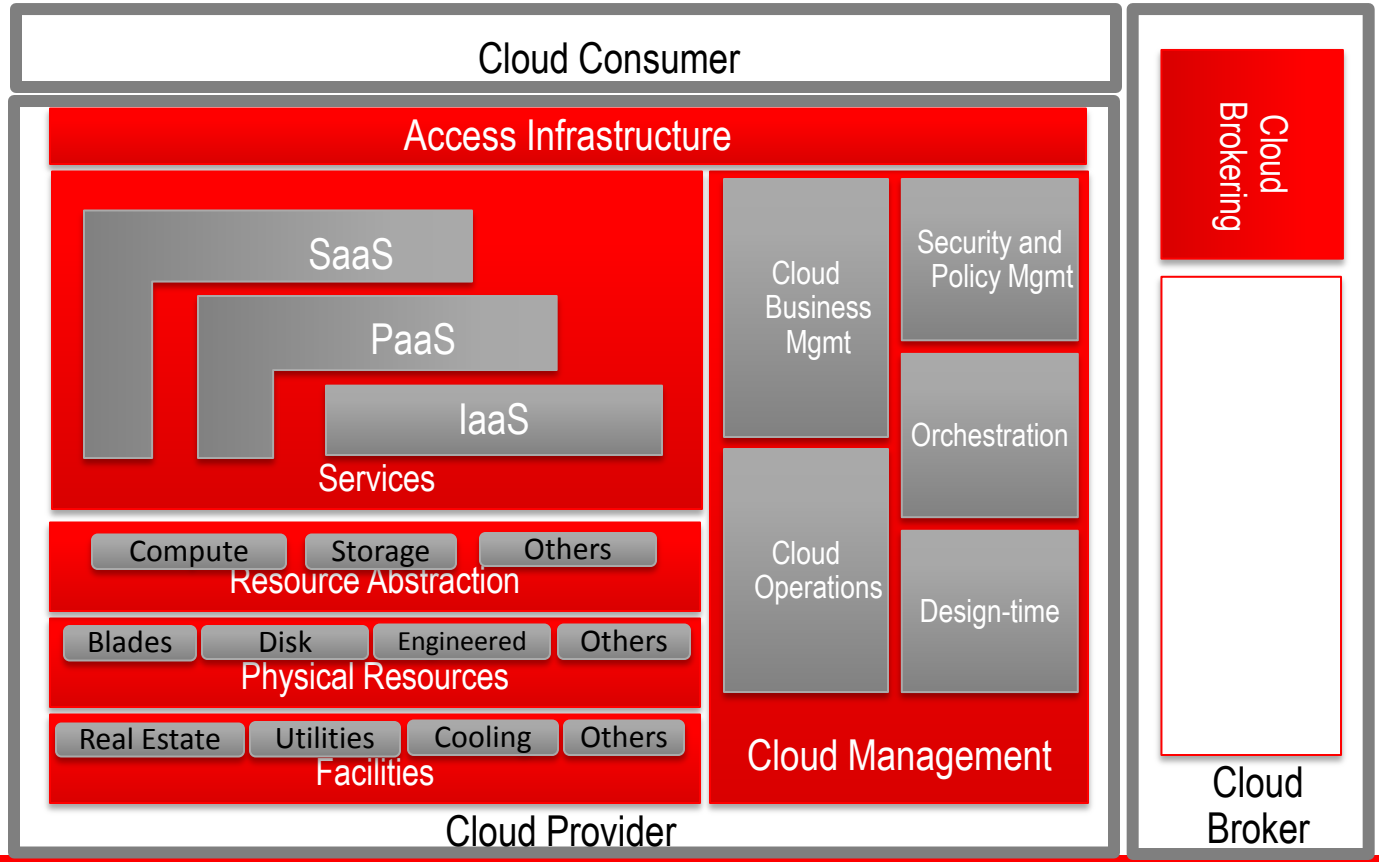
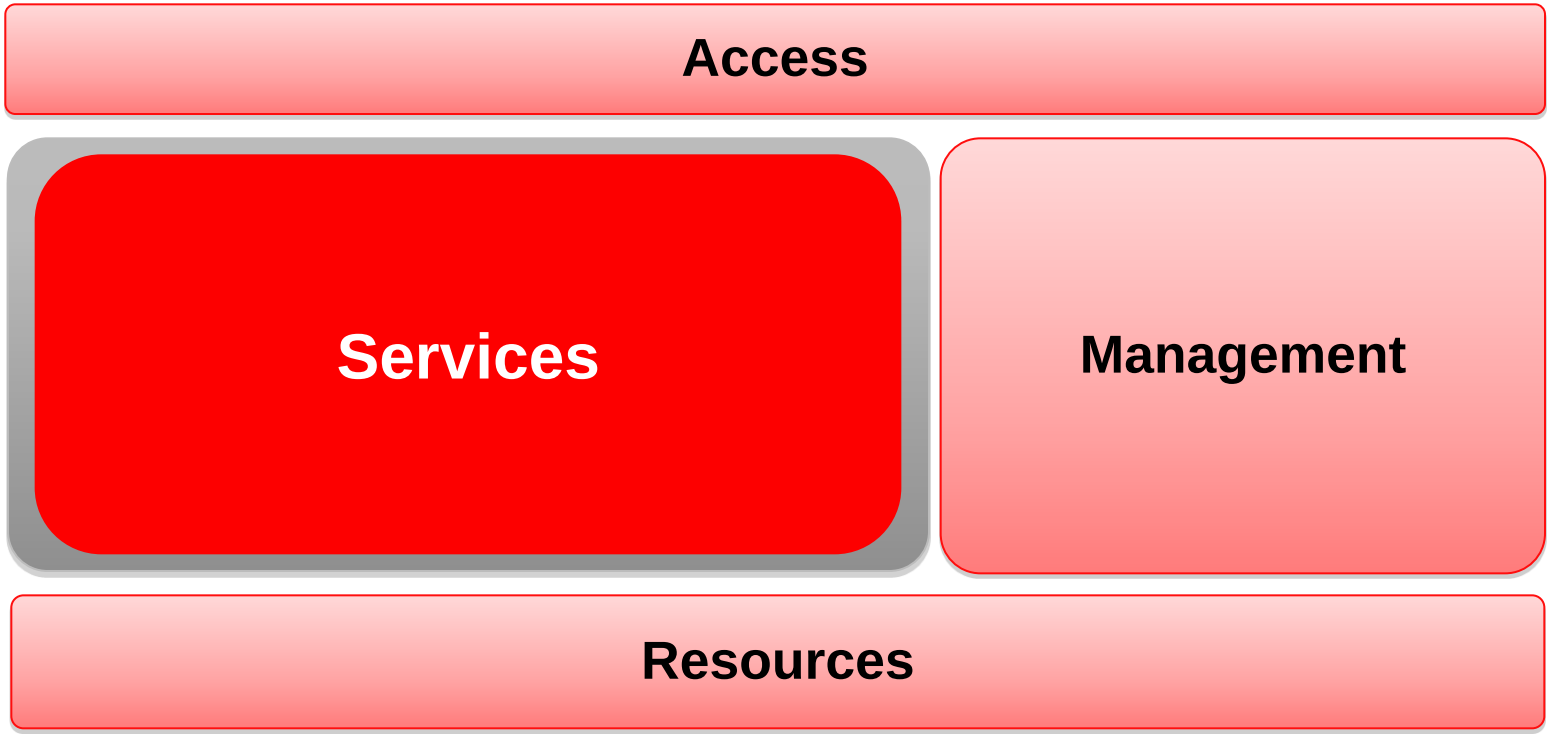
Cloud Conceptual View



Cloud Architecture - Logical View



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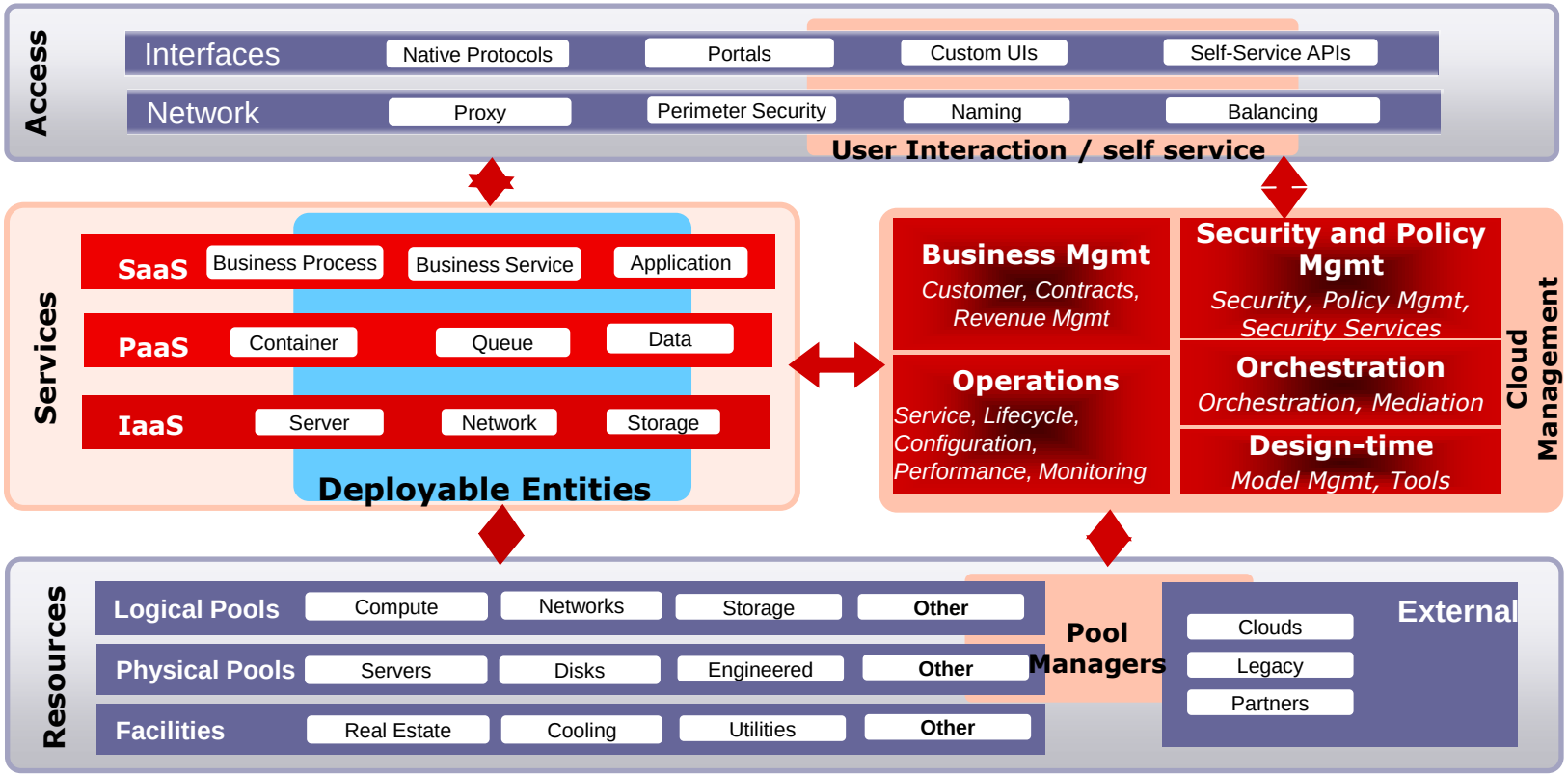
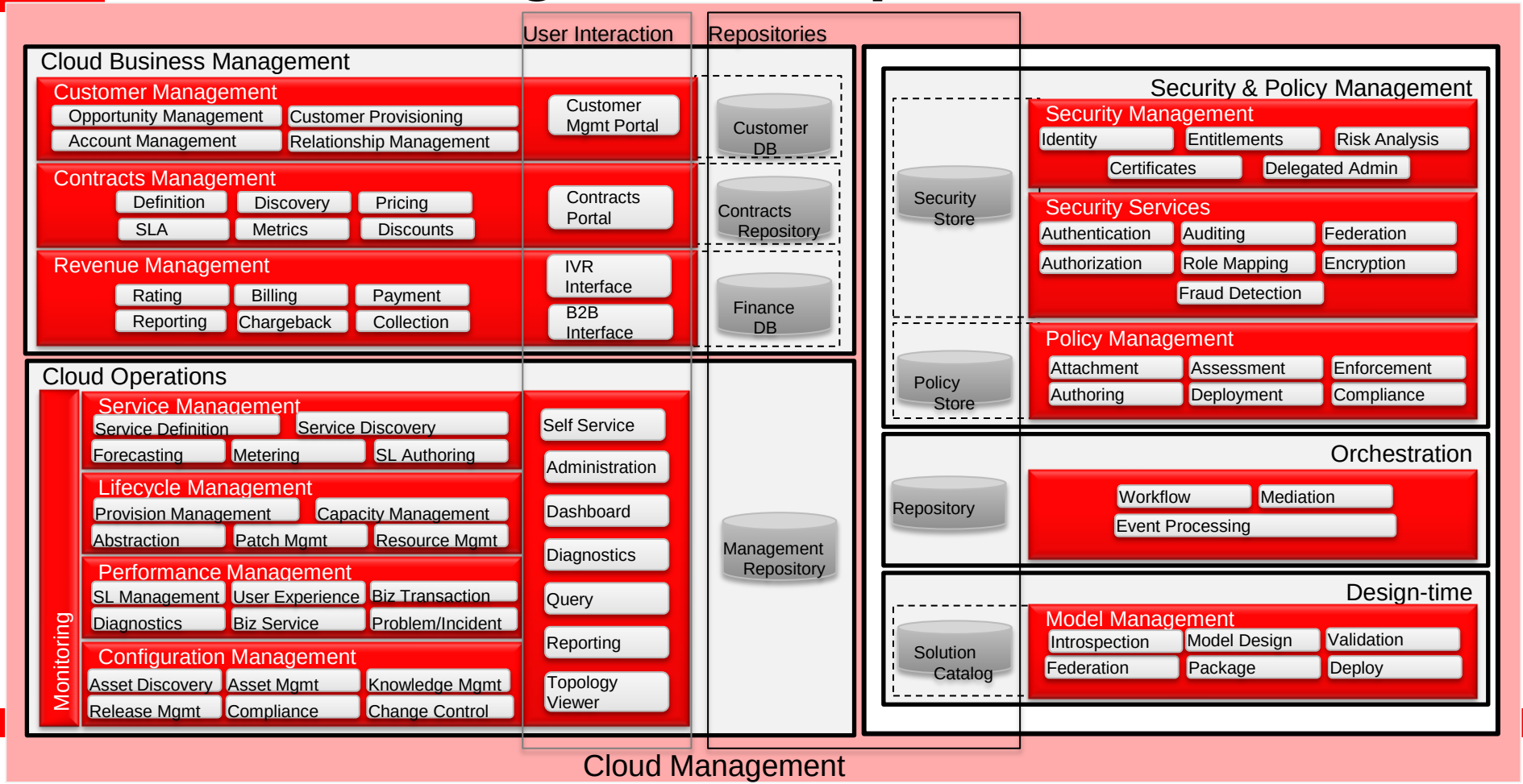
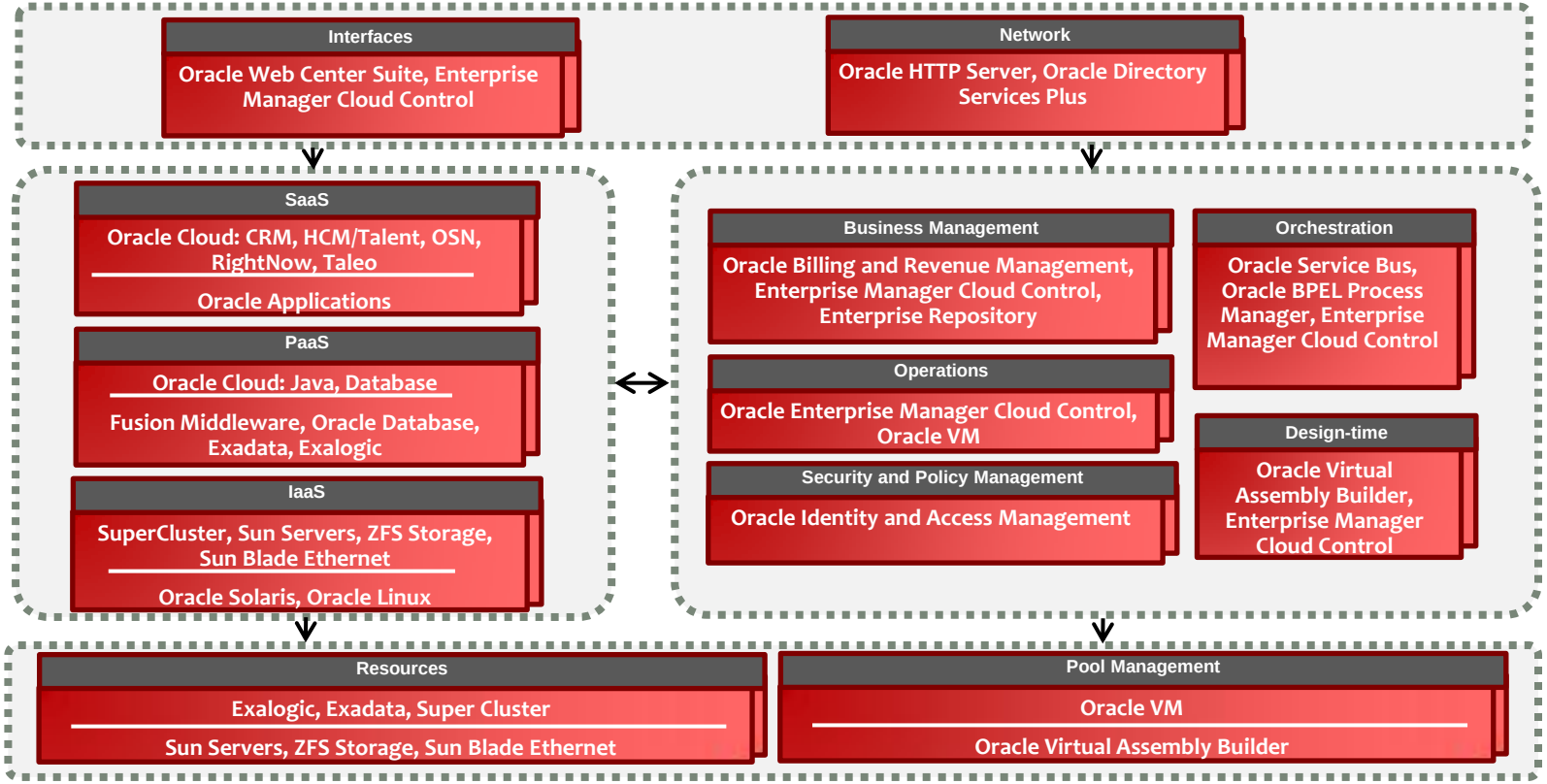


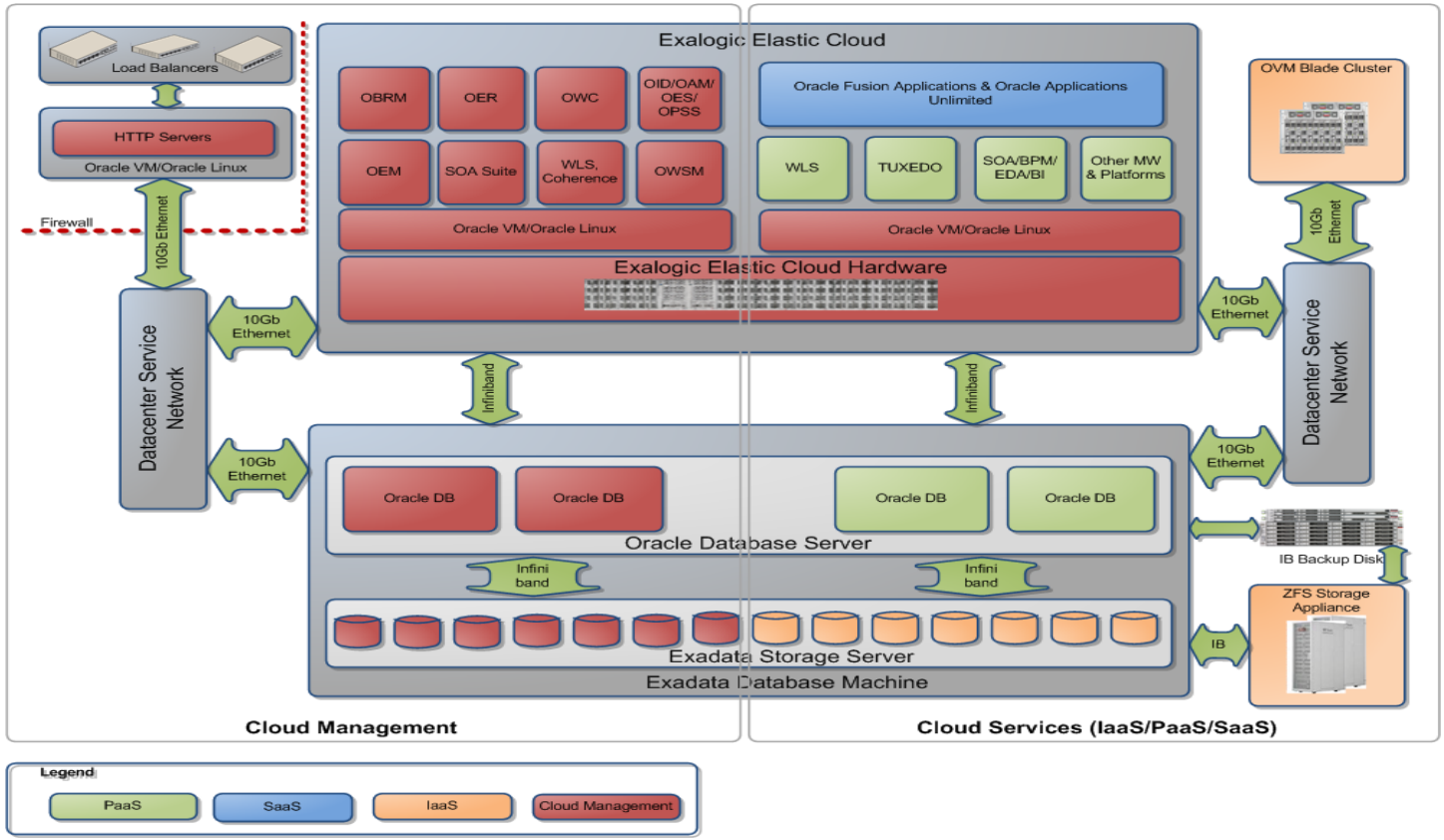
Cloud Management Capabilities Overview



Product Mapping to Logical View



Engineered Systems Deployment



Oracle Cloud Architecture

Oracle Cloud: Mission

Bring Oracle's leading Enterprise Technology and Business Applications Software to any customer or partner, anywhere in the world, through the Internet

Oracle Cloud

Platform Services

Application Services

Social Services

Common Infrastructure Services

Platform Services

Complete, Standards-Based, Enterprise-Grade

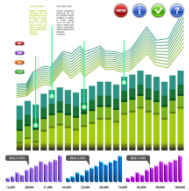
Database Services

Java Services

Developer Services

Mobile Services

Collaboration Services



Analytics Services

Application Store

Common Infrastructure Services

Application Services

Complete Suite, Best-of-Breed, Enterprise Grade

Human Capital Management	Talent Management	Sales & Marketing	Customer Service and Support
Financial Management	Procurement, Sourcing, Inventory	Project Management	Governance, Risk, Compliance

Common Infrastructure Services

Social Relationship Management

Complete, Integrated, Enterprise Grade

Social Data and Insight

Social Monitoring and Engagement

Social Network

Social Sites

Social Marketing

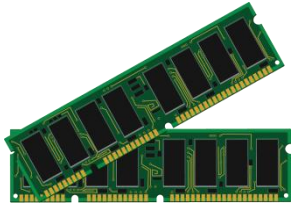
Common Infrastructure Services

Common Infrastructure Services

Storage
Object Storage

Compute
Elastic Compute

Secure Identity
Identity Administration



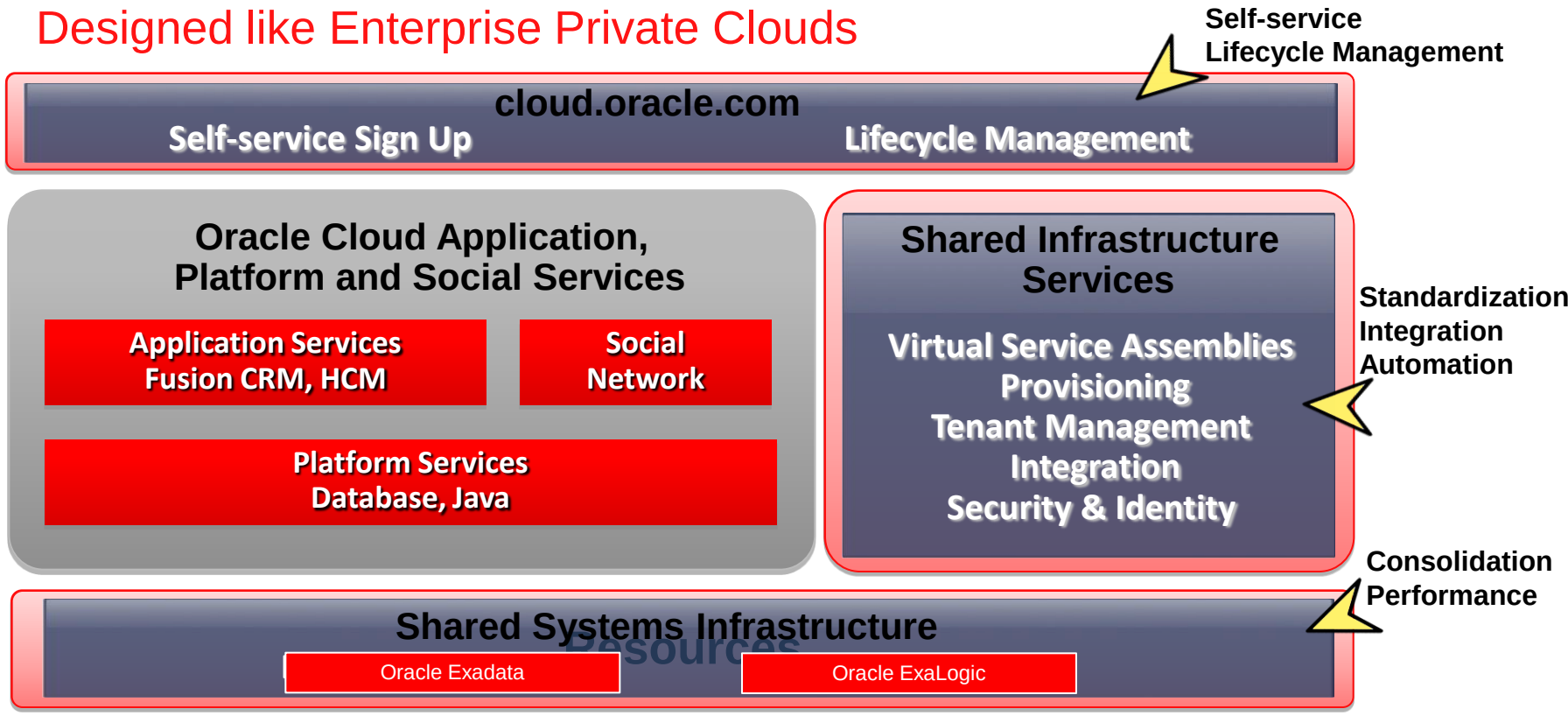
Cache
In-Memory Cache

Queues
Lightweight Queues

Messaging
Mail, Push

Oracle Cloud: Logical Architecture

Designed like Enterprise Private Clouds



Hybrid Cloud Use Cases

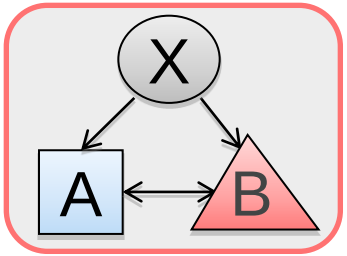
Integrating with Oracle Cloud

A Public Cloud Service and a Cloud Architecture

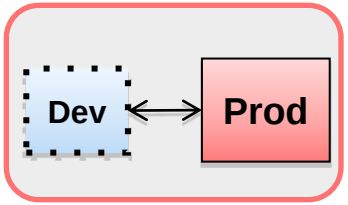
- A **Public Cloud** you may choose to use
- A model for building your own **Private Cloud**
- A part of your future **Hybrid Cloud**
  - Consider building a similar architecture to the same standards

Different Types of Hybrid Clouds

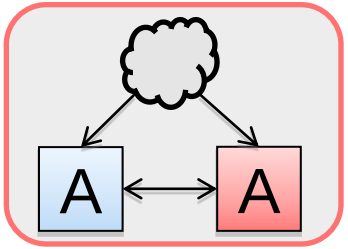
Alternative architectures for integrating public and private clouds



- **Functional Distribution**
  - Different components in separate clouds (e.g., CRM, HR)
  - Leverage best of breed services with private cloud needs



- **Lifecycle Distribution**
  - Separate development and test
  - Perhaps the easiest

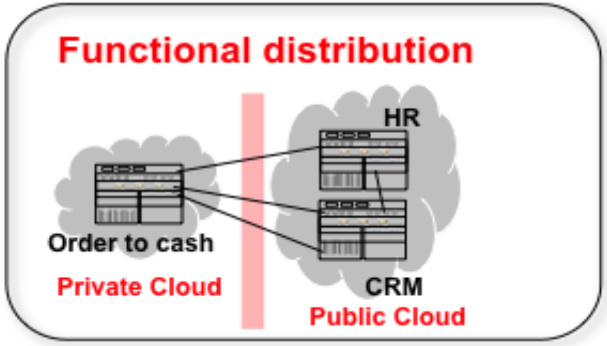


- **Workload Distribution**
  - “Cloudbursting”
  - More challenging for complex enterprise transactions

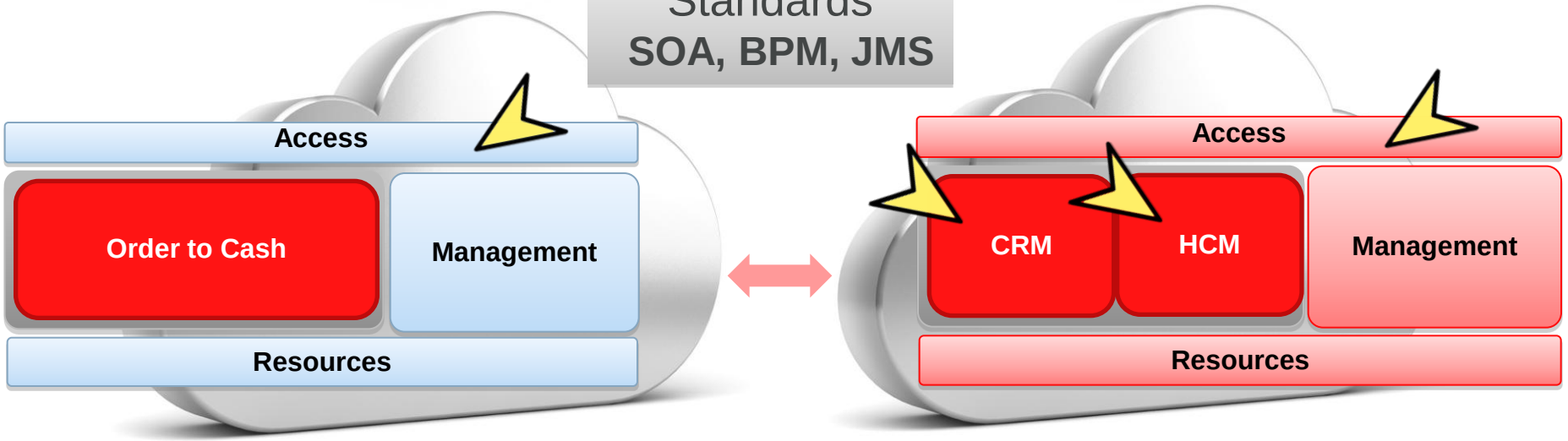
Functional Distribution

Hybrid Interoperability of Business Processes

- Business process coordinated through multiple applications distributed across multiple clouds.
- Standards are essential



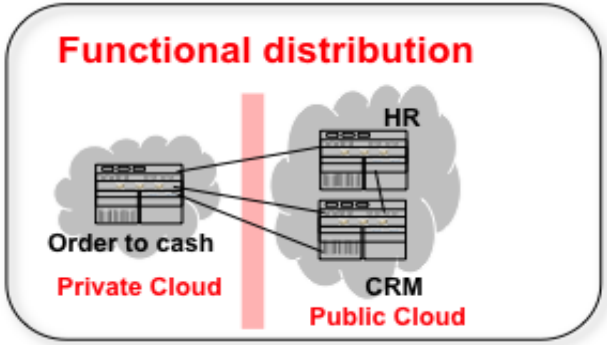
Standards
SOA, BPM, JMS

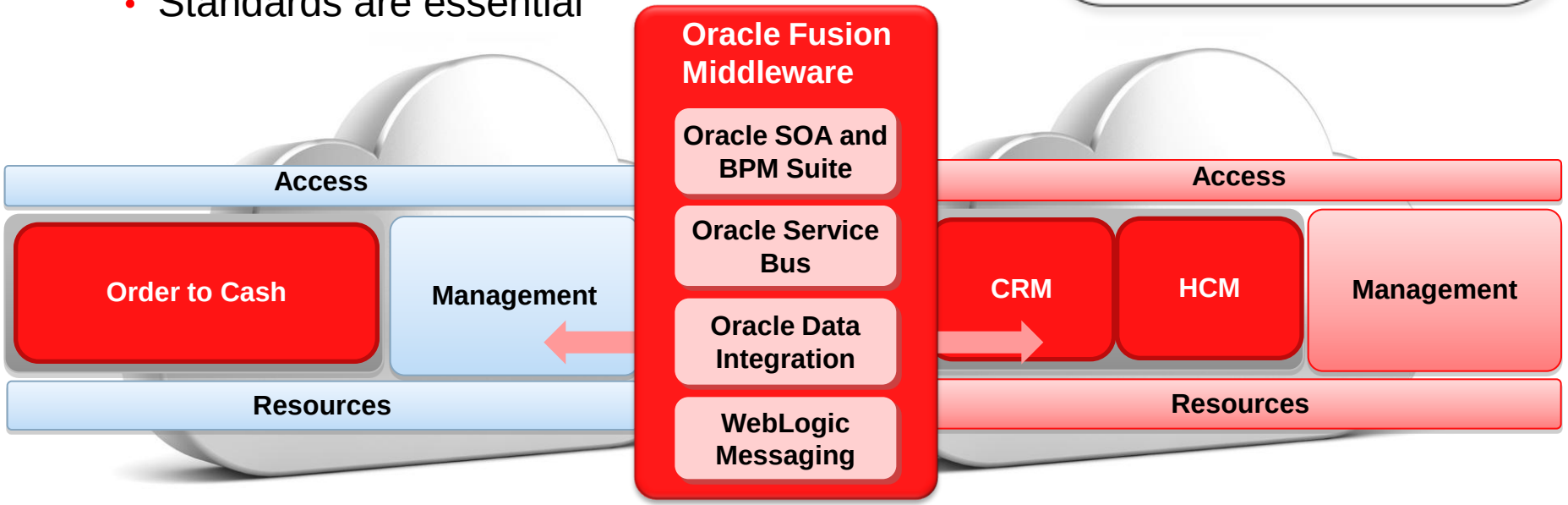


Functional Distribution

Products for Business Processes Integration

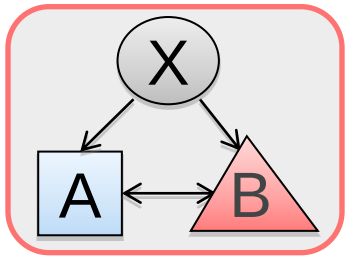
- Business process coordinated through multiple applications distributed across multiple clouds.
- Standards are essential





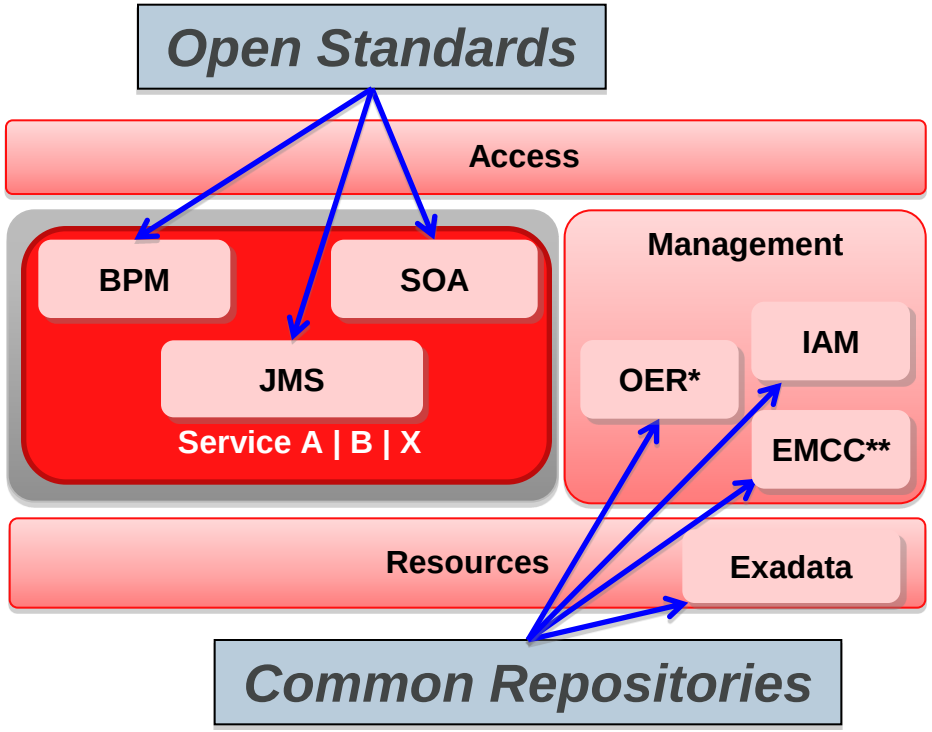
Functional Distribution Hybrid (Design)

Hybrid Interoperability of Business Processes



Key Strategy:
Standardization

- Business process coordinated through multiple applications distributed across multiple clouds.
- Standards are essential
- ***Mechanisms include:***
  Open Standards,
  Common Repositories

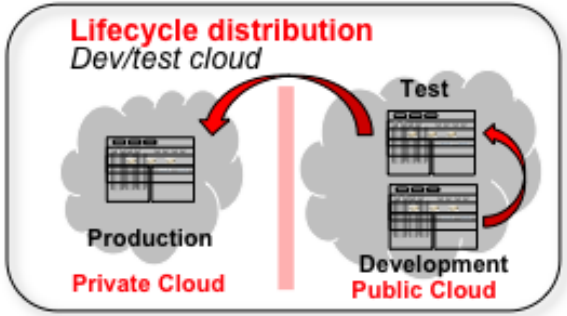


* Oracle Enterprise Repository
** Enterprise Manager Cloud Control

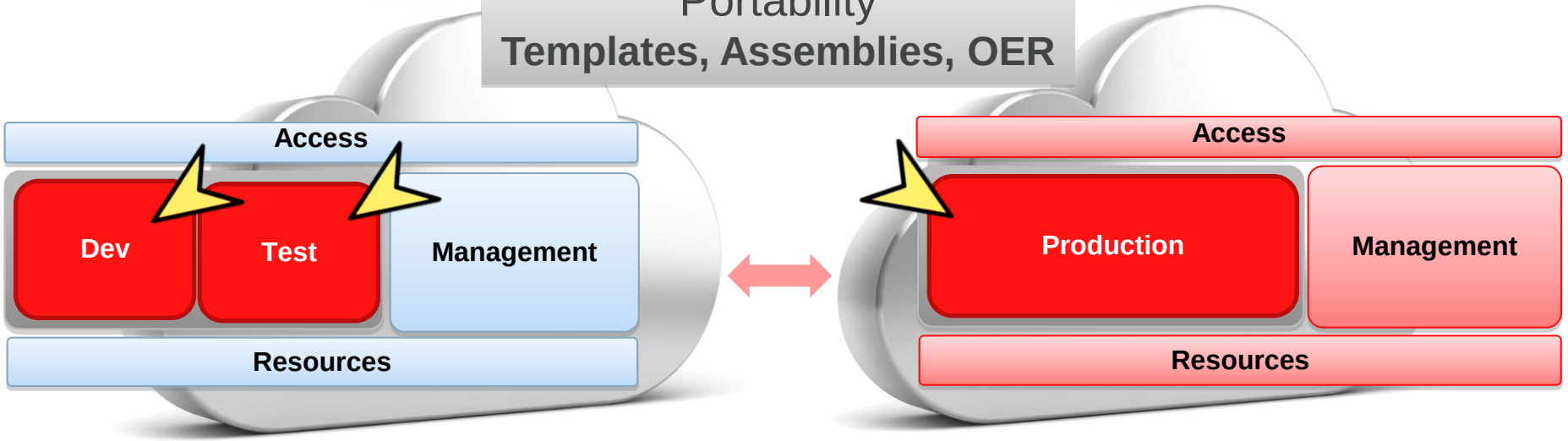
Lifecycle Distribution

Hybrid Interoperability of Application Lifecycle

- Stages of SDLC are distributed across runtime environments
- Requires Packaging



Portability
Templates, Assemblies, OER



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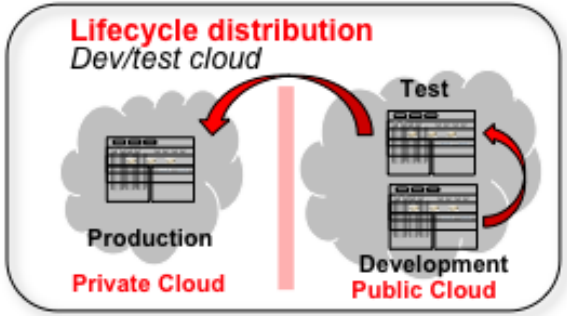
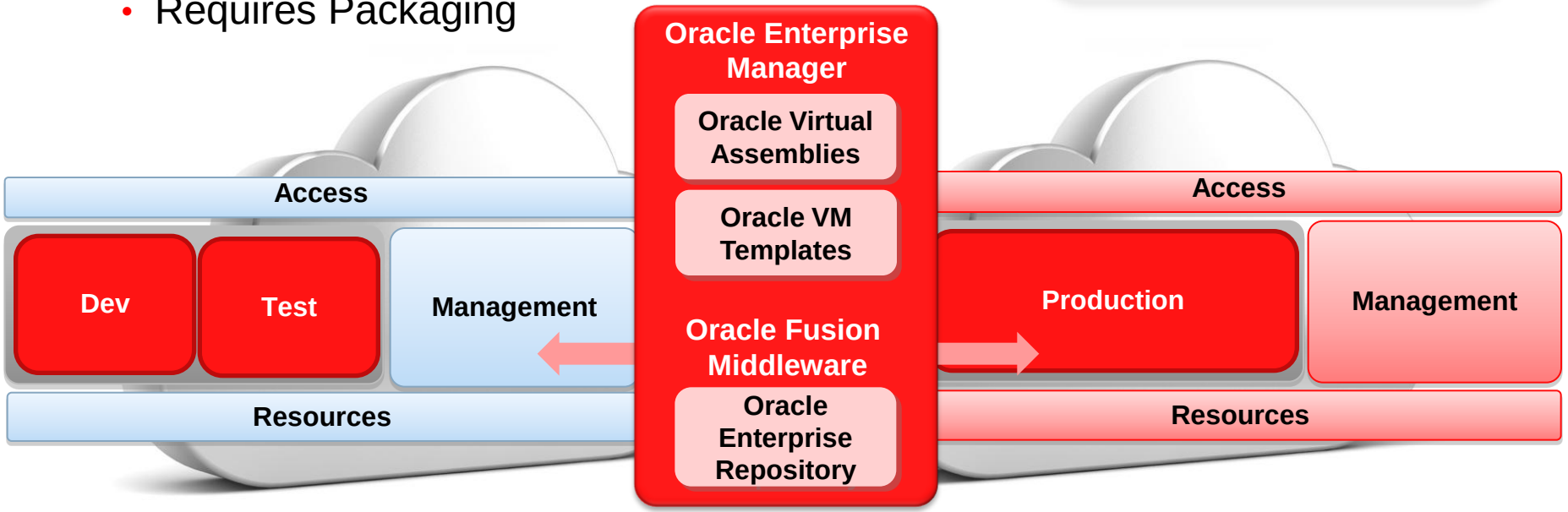
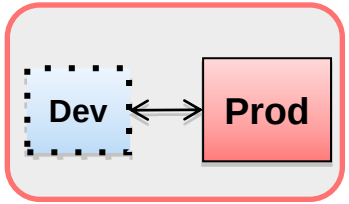




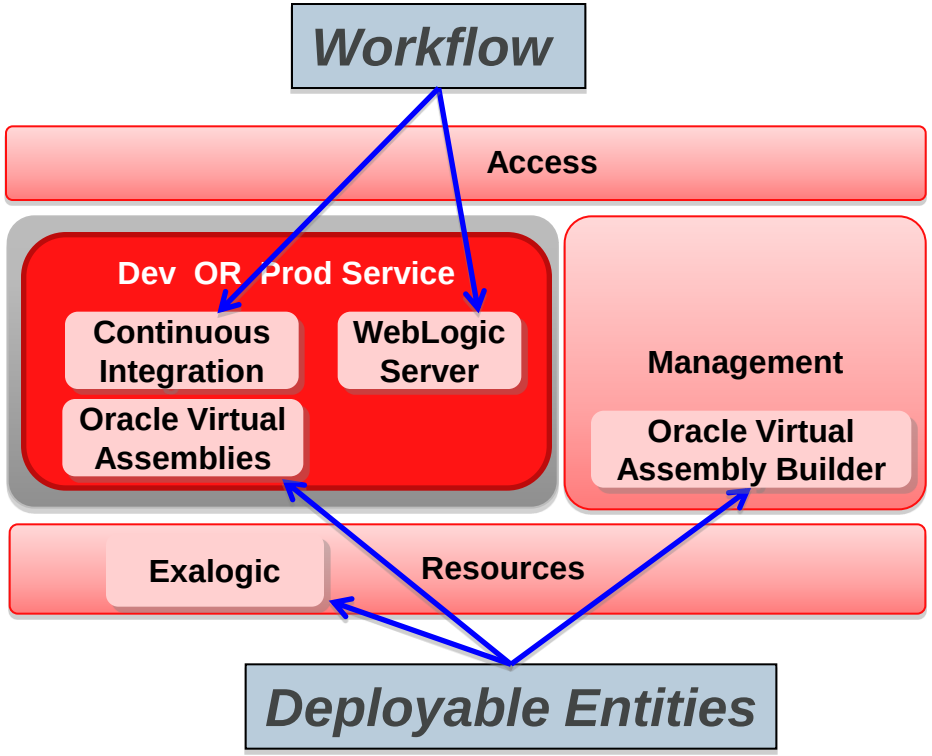
Lifecycle Distribution Hybrid (Developer)

Hybrid Interoperability of Application Lifecycle



Key Strategy:
Portability

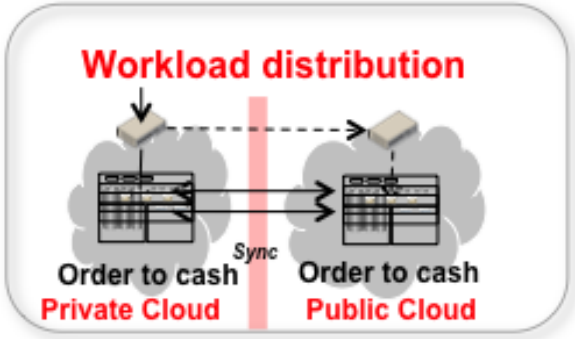
- Stages of SDLC are distributed across runtime environments
- Requires Packaging
- **Mechanisms include:**
  Workflow, Deployable entities



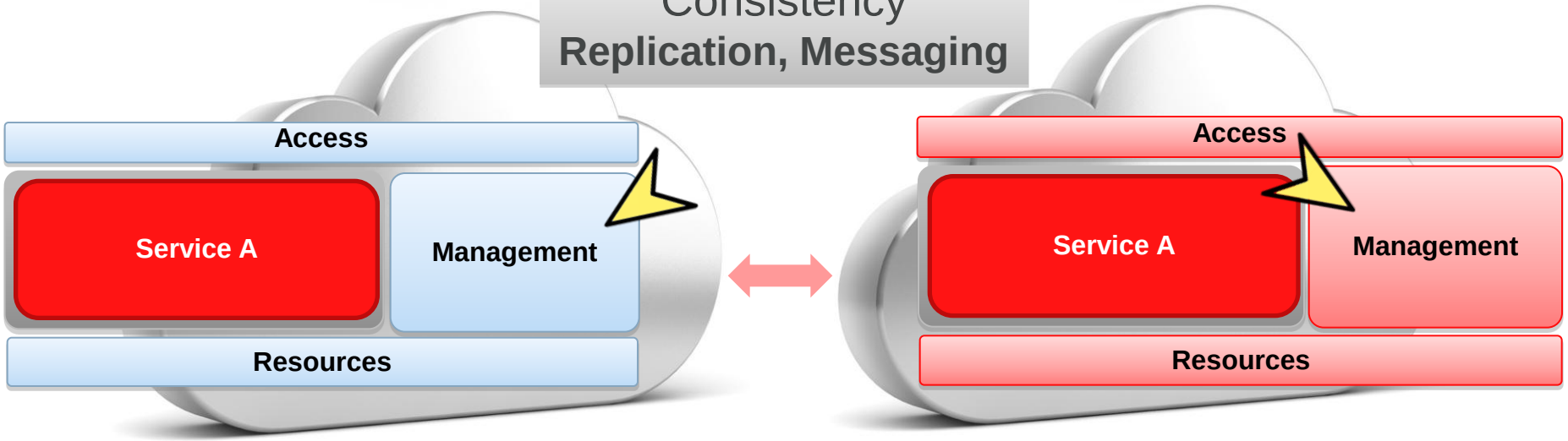
Workload Distribution

Hybrid Interoperability of Replicated Workloads

- Identical processing spread over multiple clouds. More difficult for complex enterprise apps
- Relies on data consistency



Consistency
Replication, Messaging



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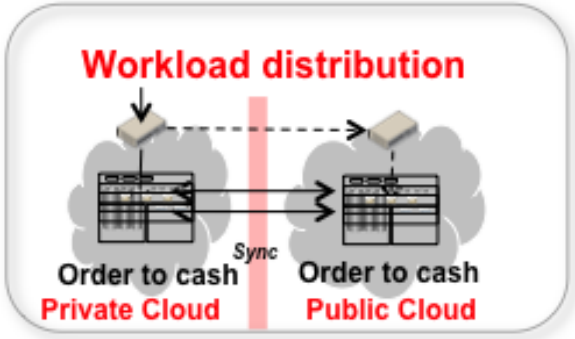
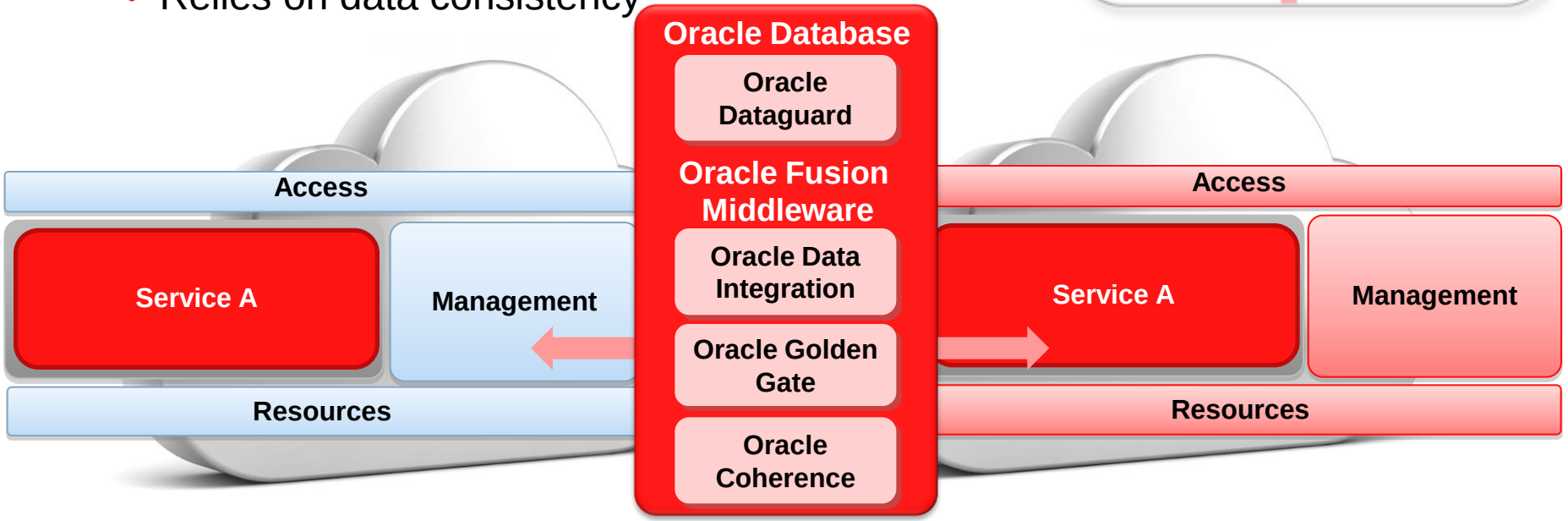
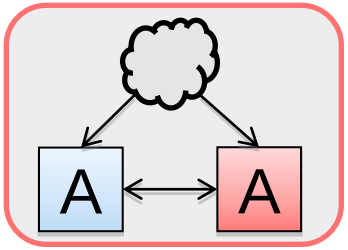




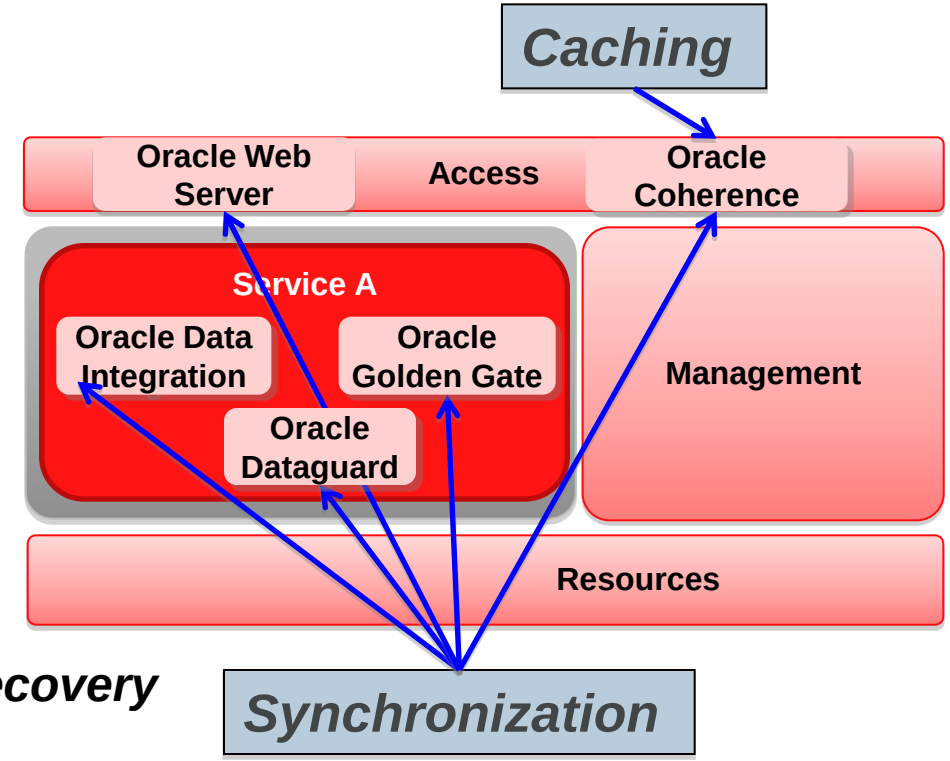
Workload Distribution Hybrid (Operations)

Hybrid Interoperability of Replicated Workloads



Key Strategy:
Consistency & Synchronization

- Identical processing spread over multiple clouds. More difficult for complex enterprise apps
- Relies on data consistency
- ***Mechanisms include:***
  for Stateless: Caching
  for Stateful: Synchronization, Recovery



Summary

Summary

- IT Strategies from Oracle (ITSO) and Oracle Reference Architecture (ORA) provide guidance for your Cloud implementation
- Oracle Cloud – Business applications and platform Cloud services built on engineered systems
- Hybrid Cloud –
  - Understand what hybrid use case you want
  - Build to standards
  - Standardize deployment and management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