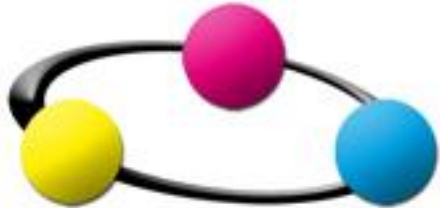


SECURITY



SUMMIT

Oracle Community For Security

Security Summit 2010

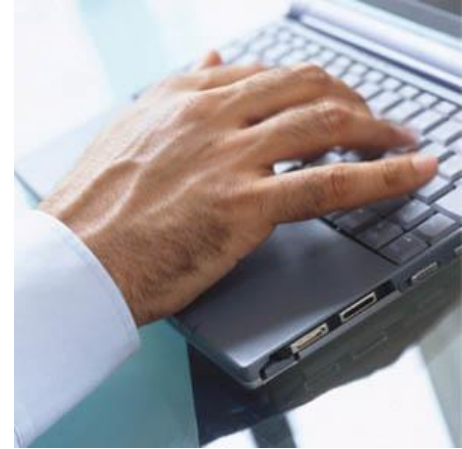
Oracle Identity Management:

Extending the Principles of Service-Oriented Security to Cloud Computing

Domenico Catalano, Identity Architect at Oracle

Agenda

- **Setting The Context**
- Cloud Maturity Model
- Identity Services Platform
- Representative Case Studies
- Summary



Cloud Computing

Definition & Essential Characteristics

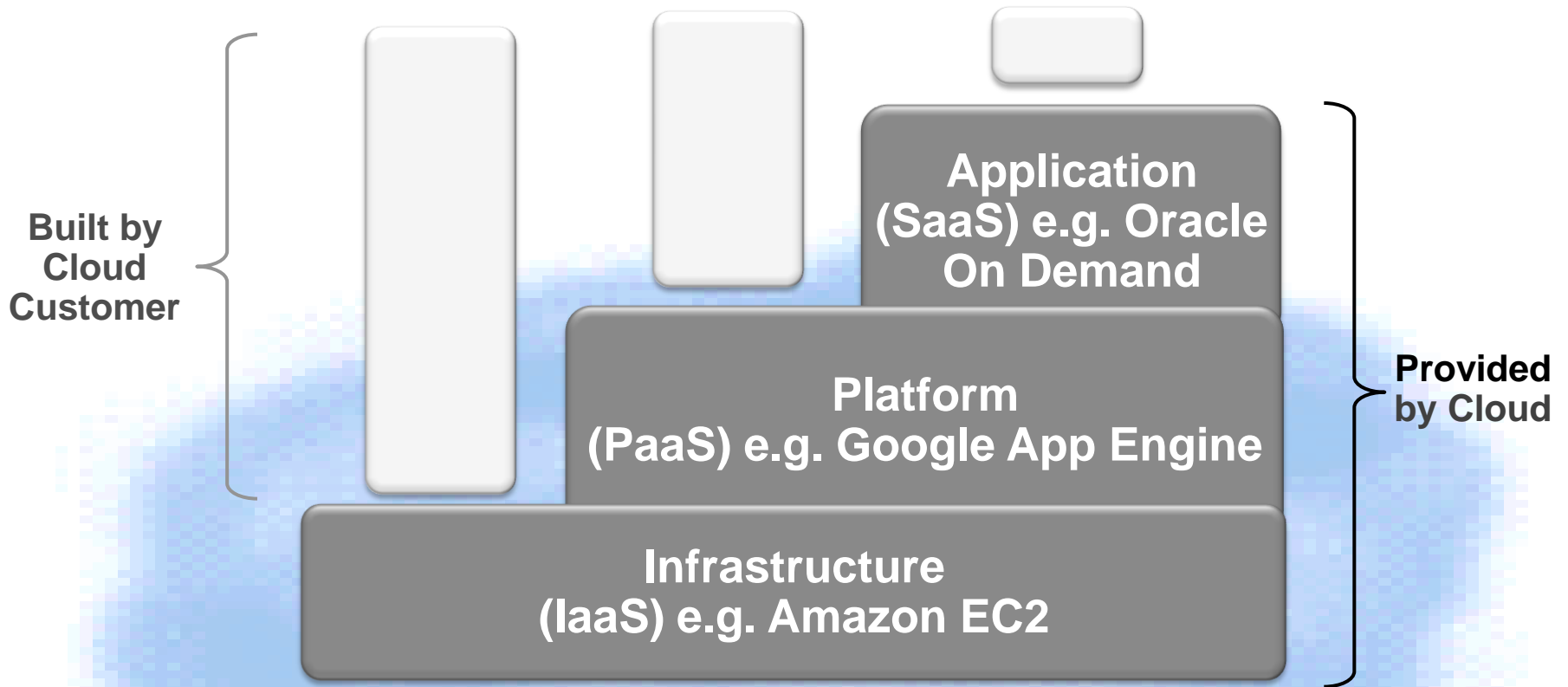
Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction

- On-demand self-service
- Resource pooling
- Rapid elasticity
- Measured service
- Broad network access



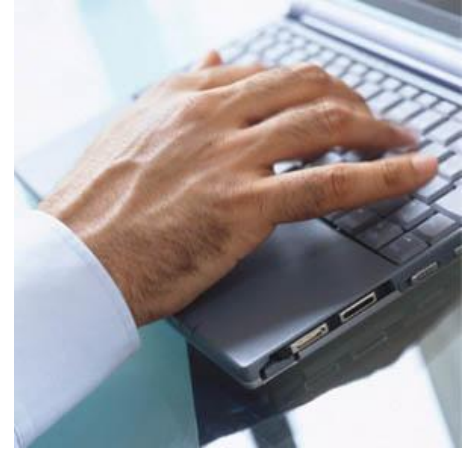
Cloud Computing

Deployment Models

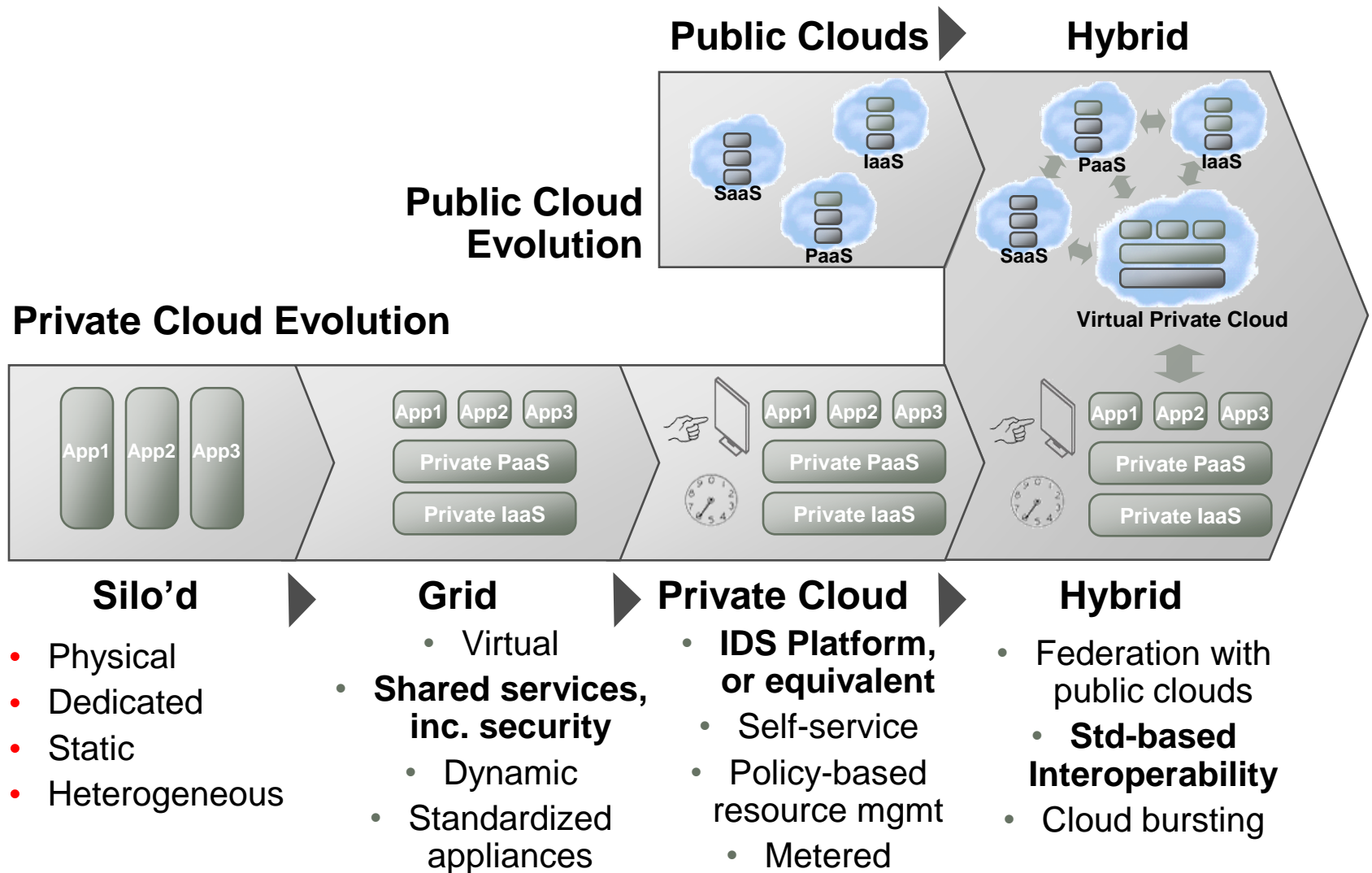


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Cloud Maturity & Adoption Model



Cloud Computing

Select Adoption Models – Public vs Private

A diagram representing Public Cloud. It features a light blue cloud-like background. Inside the cloud is a grey rounded rectangle containing the text: Oracle On-Demand, Salesforce.com, Google App Engine, and Amazon EC2. Below the cloud is the word "Internet".

Oracle On-Demand
Salesforce.com
Google App Engine
Amazon EC2

Internet

Public Cloud:

- No infrastructure setup
- Minimal management
- Lower *upfront* costs

Both offer:

- High efficiency
- High performance
- High availability
- Elastic capacity

A diagram representing Private Cloud. It features a light blue cloud-like background. Inside the cloud is a grey rounded rectangle containing the text: Corporate Cloud Services. The entire cloud and box are enclosed in a black rounded square border. Below the cloud is the text "Corporate Network".

Corporate
Cloud
Services

Corporate
Network

Private Cloud:

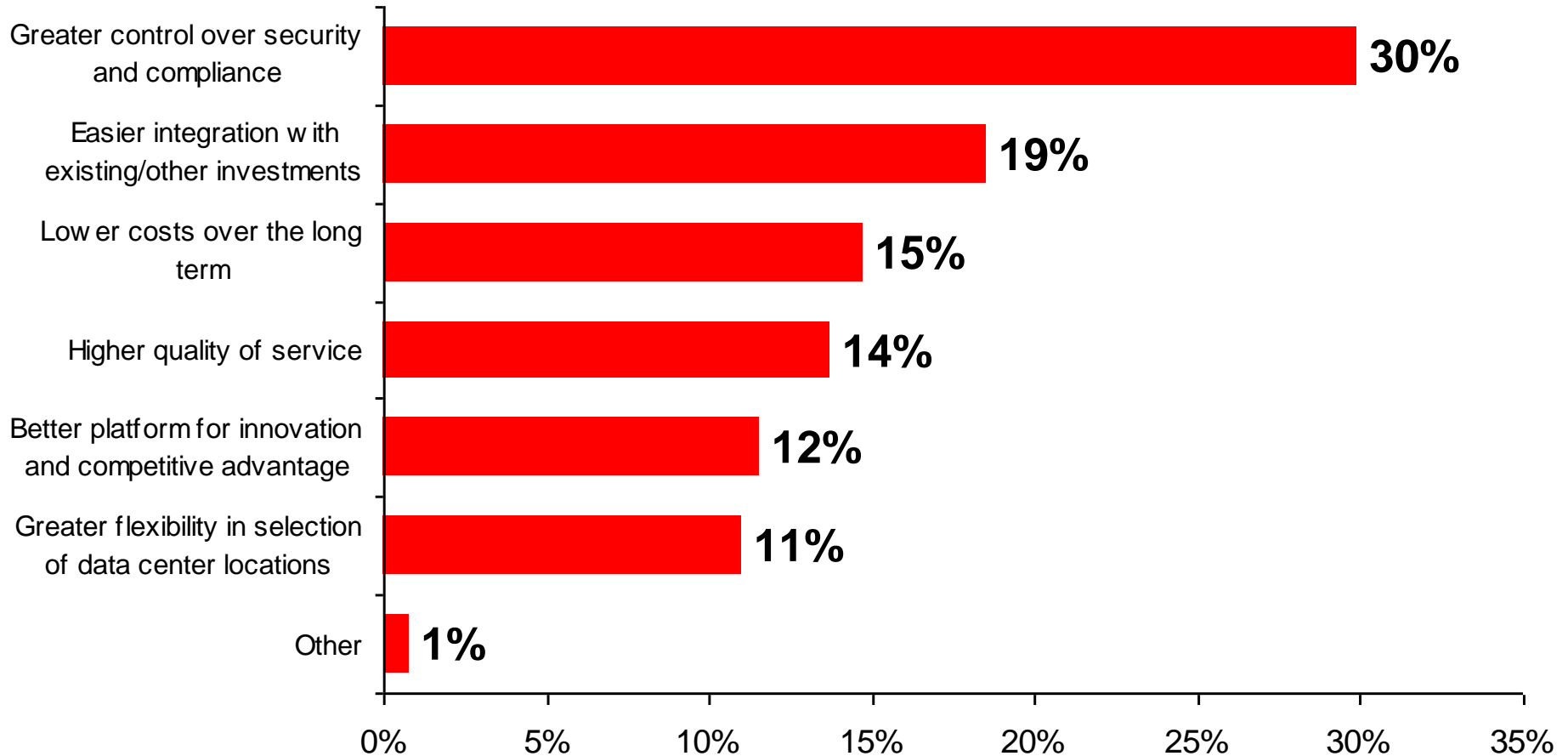
- Greater control
- Easier to integrate
- Lower *total* costs
- Meets legislative requirements

Oracle Community For Security



Your Peers' Point Of View

Reasons to Select Private over Public Clouds



Oracle Community For Security



Service-Oriented Security

Essential Characteristics

- Refers to the implementation & consumption of application security (e.g. data security, identity, access and compliance management, etc) as services in a service-oriented architecture, within and across enterprises
 - Fundamental objective is to externalize security from applications & other IT resources
 - Security becomes a fundamental platform-based service

Line of business applications, policy management applications, devices and other services then take advantage of these services either autonomously or in a choreographed manner

Cloud Computing & Service-Oriented Security

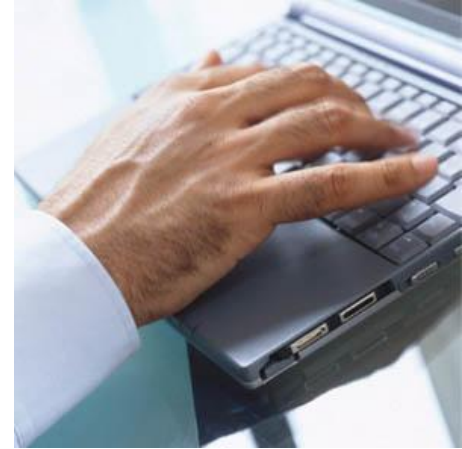
Common Principles

- **Comparative Advantage** – Ability of an entity to produce a good or provide a service at lower opportunity cost than any other available option

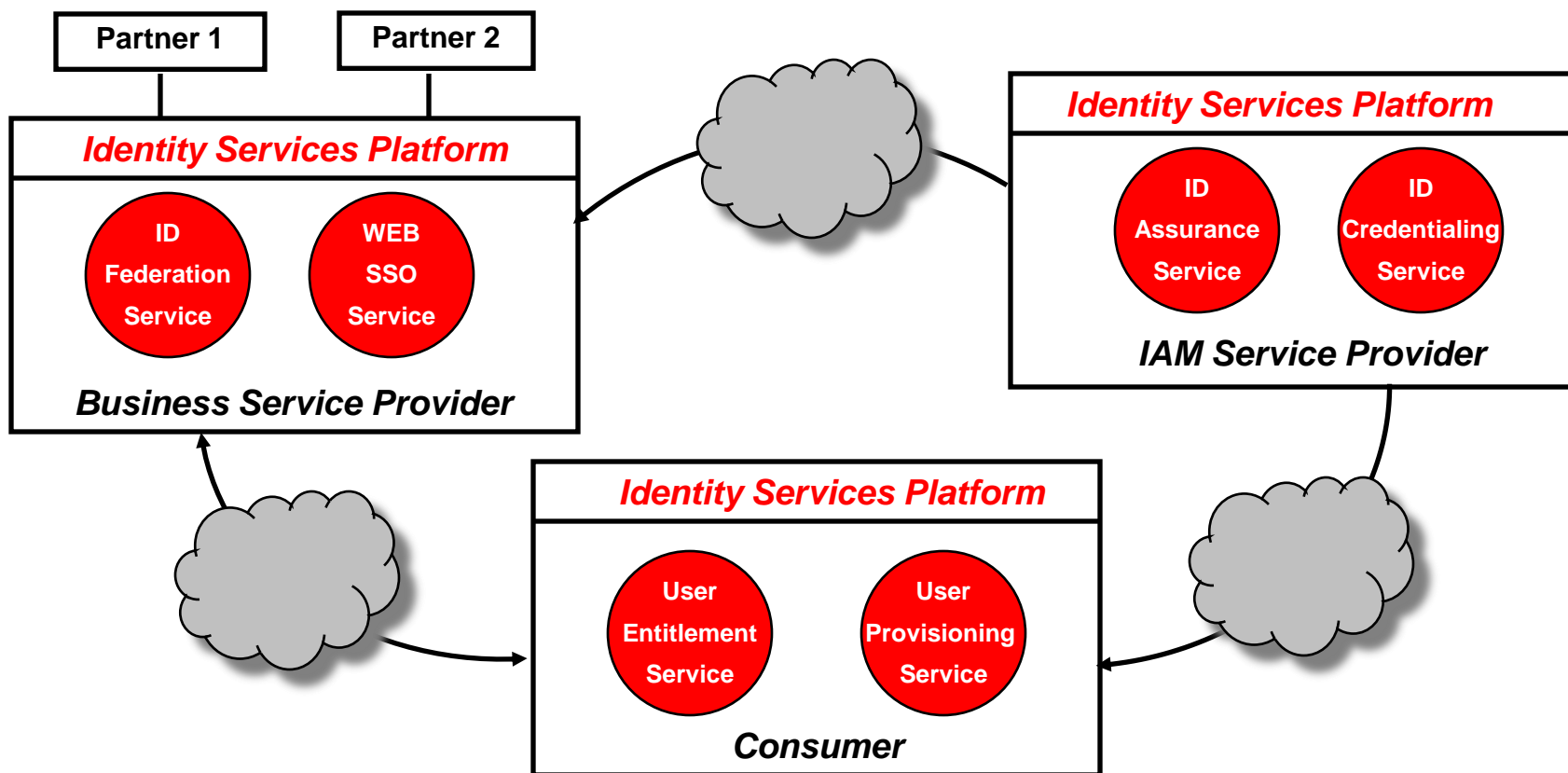
- **Architectural Simplification** – Standardize, consolidate & reuse all available assets required across the value chain

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Effective Cloud Computing requires all participants to have interoperable identity services



Every participant can be both the service provider and service consumer

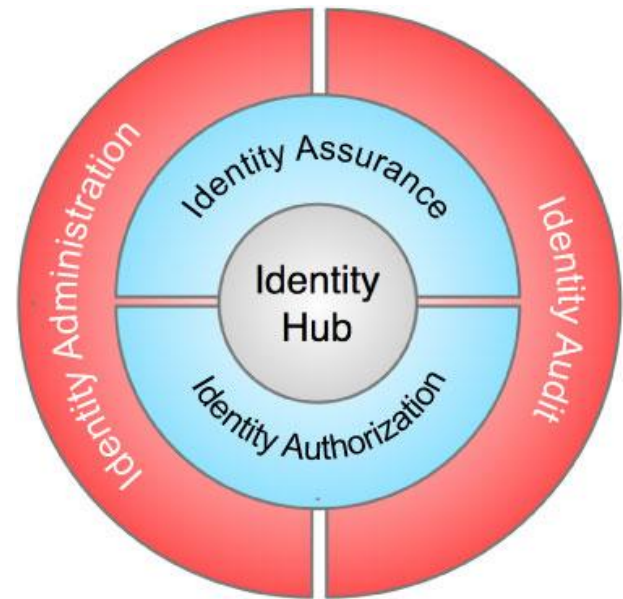
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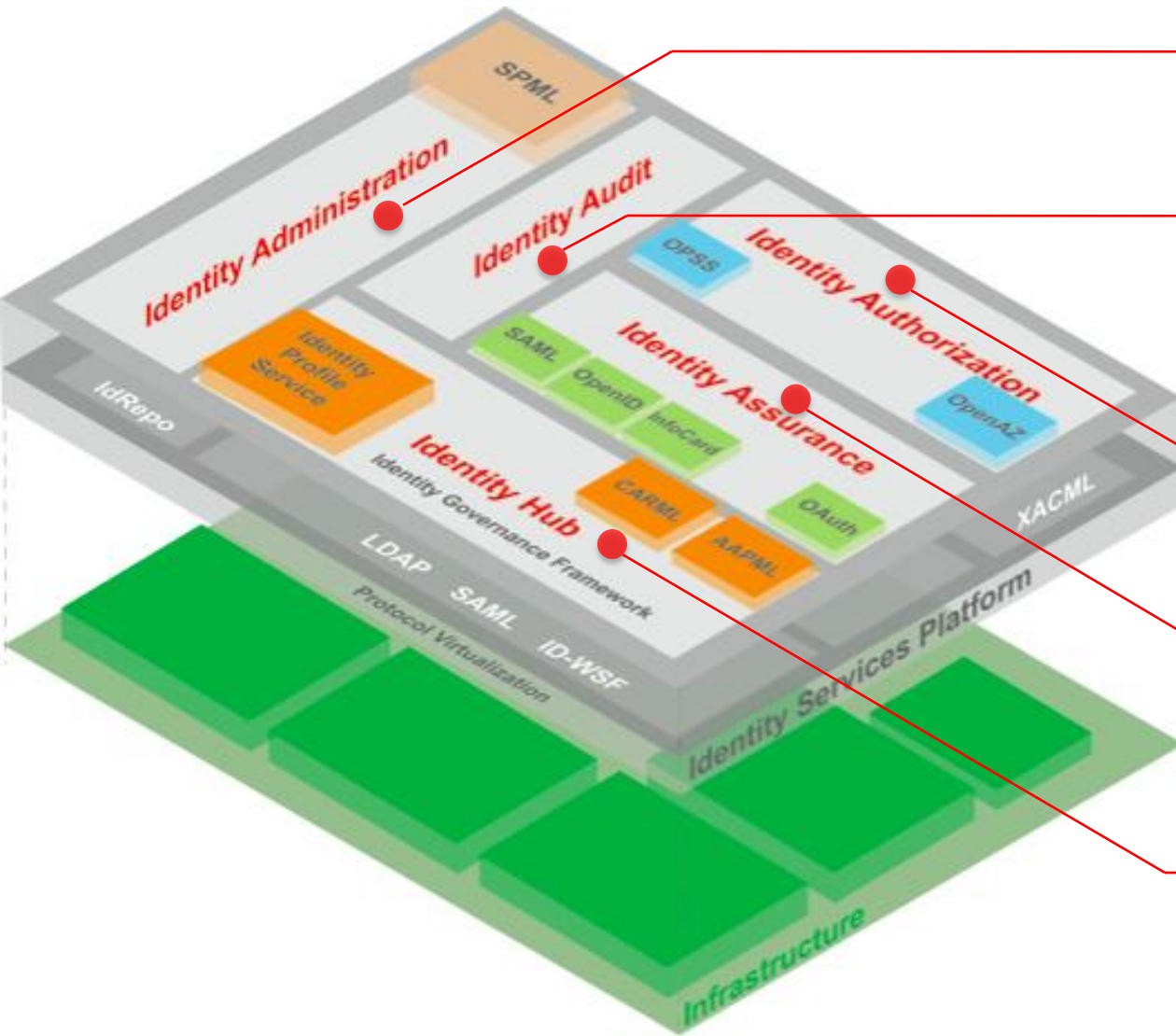
Identity Services Platform

Set of standards-based services required to extend enterprise identity management to cloud-based paradigms

- Identity Hub
- Identity Assurance
- Identity Authorization
- Identity Administration
- Identity Audit



Identity Services Platform



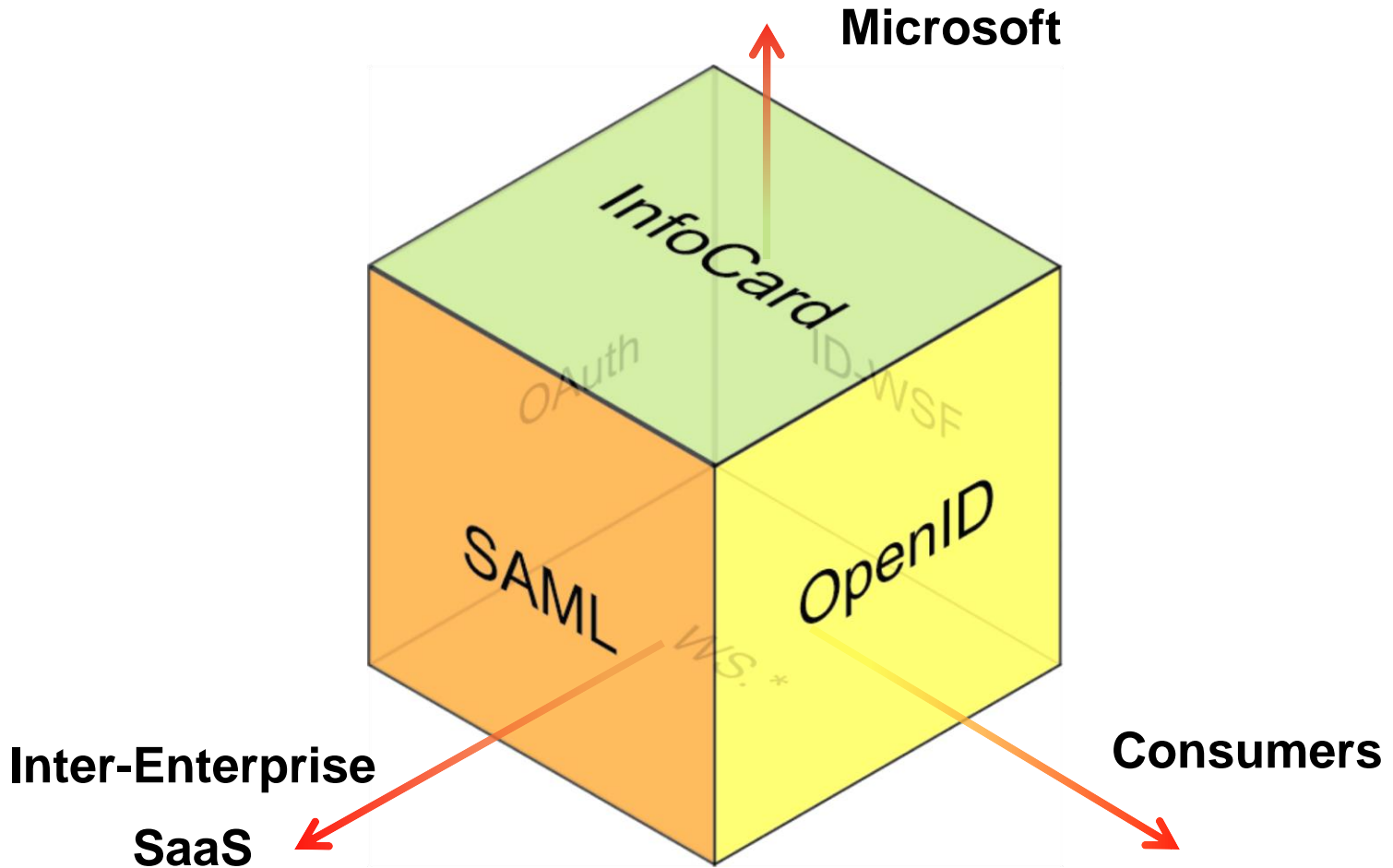
User and Role lifecycle mgmt, Provisioning, and Credential Mgmt.
Identity Auditing, Compliance reporting and Analytics

Policy definition, Enforcement & Management

Authentication, Fraud Prevention, Identity Proofing & Single Sign-On

Storage, Synchronization and Virtualization of Identity & Policy data

The Cube of Identity



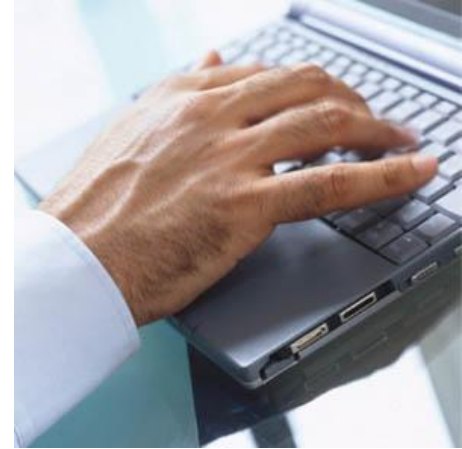
Hot-Pluggable & Open Standards

- **Leadership & Innovation**
 - Open-source efforts for Aris ID, OpenAz
- **Interoperability & Adoption**
 - Enterprise & Internet identity standards like SAML, SPML, XACML, OpenID, Oauth, etc.
- **Hot-Pluggable**
 - Across full range of Applications, Middleware and Operating Systems

The OASIS logo consists of the word "OASIS" in a bold, purple, sans-serif font, followed by a stylized icon of a person with arms raised in a yellow and blue color scheme.

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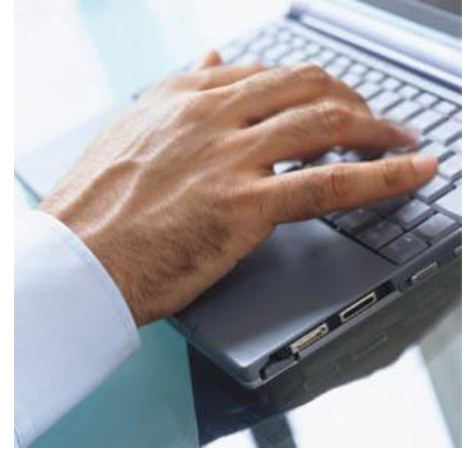


Representative Case Studies

- BT
 - Identity Assurance
 - Public PAAS
- HP/EDS
 - Identity Platform
 - Private IAAS
- Embry-Riddle Aeronautical University
 - Identity Administration
 - Hybrid-Private PAAS + Public SAAS

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Summary

1. Adoption of Cloud Computing is accelerating innovations in the service-orientation of security services across organizations
2. The identity eco-system is maturing in its response to this computing paradigm – but there's much more that can & should be done
3. Oracle's functional comprehensiveness, early successes & incumbent assets provide us with a unique responsibility to make the market for continued adoption of these trends

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Oracle Identity Management

Unique Foundation for Enterprises' Identity Services Platform

Identity Administration	Access Management	Directory Services
Identity Manager	Access Manager Adaptive Access Manager Enterprise Single Sign-On Identity Federation Entitlements Server	Directory Server EE Internet Directory Virtual Directory
Identity & Access Governance		
Identity Analytics		
Oracle Platform Security Services		
Operational Manageability		
Management Pack For Identity Management		

Q&A