OPEN DATA CENTER ALLIANCE℠

Matt Estes, *ODCA Board of Directors, Services WG Co-Chair*

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THE OPEN DATA CENTER ALLIANCE℠

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Enable delivery of cloud and data center solutions that meet the challenges facing data centers today and tomorrow, support solution development in an **open**, **industry-standard** and **multi-vendor** fashion, and aid in deploying solutions by defining **member requirements through usage models**.

Create
Unified voice for data center requirements

Deliver
Requirements to and with industry

Commit
Guide internal IT deployments

Commit
Guide solution providers

OPEN DATA CENTER ALLIANCE

>300 GLOBAL IT LEADERS

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Intel serves as Technical Advisor to the Alliance

intel

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ESTABLISHING A VISION FOR CLOUD COMPUTING

Drive new levels of IT agility through delivery of unified customer requirements for cloud computing enabling **secure & federated** cloud services, **agility** of IT infrastructure, **common management and policy** for data center resources, and **transparency** in cloud service capability and metrics.

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WHY SHOULD YOU CARE?

- Cloud is here to stay – 59% of IT decision makers surveyed[1] in 2010 indicate **cloud is the future model of IT** – 49% already have cloud as part of IT strategy
- Need an **open ecosystem** at many levels in the cloud for the paradigm to succeed in meeting expectations
- Most IT and other end-users **concerned with vendor lock-in**[1] – looking for interoperable and interchangeable services and service components
- Market leadership requires right products and solutions from deep **understanding of customer requirements** and expectations
- ODCA members collectively brings **100+ billion in purchasing power**

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[1]KPMG Cloud Computing Survey 2010 – "From Hype to Future"

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LEADERSHIP AND WORK AREA STRUCTURE

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OPEN DATA CENTER USAGE MODEL OVERVIEW

SECURE & FEDERATED	AGILITY	COMMON MGMT AND POLICY	TRANSPARENCY
Provider Assurance Industry standard provider security tiers: bronze-platinum **Compliance Monitoring** Transparent oversight of provider security	**Virtual Machine Interoperability** Standard, interoperable VM deployment & management **IO Control** Extend QoS guarantees from system to network	**Regulatory Framework** Guide industry in requirements & compliance management best practices	**Service Catalog** Compare service features & price across providers **Standard Unit of Measurement** Standardized cloud performance comparison **Carbon Footprint** Cloud services become “CO2 aware”

The Alliance endorses immediate use to guide member planning and purchasing decisions

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SECURE & FEDERATED CLOUD SERVICES

Challenge:

- Lack of consistent security delivery and management across enterprise and cloud services
- New threats emerging targeting cloud data transport

>75%

Percentage of IT who list security as the main concern for cloud computing [1]

Alliance Vision:

Seamless delivery of customer security policies across cloud environments that comprehends transport of data across clouds and security of shared, virtual environments

1: Souce: KPMG 2010 Cloud Computing Survey

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TODAY'S USAGE MODEL DELIVERY

Provider Security Assurance

Requirements:

1. Granular requirements for service provider security attributes
2. Delivered through standard tiered framework

Security Compliance Monitoring

Requirements:

1. Specific hooks enabling real time monitoring of delivered security.
2. Available to customers and 3rd party certification firms.

Impact:

Acceleration of cloud adoption through consistency of security regulations and SLAs.

Expansion of scope of "cloud ready" applications through tiered security attributes matching security level to workload.

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CLOUD INFRASTRUCTURE AGILITY

Challenge:

- Considerable cost overhead in delivery of automated cloud services gating full realization of operational efficiencies
- Lack of standards based infrastructure control gating innovation

$2,000,000,000,000

Estimated cost of VM deployment & operations without simplification 2010-2014[1]

Alliance Vision:

Delivery of elastic and automatically scalable cloud services that meet SLAs and manage cost and efficiency through automated control unlocking new levels of IT agility.

1: Souce: Intel/Bain Consulting Joint Study, 2010.

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TODAY'S USAGE MODEL DELIVERY

VM Interoperability

Requirements:

1. Articulates VM management as key hurdle for cloud adoption.
2. Defines requirement for common management interface across all hypervisors.

IO Control

Requirements:

1. Articulates today's challenge of lack of ability to control IO QoS across VMs
2. Establishes ability for customer control of bandwidth allocation per VM & total level of network IO capacity

Impact:

Delivery of solutions meeting these requirements will result in:

1. Increased efficiency of system use & workload management
2. Extension of policy based management of data center resources
3. Tighter control of data center resources.

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COMMON MANAGEMENT AND POLICY OF CLOUD RESOURCES

Challenge:

- Lack of common management between cloud services and providers .
- Complex regulatory environment gates seamless management of regulatory compliance.

>50%

Percentage of IT naming regulation as primary obstacle to the cloud.[1]

Alliance Vision:

Common, simplified management model: enabling greater consistency across cloud services, service providers and infrastructure. This environment provides support for managing SLAs and for seamless regulatory compliance.

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1: Source: KPMG 2010 Cloud Computing Survey

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TODAY'S USAGE MODEL DELIVERY

Regulatory Framework

Framework:

1. Establishes a baseline of regulatory agencies engaged on articulating cloud service regulations
2. Points towards opportunity for integration of regulations to operational oversight standardization.

Impact:

This initial usage model lays a foundation for the Alliance vision for policy management and is expected to be enhanced with further publications.

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TRANSPARENCY OF CLOUD SERVICE OFFERINGS

Challenge:

- Lack of consistent standard framework for comparison of cloud service features
- No ability to compare cloud service pricing against standard qualifications
- Lack of standard cloud service performance metrics

Alliance Vision:

Transparency in cloud service offering comparison, capabilities metrics and usage statistics.

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TODAY'S USAGE MODEL DELIVERY

Service Catalog

Requirements:

1. Requires standard service attribute framework enabling efficient evaluation and comparison of cloud providers.

Standard Units of Measure for IaaS

Requirements:

1. Defines framework for a new class of capabilities metrics.

Carbon Footprint

Requirements:

1. Defines requirement for carbon reporting of workload based carbon footprint

Impact:

Acceleration of cloud adoption through ease in evaluation and performance measurement of cloud services.

Consistency in IT sustainability reporting and comparison of carbon impact across providers.

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INDUSTRY COLLABORATIONS: CRITICAL TO ALLIANCE MISSION

Aligning standards development with customer requirements, speeding industry standards solutions to market.

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THE TIME IS NOW … CALL TO ACTION

Enterprise IT & Service Providers

- **Review**: Read all Alliance publications (provide feedback)
- **Commit**: Use usage models within your organizations
- **Accelerate**: Join the Alliance to help shape the future of cloud

IT Standards Bodies & Solutions Vendors

- **Review**: Read all Alliance publications for relevant requirements
- **Commit**: Integrate requirements into your roadmap
- **Accelerate**: Join as a Solutions Provider to engage with over 280 global cloud customers

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Visit www.opendatacenteralliance.org for more details

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