Accelerating the Speed of Innovation

Jason Waxman
General Manager
Cloud Infrastructure Group
Intel
Cloud Adoption is Inevitable

The cloud computing marketplace will reach total revenues of
+$241 billion in 2020

Global public cloud market size, 2011 to 2020

Source: Forrester Research, Inc.
This Inevitability Comes with Challenges to Be Overcome

Security is top of mind. Migrating applications, implementation strategy, & operational efficiency are also priorities.

- **40%** Security
- **31%** Application Migration Strategy
- **11%** Simplified Management...
- **8%** Initial Cloud On-Boarding
- **7%** Regulations
- **2%** Power and carbon footprint

Source: ODCA Member survey, October 2011
Our Opportunity: Innovate Towards ODCA Priorities for Cloud

- Transparency
- Secure Federation
- Automation
- Common Management and Policy

Industry Standard Solutions
Collaboration Founded in Standards is Key

Cloud Service Providers
Delivering Top-grade Services

Global Enterprises
Consuming and Offering Top-grade Excess Capacity

Technology Solution Providers
Offering Brokerage and Management services

Emerging Dynamic Cloud Market Place
From Requirements to Solution Scale

Streamlined Requirements
Accelerate Adoption

Standardized Response Checklists
Accelerate TTM

Shared Practices
Drive Scale

Available to Members at: www.opendatacenteralliance.org
2012: Accelerated Innovation is Here

- Delivering Standard Services
- Improving Big Data Response
- Early Security Solution Testing
Virtustream: Delivering Open Cloud Services

Kevin Reid
CEO & CTO

Virtustream
Enterprise Class Cloud™
Secure Cloud Services Following ODCA Standards

Run a Private Cloud
(At your site)
Customer operated or remotely managed
- Infrastructure
- Regulation
- Security

Virtual Private Cloud
(In Virtustream’s Cloud)
Virtustream managed or Customer managed
- Infrastructure
- Management
- Regulation
- Security
- Services

Enterprise Public Cloud
(In Service Provider’s Cloud)
Virtustream or Other Service Provider managed
- Management
- Security

Platform integrity & trust through hardware based root of trust, reported and attested through industry standard TPM and open APIs
Challenge

Improve solution performance to enable faster response time to big data analytics queries.
Baidu: Infrastructure Innovation

Implementation
QoS controls and IO acceleration deployed on 100PB cluster

Results
Real time data retrieval, scale for future data growth, based on industry standard solutions

ODCA IO Control Requirements based Solution Delivers Improved Analytics Performance
National Australia Bank: Pushing Standard Based Security Assurance

Challenge

Move standard security availability forward by delivering ODCA security requirements based configuration
National Australia Bank: Pushing Standard Based Security Assurance

Implementation
Tiered solution mixing managed and un-managed service

Results
POC Results in key insights for ODCA Usage Model
Shared learning will help drive solution scale

Learn About POC Later Today in Cloud Ceiling Track
Our Path Forward is Clear


Those Who Collaborate Will Win Through Acceleration

Cloud and Big Data Represents Massive Industry Opportunity
Cloud Formation Track Panels

**Service Provider Panel**
- **Moderator**: Richard Villars, IDC
- **Panelists**:
  - Curt Aubley, Lockheed Martin
  - Jeff Deacon, Terremark
  - Joe Weinman, Telx
  - Petteri Uljas, Capgemini

**Cloud Hardware Infrastructure Delivery Panel**
- **Moderator**: Barb Darrow, GigaOm
- **Panelists**: Brandon Fears, HP
  - Jason Waxman, Intel
  - Yael Maguire, Facebook
  - Mark Wood, Dell

**Cloud Software Innovation Panel**
- **Moderator**: Richard Villars, IDC
- **Panelists**: Gordon Haff, Red Hat
  - Greg Brown, McAfee
  - John Engates, Rackspace
  - Reuven Cohen, Virtustream
  - Andrew Stokes, Chief Scientist, Deutsche Bank Global Technology

**Industry Standards Development Panel**
- **Moderator**: Jason Waxman, Intel
- **Panelists**: Chet Ensign, OASIS
  - Pam Fusco, President of the NY Metro CSA
  - Josh Cohen, DMTF
  - Yael Maguire, Facebook
  - Elad Yoran, Vaultive
  - Andrew Stokes, Chief Scientist, Deutsche Bank Global Technology

[Open Data Center Alliance logo]
Q&A