Cloud Object Storage
And The Use Of Gateways

Live Webcast

September 26, 2017
10:00 am PT
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50,000 IT end users & storage pros worldwide
Today’s Topics

- Market Trends
- The Hybrid Cloud Strategy
- Object Storage Basics
- Primary Gateway Use Cases for Cloud
- Summary
MARKET TRENDS
The Data Explosion

New, mostly unstructured data sources emerge constantly, creating an expanding data ecosystem for every organization.

- **75 billion** Internet-connected devices by 2020
- **44 Zetabytes** by 2020
- **90%** of all data was created in the last 2 years
- **80%** of stored data is unstructured
Files Sizes Growing Exponentially

- Adobe Illustrator
  - 24 MB
  - Full page image
- Raw digital photo
  - 50 MB
- CAD
  - 20-70 MB
- AEC¹
  - 400 MB
- PACS² medical images
  - 1.8 GB
- Software business package
  - 2.5 GB
- Video game
  - 38 GB
- 4K movie
  - 60 GB
- 2 hours
- Battlefield 4
- QuickBook Pro
- Large building
- 1 Exam
- CAD
- 1.8 GB
- 2.5 GB
- 38 GB
- 60 GB
- Video game
- 2 hours

¹ Architecture Engineering Construction
² Picture Archiving and Communication System

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What do the analysts say is important?

**Cognitive**

By 2018, 50% of developer teams will embed cognitive capabilities in their apps

*Source: IDC FutureScape*

**All about the UX**

By 2018, 80% of enterprises will overhaul their "Digital Front Door" to support more customers and customer touch points

*Source: IDC FutureScape*

**DIY won’t work**

Through 2018, over 80% of organizations that deploy or assemble self-managed PaaS frameworks will not achieve the expected cloud PaaS experience

*Source: Gartner*

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Gartner, Predicts 2016: PaaS Innovation Continues Unabated, 12/10/2015, Yefim V. Natis, Lydia Leong, Benoit J. Lheureux, Paul Vincent
HYBRID CLOUD STRATEGY
What Enterprises are Trying to Do

Create cloud native apps
- Use the latest tools
- Release faster, more often
- Incorporate user feedback quicker

Connect legacy apps to cloud services
- Open trusted apps and data to innovation, securely.
- Maintain/Sustain governance
- Enable apps to use new sources of data
- Build new business models across ecosystems

Optimize workloads & data for best fit
- Lift and Shift selected apps and data to cloud for better agility and economics
- Place data and analytics for best cost/risk/performance profile

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Enterprises are Turning to Multi-cloud

New data sources
- IoT, social, weather, video...

New apps and services
- Analytics, blockchain, marketing...

Innovation communities
- Open, developer, industry, cognitive...

Getting new value from third parties

Data
- Customer, transactional...

Applications
- ERP, CRM, BSS, OSS...

Expertise
- Industry, domain, customer...

Extracting value from your entire business

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Hybrid Cloud for Cost Effectiveness

**Speed**
change only what you need to get value faster

**Innovation**
Leverage cloud services, open communities, new technologies to maximize opportunity

**Flexibility**
Position workloads to deliver on business objectives

**Insight**
combine data with new sources of data for best outcomes

Hybrid cloud is a combination of cloud and traditional IT working in unison to deliver value to customers, suppliers, employees, & partners.

CIOs report that 16% of workloads now run in a public cloud, growing to 41% in 5 years

Barron's Tech Trader Daily, April 2016
CLOUD OBJECT STORAGE BASICS
Traditional Solutions Fail Today’s Needs

Storage architecture needs to manage hyper growth and evolving workloads to help unlock data value.

• Any application, any source, any business
• Flexible, massive scale without roadblocks
• Enabling innovation, discovery, new experience
Demand for a New Storage Architecture

On-Premises
- Compliance/control
- Leverage existing assets

Cloud
- Elasticity
- As-a-service pricing
- Unlimited scale
- Global reach

Flexibility in developing applications and leveraging content

Consistent, uniform and open programming interfaces
Ready for cognitive analytics
Cloud Object Storage holds data where it's most available, more useful, and ready to support insights that drive innovation.
Use cases across multiple industries

- **Media & Entertainment Production**
  - Repository for new creative

- **Media & Entertainment Distribution**
  - Global on-demand content hub

- **Service Providers**
  - Storage as a service for subscribers

- **Financial Services & Insurance**
  - Secure archive and synch/share

- **Health Care & Life Sciences**
  - Critical data archive for public safety

- **Government**
  - Shared genomics research

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**Active Archive, Backup, Cloud Storage**

- **Content Repository**
- **STaaS**
- **Enterprise STaaS**
- **Enterprise Collaboration**
  - Genomics Collaboration
USING GATEWAYS
A cloud storage gateway provides transparent communication by translating protocols and enabling connectivity for incompatible applications.

Gateways can make cloud object storage appear to be a NAS filer, a block storage array, a backup target or even an extension of the application itself.

Many cloud storage gateway products provide data optimization and encryption to cloud object storage.
Cloud Gateway Deployment

- Gateways are deployed as physical on premises appliance, a virtual machine (VM) image or a cloud service.
- To the application a gateway looks like NAS
Enterprise Business Challenges

- Shift applications and storage without disruption to existing application and business processes.

- Deploying an object-first, cloud-first roadmap

- Provide always on access to valuable data across multiple device types, geographies and organizations.

- Need to reduce the cost of data storage and management for file services, unstructured data and data archival

- Share and synchronizing data across many mobile devices (BYOD) and Remote office locations

- Need to provide secure access to all your data, and protect against ransomware threats to the corporate network
Proven Use Cases

ILM to the Cloud
- Drain aged and infrequently used content from On Premises NAS
- Cloud Object Storage as Tier 2 or 3 storage resource
- Mitigate NAS sprawl and shift expense from capital budget to operational budget

Enterprise Sync & Share
- Established as File collaboration platform replacing legacy NAS and CMS
- Data protection, content distribution for geographical dispersed locations
- Centralized management of end point content

Application Lift and shift
- Consolidate unstructured data in the cloud to simplify backup, disaster recovery, and archive processes.
- Provide better application performance and more efficient on prem processes
Key Takeaways

- New, mostly unstructured data sources emerge constantly, creating an expanding data ecosystem for every organization, thus demanding a change where content is stored and managed.
- Enterprises are considering or implementing a multi cloud strategy as a way to leverage 3rd party content while extracting value from their own data.
- The use of gateways with Cloud Object Storage provide a more cost effective and scalable solution for Enterprises to modernize their business, application and storage processes.
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