

# Cloud Object Storage And The Use Of Gateways

Live Webcast

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10:00 am PT

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# Today's Presenters



**Dan Albright**  
**IBM**



**Alex McDonald**  
**NetApp**

## SNIA-at-a-Glance



**160**

unique member  
companies



**2,500**

active contributing  
members



**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.

**44**

Zetabytes by  
2020

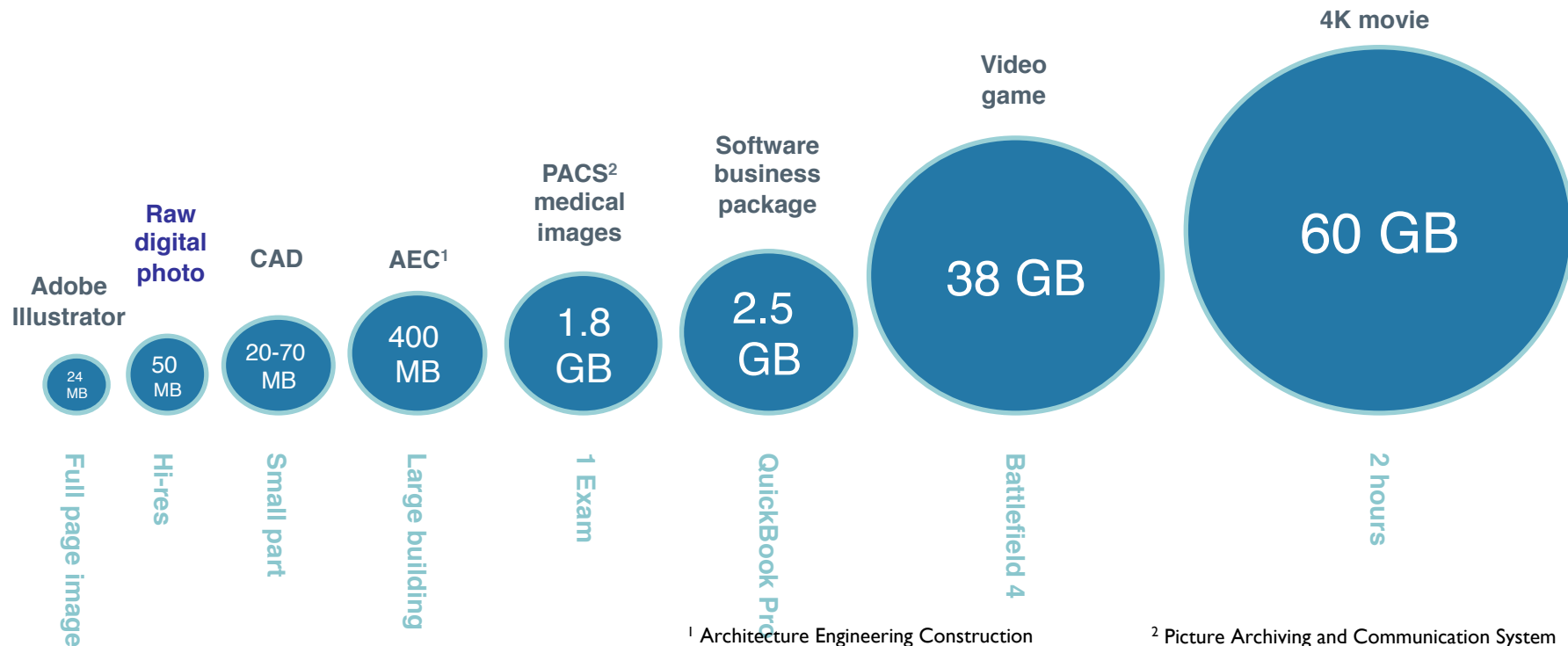
**75 billion**  
Internet-connected  
devices by 2020

**90%**  
of all data was created  
in the last 2 years

**80%**

of stored data is  
unstructured

# Files Sizes Growing Exponentially





# 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

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



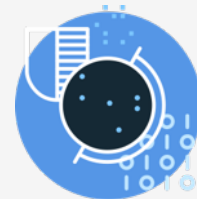
- Use the latest tools
- Release faster, more often
- Incorporate user feedback quicker

## Connect legacy apps to cloud services



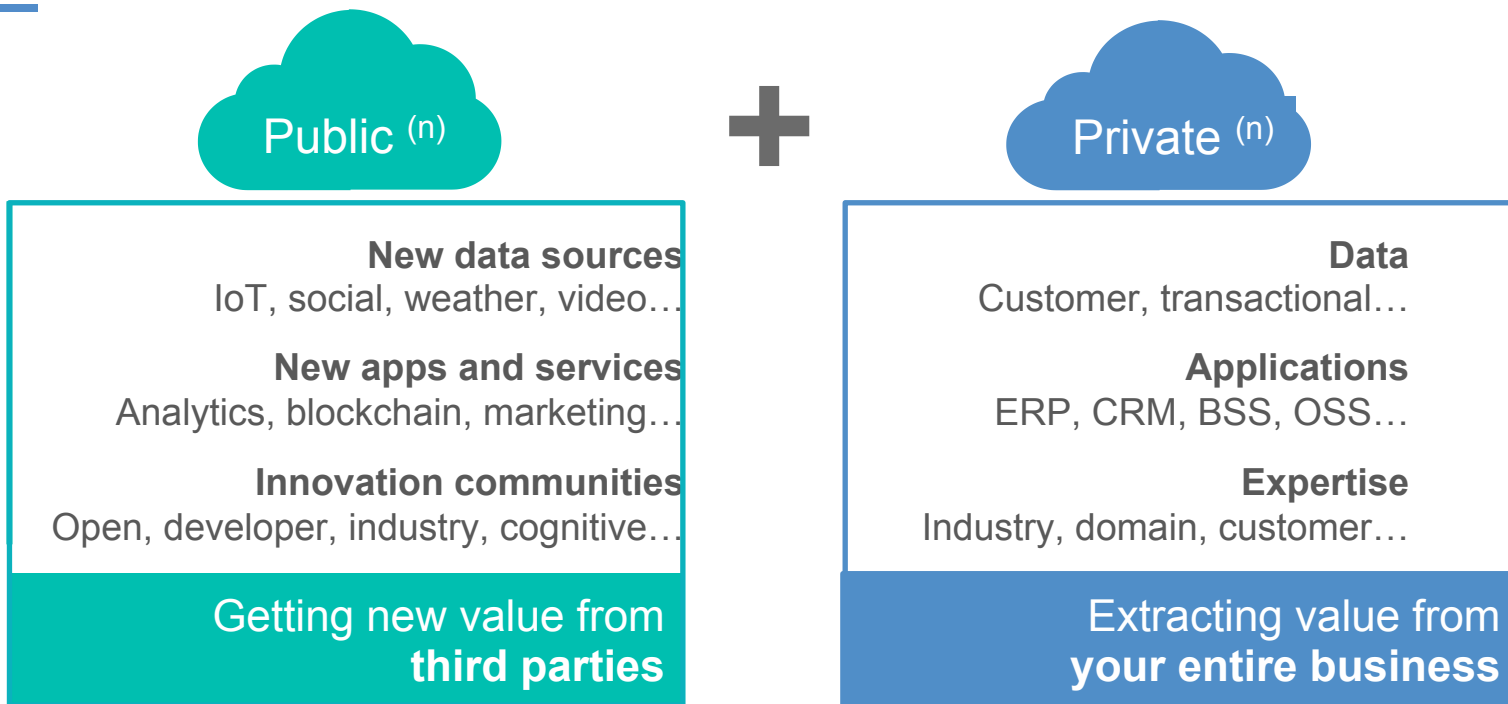
- Open trusted apps and data to innovation, securely.
- Maintain/Sustain governance
- Enable apps to use new sources of data
- Build new business models across ecosystems

## 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

# Enterprises are Turning to Multi-cloud



# Hybrid Cloud for Cost Effectiveness

## Speed

change only what  
you need to get  
value faster

## Innovation

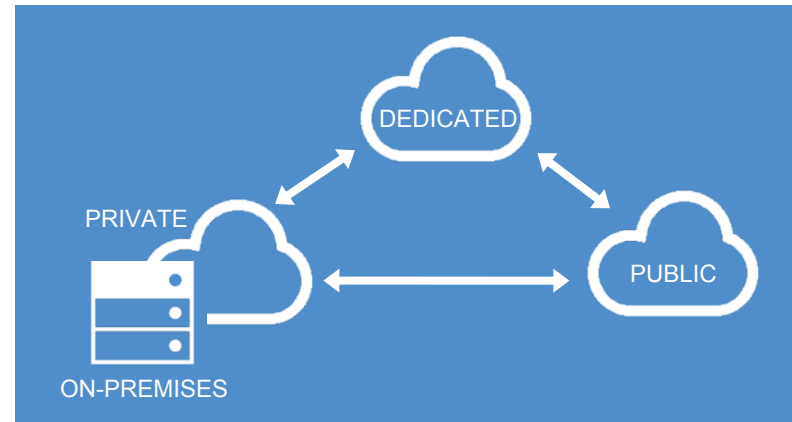
Leverage cloud  
services, open  
communities, new  
technologies to  
maximize opportunity

## 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

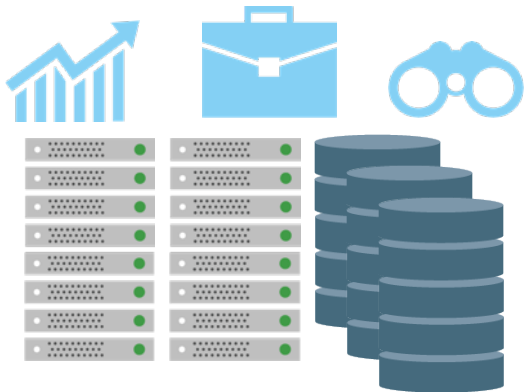


# Demand for a New Storage Architecture

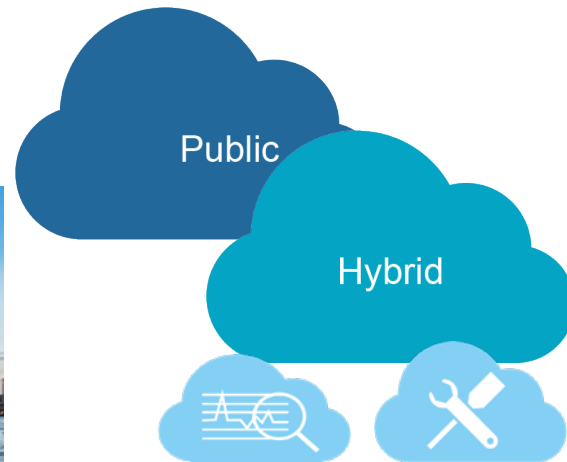
**Flexibility in developing  
applications and  
leveraging content**

## On-Premises

- Compliance/control
- Leverage existing assets



**Consistent, uniform and open  
programming interfaces  
Ready for cognitive analytics**



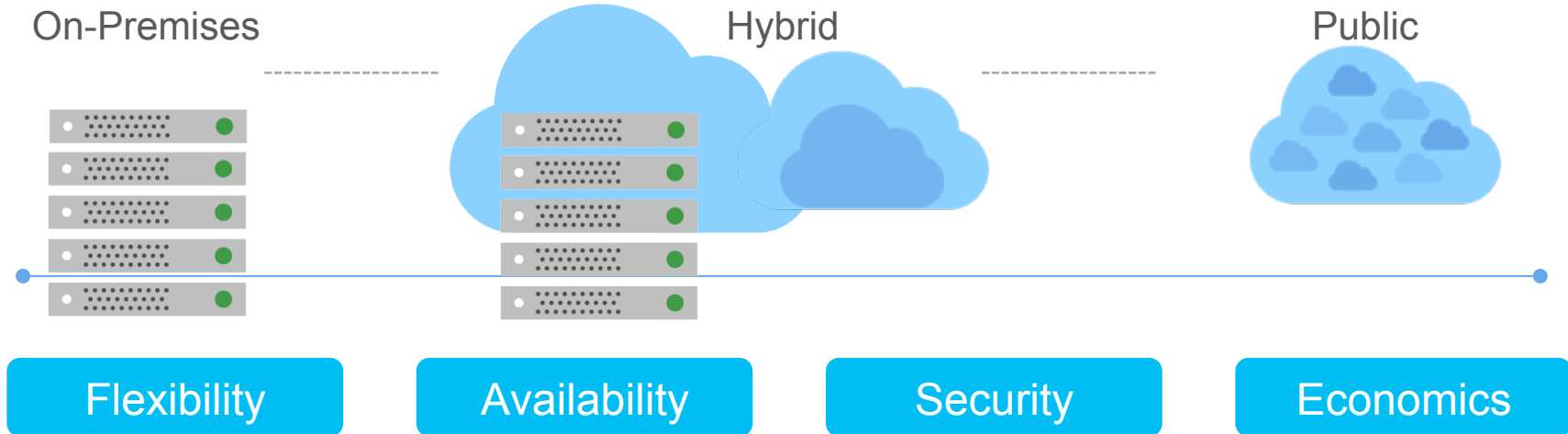
## Cloud

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

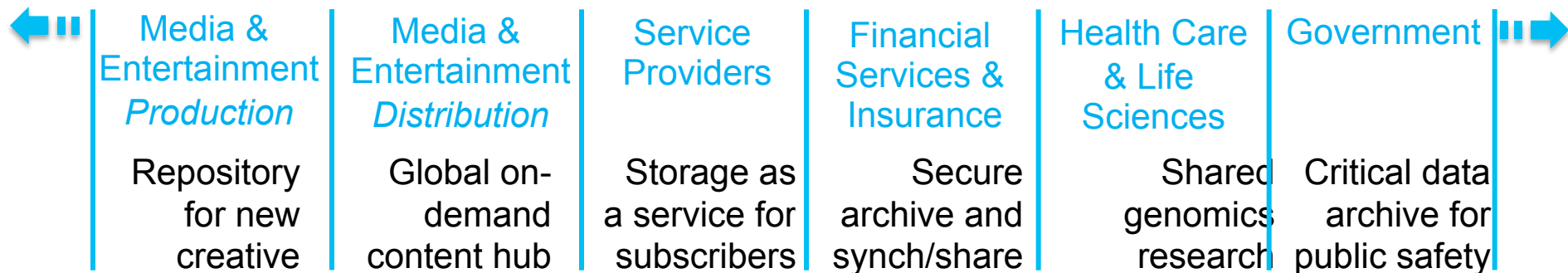


# Cloud Object Storage

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



Active Archive, Backup, Cloud Storage

Content Repository

STaaS

Enterprise STaaS

Content Collaboration

Enterprise Collaboration

Genomics Collaboration

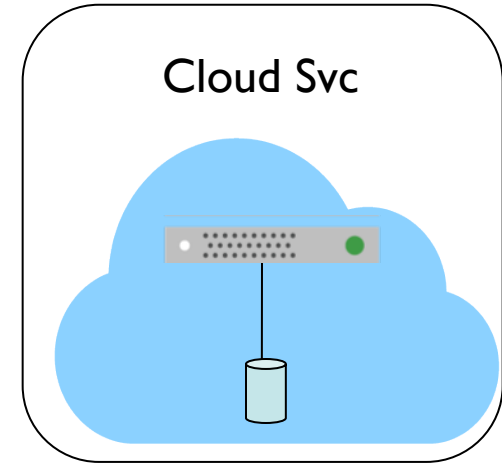
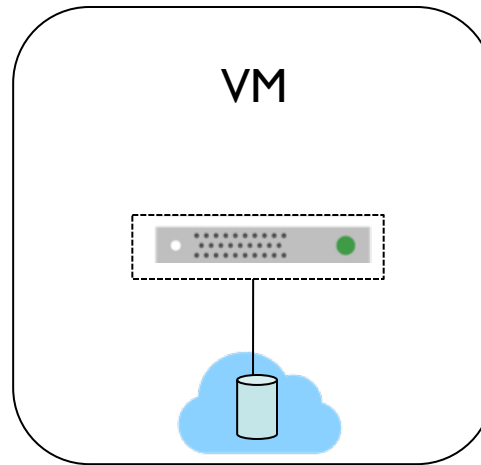
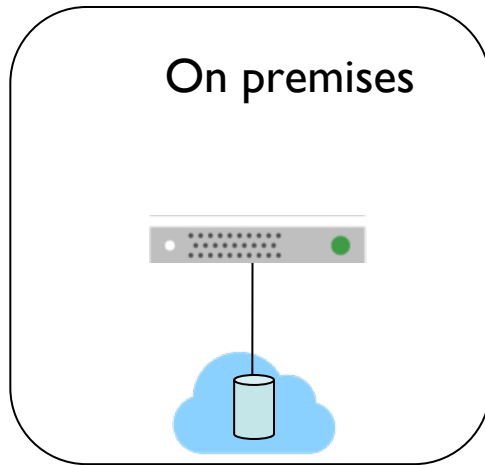
# USING GATEWAYS

# What is a Cloud Storage Gateway

- 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

# SUMMARY



# 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 3<sup>rd</sup> 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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