ELIMINATE DATA CENTER CLUTTER: MOVE SOME DATA TO THE CLOUD

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IT departments are challenged to meet many business demands that arise from shortages of valued resources: people, physical infrastructure, budget, and time. By extending your IT strategy to the cloud with Hitachi Cloud Service for Content Archiving, you can overcome many of these resource challenges, freeing you to focus on the higher priority needs of the business. By deploying an active archive, you are able to drive even greater value from business analytics.

In this session, you will learn how to:

- Incorporate Hitachi Cloud Service for Content Archiving as part of your extended IT strategy.
- Eliminate inefficiencies by moving target data from higher- to lower-tier storage.
- Improve operational efficiency by out-tasking storage management.
- Develop an integrated, seamless onsite and offsite storage strategy.
And in the beginning, that was good.

But then…

By 2014, there will be 1 billion applications.

By 2020, there will be 42x growth in data from 2009.

Data and information must be managed for insight and innovation in order to drive strategic and competitive value.

By 2014, there will be 1 billion applications.

ALL DATA NEEDS TO BE STORED, GOVERNED, AND MANAGED.
WHAT’S NEXT … IS ALREADY HERE

Business needs to capitalize on insight, anywhere it happens

INFORMATION LANDSCAPE HAS CHANGED

- Growing data demands
- Cloud economics are real
- Proliferation of applications and devices

EMPLOYEES WORK DIFFERENTLY

- Bring their own devices and apps
- Mobile, not tied to offices
- Expect to share and analyze data in new ways
SPUR INNOVATION WITH INFORMATION USING THE CLOUD

The right data, anytime, anywhere, on any device

- Encourage creative, ongoing collaboration with secure access to fluid content
- Make information available to your staff for insightful decisions – whether it’s housed internally or externally
AND THE BOTTOM LINE

Lower your cost, increase your ROI

- Free your IT staff for more strategic contributions
  - Lower storage management costs up to 25% with simplified administration
  - Increase FTE/terabyte ratio by 5 with automated, superior data management

Adapt as your needs grow and shrink

Flex
Scale
Protect
WITH HDS, THE CLOUD IS NOT ONE SIZE FITS ALL

AT YOUR DATA CENTER

Traditional Storage Needs

Private Cloud

HDS Storage

TIER 1

TIER 1

TIER 3

OFFSITE DATA CENTER

Hybrid Cloud

Hosted Cloud
EXTEND BEYOND YOUR LIMITS

HDS CLOUD STRATEGY

EXTEND

Enterprise into the cloud
Enable enterprise IT attributes in the cloud and bridge the enterprise with seamless data solutions

Cloud transformation
Deliver SLA-based infrastructure services with an elastic consumption model

Cloud partnership
Partner with service providers and ISVs to create differentiated value-added cloud services
A NEW ERA OF INFORMATION EVERYWHERE

CLOUD ARCHITECTURE BASED ON HCP

HPC ANYWHERE

CONTENT CORE

EDGE STORAGE

MOBILE WORKFORCE

WEB APPS AND DATA

HITACHI CONTENT CLOUD

HITACHI CLOUD SERVICES
ENTERPRISE TO CLOUD:
HITACHI CLOUD SERVICES OVERVIEW

ENTERPRISE-LEVEL CLOUD SERVICE

- Multitenant online storage accessed through a secure Internet connection
- Self-provisioning via a portal (storefront) available from HDS.com
- Enterprise-level service availability with 3 optional data availability classes
  - Base (RAID 6, DPL 1) Replicated (DPL-2 - 2 copies in the same data center), high availability (DPL-1 and replication to distant data center)
- Covering 3 use cases: File tiering, file serving and ISV application archiving (or any REST API archiving), such as Symantec EV
- Hosted in the United States (Tier 3 data centers) and fully managed by HDS

Efficiency
- Single instancing
- Compression
- Versioning

Security
- Antivirus options
- Secure transport
- Encryption

Search
- Index
- Utilization
- Discovery

Independence
- Easy growth
- Online access
- Low touch

Resilience
- Replication
- Remote sites
- Disaster recovery
SERVICE DEFINITION CONCEPTS

SIMPLE AND EASY TO CONSUME

- Pay-as-you-go consumption model
- Lower rate for fixed-tier subscriptions
- Number of copies and versioning at object level
- Disaster recovery replication option
- Self-service portal: Includes reporting, chargeback, portal, and administrative control and monitoring
- Content visibility through indexing and search
HDS UNIQUE VALUE PROPOSITION

- Extends the enterprise to the cloud
  - Part of overall IT strategy; not a siloed approach
  - Optional professional services for complex integrations

- Flexible, transparent pricing
  - Inclusive
    - Service and support
    - Competitively priced

- Hitachi/HDS architecture/support robustness
  - Managed infrastructure to ensure quality of service
  - 24/7 premium HDS support with 15-minute response time

- Data Sovereignty
  - Data stays within the U.S.
PAY-AS-YOU-GO CLOUD CONSUMPTION OPTIONS

- Mainstream application compatibility
  - REST API integration with enterprise applications provides multiple methods for customers to push data to the cloud

Enterprise Ecosystem

*Future*
USE CASE FOR ARCHIVING TO THE CLOUD

Challenge
- Free up data center capacity consumed by multiple aging petabytes of large files (video, audio, presentations, etc.)
- Enable access on demand
- Look for alternatives to existing, costly onsite model

Solution
- Hitachi Cloud Service for Content Archiving
- Pay-for-use, predictable consumption model
- Enable on-demand, quick access to content
- Enterprise reliability, availability, and security
Benefits

- Free up data center – reduce power, reduce backup, and increase compute capacity
- Offers simple pay-as-you grow, self-serve model
- Competitive alternative to low-cost, cloud offerings like Amazon S3
NAS THINNING/BACKUP REDUCTION

POLICY-BASED FILE TIERING

Challenges
- High growth, continuing to buy NAS filers
- Low utilization and performance
- Increasing complexity
- Difficult to maintain service levels, especially for backup

Solution
- Policy-driven NAS thinning solution
- NAS filer reduction, consolidation, and space reclamation
- Backup reduction
- Complete end-to-end reporting
NAS THINNING/BACKUP REDUCTION

POLICY-BASED FILE TIERING

Benefits
- Improves asset utilization
- Reduces future NAS purchases
- Lowers overall system cost
- Identifies non-critical data
- Improves or eliminates backup
- Simple – pay as you grow
HNAS/HUS FILE MANAGER OFFERS FLEXIBILITY

- We understand
  - Requirements to keep data onsite
  - When to move offsite
  - Management of tiers of storage

- We provide
  - Seamless data mobility to the cloud with Hitachi Cloud Services (flexible with others like Amazon)
  - Provide on- and off-premises tiers of storage
THE RIGHT CONTENT AT THE RIGHT TIME

USE HDS SERVICES TO MOVE YOUR INFORMATION FORWARD

CREATE AN INFRASTRUCTURE CLOUD

Transformation Services – define and implement operational best practices for service management

Data Protection Services – align protection, replication, and management policies to business requirements

MOVE TO THE CONTENT CLOUD

Content audit and infrastructure – classifies content: Identify what should stay onsite, what can go to the cloud

- Set ongoing operational standards for discovery and archive
- Provision resources for content governance
- Enable seamless migration and transition

OPTIMIZE YOUR DATA CENTER

Consolidate and virtualize – create virtual compute/storage pools

- Extend use of existing compute/storage assets
- Allocate and provision resources dynamically
HITACHI CLOUD SERVICES STOREFRONT

STOREFRONT, USER ADMIN, OPERATIONAL ADMIN

Storefront

Customer Admin
Enterprise Solutions
Integrated Solutions: Healthcare Clinical Repository, Video Surveillance, and Data Scientist Services

Enterprise Services
Advanced Search, Advanced Content Management, Enterprise Share/Dropbox, and Analytics

Content Services
Index and Basic Content Management

Archiving
Content Archiving, File Tiering, File Service, and Microsoft® SharePoint® Archiving
AN INTEGRATED HITACHI VISION FOR SOCIAL INNOVATION AND BIG DATA TOMORROW

INTEGRATED STRATEGY ACROSS HITACHI

Hitachi hybrid train system for the London Olympics

INNOVATIVE ANALYTICS:
Real-time sensor, ticket data, diagnostics

BENEFIT: Active machine maintenance reduces costs and increases safety for passengers

DECADES OF VERTICAL INDUSTRY EXPERIENCE

GLOBAL GO-TO-MARKET FOR BIG DATA OF TOMORROW SOLUTIONS

INFRASTRUCUTRE SYSTEMS GROUP

RAIL SYSTEMS
TRANSPORTATION AND CONTROL SYSTEMS

INFORMATION AND TELECOMMUNICATIONS DIVISION

SMART INFORMATION SYSTEMS
IT PLATFORM DIVISION

SEARCH, STORE, AND ACCESS

TRANSATION

SCALABLE INFRASTRUCTURE / PURPOSE-BUILT DATA ANALYTICS
Hitachi Transportation: Trains
- Track/train sensors
- Keep trains on schedule
- Proactive maintenance

Hitachi Power: Power Stations
- Telemetry from seismic sensors
- Time series data

Hitachi Construction: Excavators
- Operational data from sensors
- Insight for fleet managers

Hitachi Health And Life Sciences
- Clinical repository
- Medical images
- Collaboration and analysis

Big Data Tomorrow
LEARN MORE ABOUT HITACHI DATA SYSTEMS SOLUTIONS FOR “YOUR CLOUD, YOUR WAY”
HTTP://WWW.HDS.COM/SOLUTIONS/IT-STRATEGIES/CLOUD

TO LEARN MORE ABOUT HITACHI CLOUD SERVICE FOR CONTENT ARCHIVING
QUESTIONS AND DISCUSSION
UPCOMING WEBTECHS

- **WebTechs**
  - **Maximize IT for Real Business Advantage**, July 31, 9 a.m. PT, noon ET
  - **Separate Fact from Fiction When Making a Flash Decision**, Aug 7, 9 a.m. PT, noon ET

Check [www.hds.com/webtech](http://www.hds.com/webtech) for

- Links to the recording, the presentation, and Q&A (available next week)
- Schedule and registration for upcoming WebTech sessions
THANK YOU