



# EMC ATMOS

Manage Big Data in the  
Cloud

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# Big Data Challenges



## Unstructured Content

Prepare for digital universe explosion—34.2 zettabytes of growth 2020

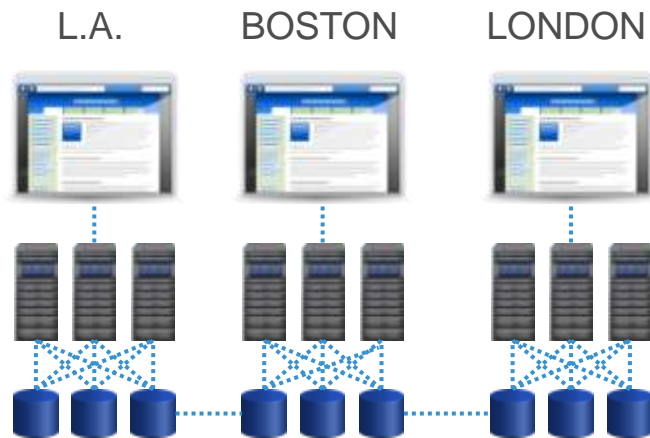
## Distributed Big Data

Aggregate data as a business advantage; manage as one system

## Accessibility

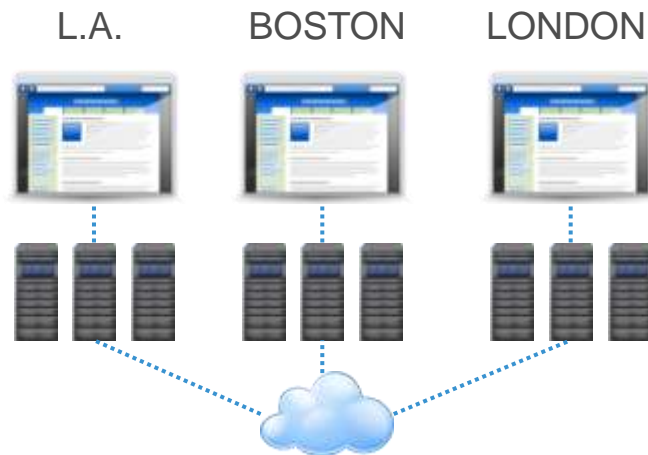
Make available around the globe—from any device—any location

# A New Approach for Distributed Big Data



Storage islands

- Disparate systems
- Manual administration
- One tenant, many systems
- IT provisioned storage



Single storage pool

- Single system across locations
- Automated policies
- Many tenants one system
- Self-service access



# EMC Atmos

BIG. SMART. ELASTIC.

# EMC Atmos

Efficiently store and manage distributed Big Data



A **single system** across locations

**Scales-out** seamlessly

**Automates** data placement, protection, and services

**Easy access** across networks and platforms

**Metering and self-service** across tenants

# Optimized to Handle Big Data Applications

CUSTOM APPLICATIONS    PACKAGED APPLICATIONS    SEAMLESS ACCESS

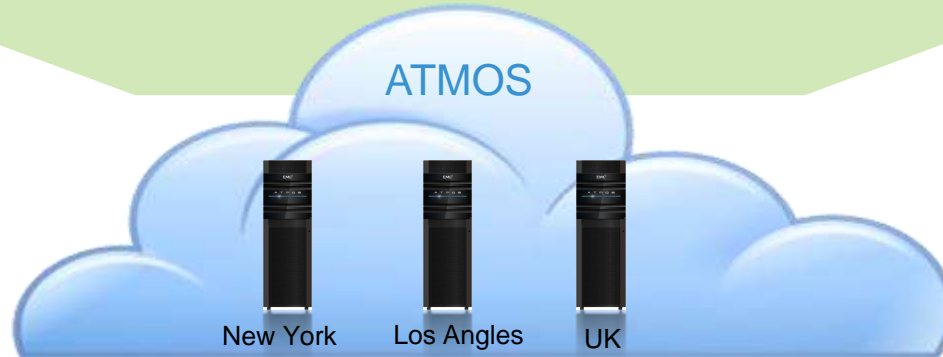


WEB SERVICES

FILE ACCESS

WAN or LAN

ATMOS



EMC<sup>2</sup>

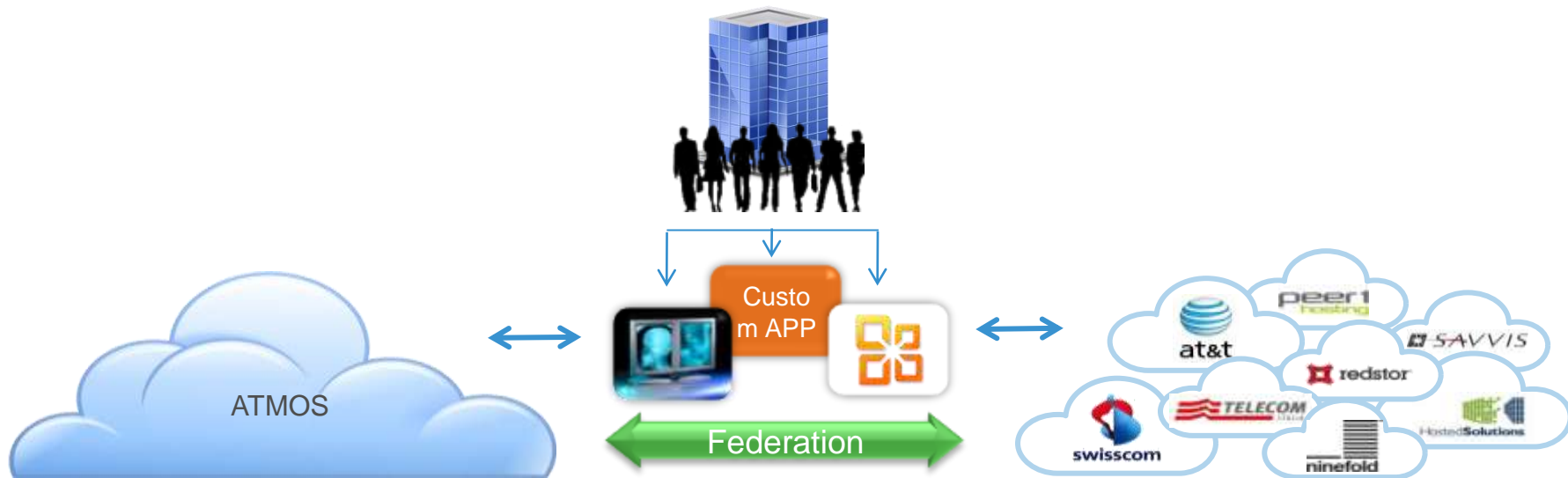
# Private, Hybrid or Public Storage Clouds

## Atmos for Private, Hybrid Clouds

- On-premises storage, with external extensibility
- Scalability, control, and flexible service level agreements

## Atmos-powered Public cloud services

- Public storage-as-a-Service built and delivered on Atmos
- Internet-accessible, on-demand storage





# EMC Atmos

## Capabilities



# Aggregate Distributed Big Data

A single system across locations



- Global namespace
- Common view independent of location
- Central management and automation
- Single pane of glass across systems

# Easily expand storage

Scale out seamlessly



- Expand capacity and locations
- Increase performance
- Add applications and tenants

# Make Big Data Smart

Automate data placement, protection and services

- Metadata drives business decisions
- Flexible protection methods
- Built-in data services

## Policy A.

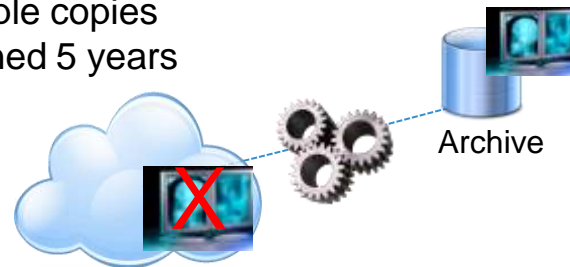
“Status=UserPaid”  
Multiple copies  
multiple sites



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## Policy B:

“Modality=MRI”  
Multiple copies  
retained 5 years



# Make Big Data Accessible

Easy access across networks and platforms

- Web services for next-gen apps
- File-based access for traditional apps
- Access via Windows, Linux, Web, mobile devices



# Atmos Deployment Models



## Purpose-built hardware

- Standard components—factory configured, racked, and cabled
- Optional high availability and redundancy

WS2-120



Small/Medium Compute

WS2-240



Dense Compute

WS2-360



Capacity

Intel Xeon 5500 "Nehalem"

2 TB low-power SATA drives

- 60 TB cloud entry point
- Up to 480 TB per rack
- Up to 720 TB per rack

## Software on VMware

- Certified with EMC VNX, VMware-supported servers, and third-party storage

### Atmos Virtual Edition



Flexibility

VMware vSphere

NFS/FC/iSCSI Storage

- Starts at 10 TB
- Up to 960 TB per site



# Offer Storage-as-a-Service

Metering and self-service



- Single infrastructure—multiple tenants
- Users manage policies and storage
- Meter capacity and usage for chargeback

# How businesses are using Atmos today



Web delivered services

Storage-as-a-service

Archive

# EMC Atmos Cloud Storage Portfolio



## GeoDrive for Windows and Linux

- User or application access
- Installs on Windows or Linux

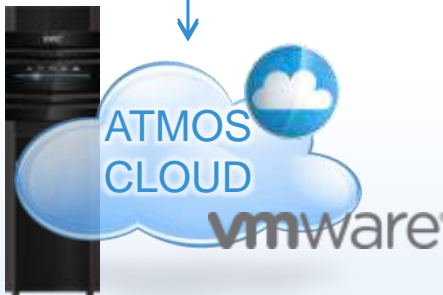


## Atmos Cloud Delivery Platform Software

- Software to deliver storage-as-a-service
- Enables metering and self service

APP / USER STORAGE ACCESS

STORAGE-AS-A-SERVICE



## Atmos

- Atmos cloud storage software
- Software/hardware appliance
- Scale out architecture

## Atmos Virtual Edition Software

- Atmos cloud storage software-only
- Runs in VMware ESX environment



# Integrated Partner Solutions Extend your Storage Needs

Custom Applications



Archive to the Cloud



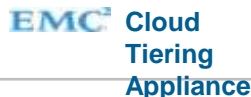
Cloud Backup and Recovery



Content Management and Collaboration



File Tiering



Medical Imaging Archive



Mobile and File Sync and Share



Server Gateway



WAN Optimization and Fast File Transfer



# Web Delivered Services

## Vistaprint



### Business Benefits

- Automated service levels and cost by consumer type
- Cut storage costs
  - \$1.4M / year storage savings
  - \$300,000 / year bandwidth savings
- Continuous availability
  - 100% up time for uploads
  - Mapped to customer location

### Situation

- 100%+ digital media growth
- Access for globally distributed applications
- Competitive pressures to retain low cost/high service
- Provide different levels of service by customer type

### Solution

- EMC Atmos cloud storage across 3 locations
- \$1.4M / year storage savings
- \$300,000 / year bandwidth savings
- 100% up time for uploads

# EMC Atmos Resources and Tools



- Datasheets, White Papers, Videos
  - [www.emc.com/atmos](http://www.emc.com/atmos)
- Stay up to date –Twitter, Blog
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  - Blog : [www.atmosonline.com](http://www.atmosonline.com)

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