



The Petabytes are Coming

Is Your Data Center Ready?

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September 26, 2008
12:00 p.m. Eastern/9:00 a.m. Pacific
60 Minutes

New Business Models Require New Infrastructure

Photo Sharing & Finishing Services



Streaming Video Services

Security & Surveillance



Digital Animation

Genome Research



Enabled by
Globalization of technology's reach
Faster, better, cheaper technology



Energy Exploration



Online Social Communities

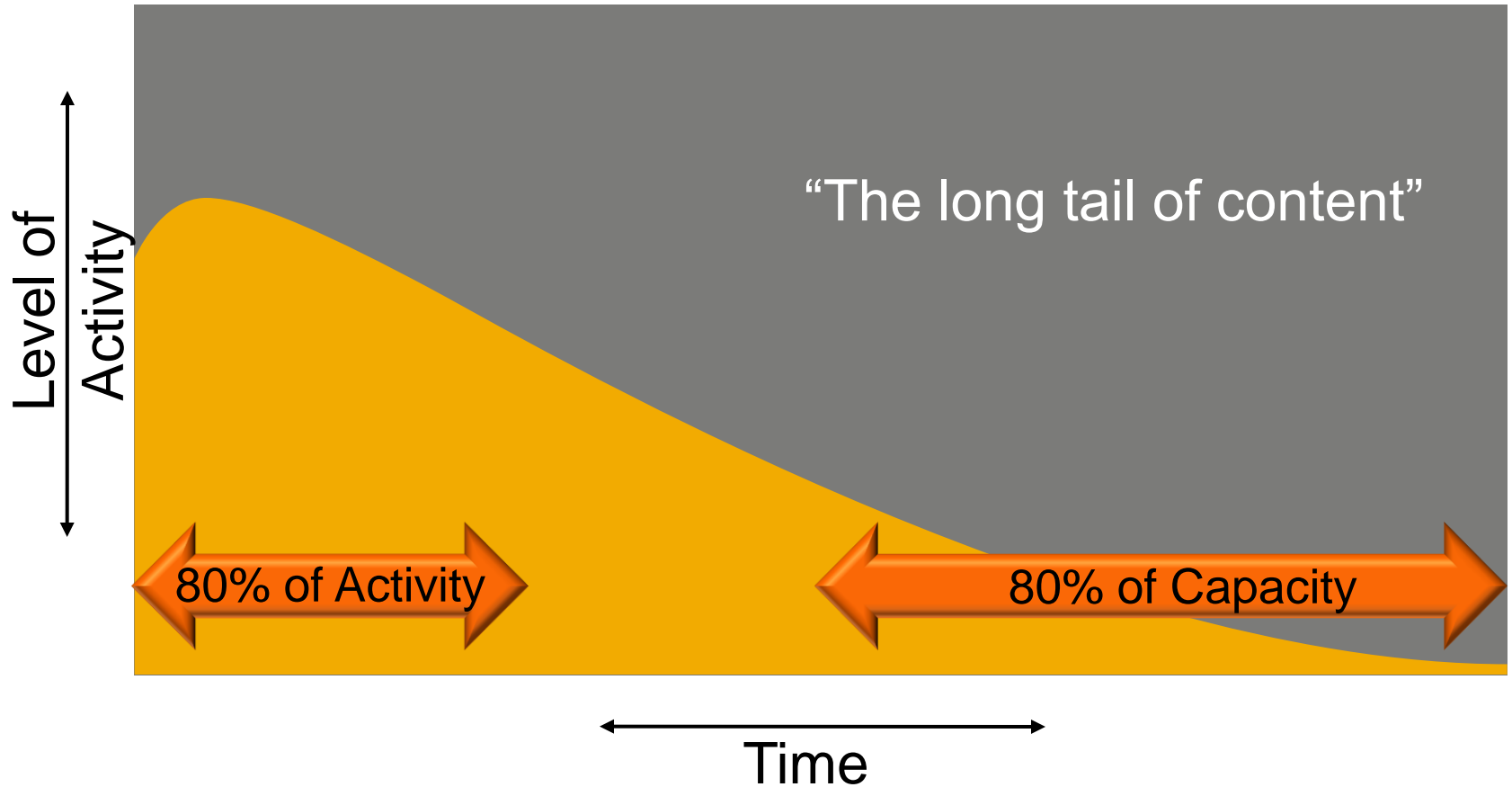


Music and Ringtone Services

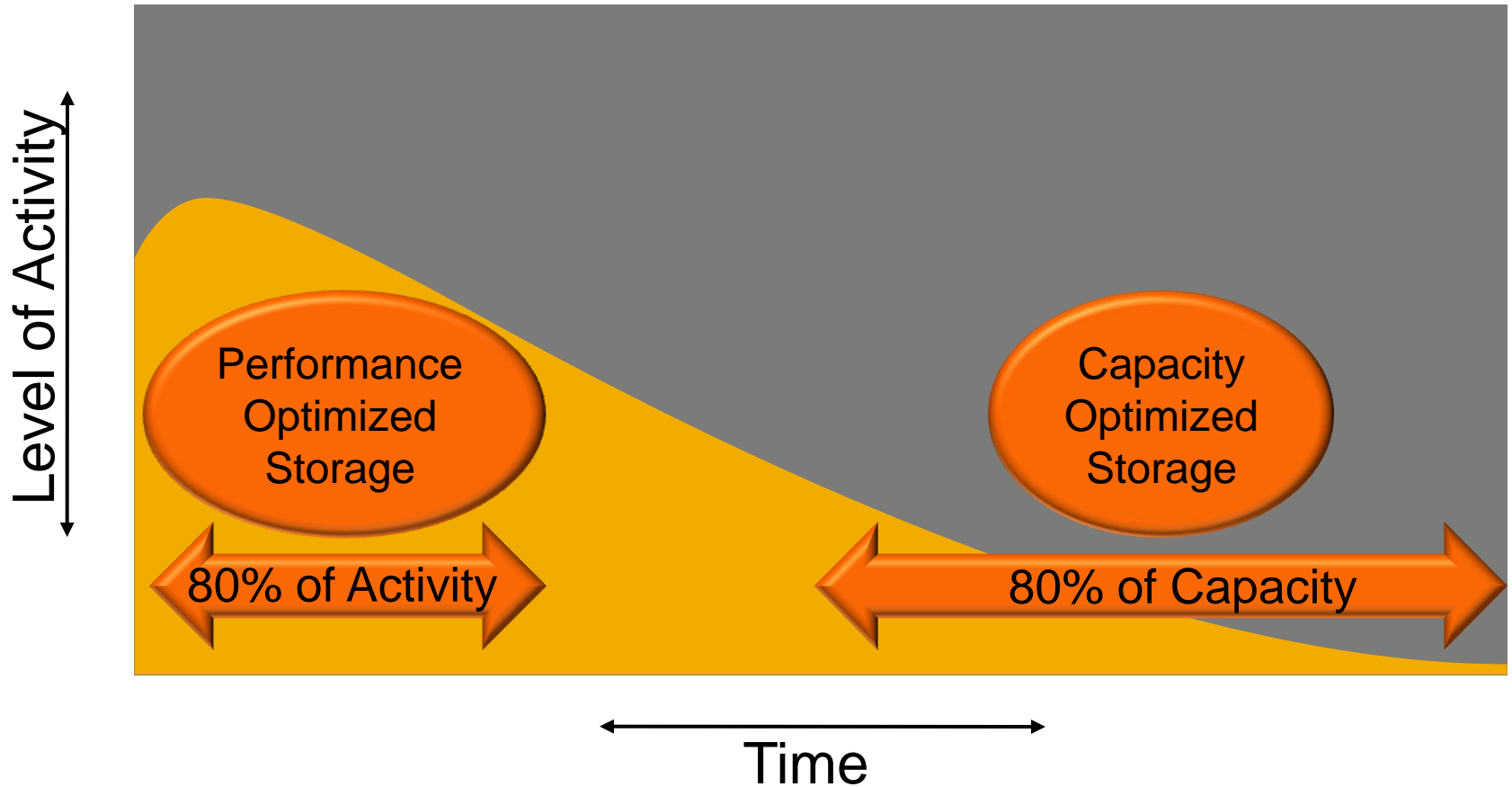


Medical Imaging & Analysis

Life as a File...



Gives Rise to A New Storage Approach...

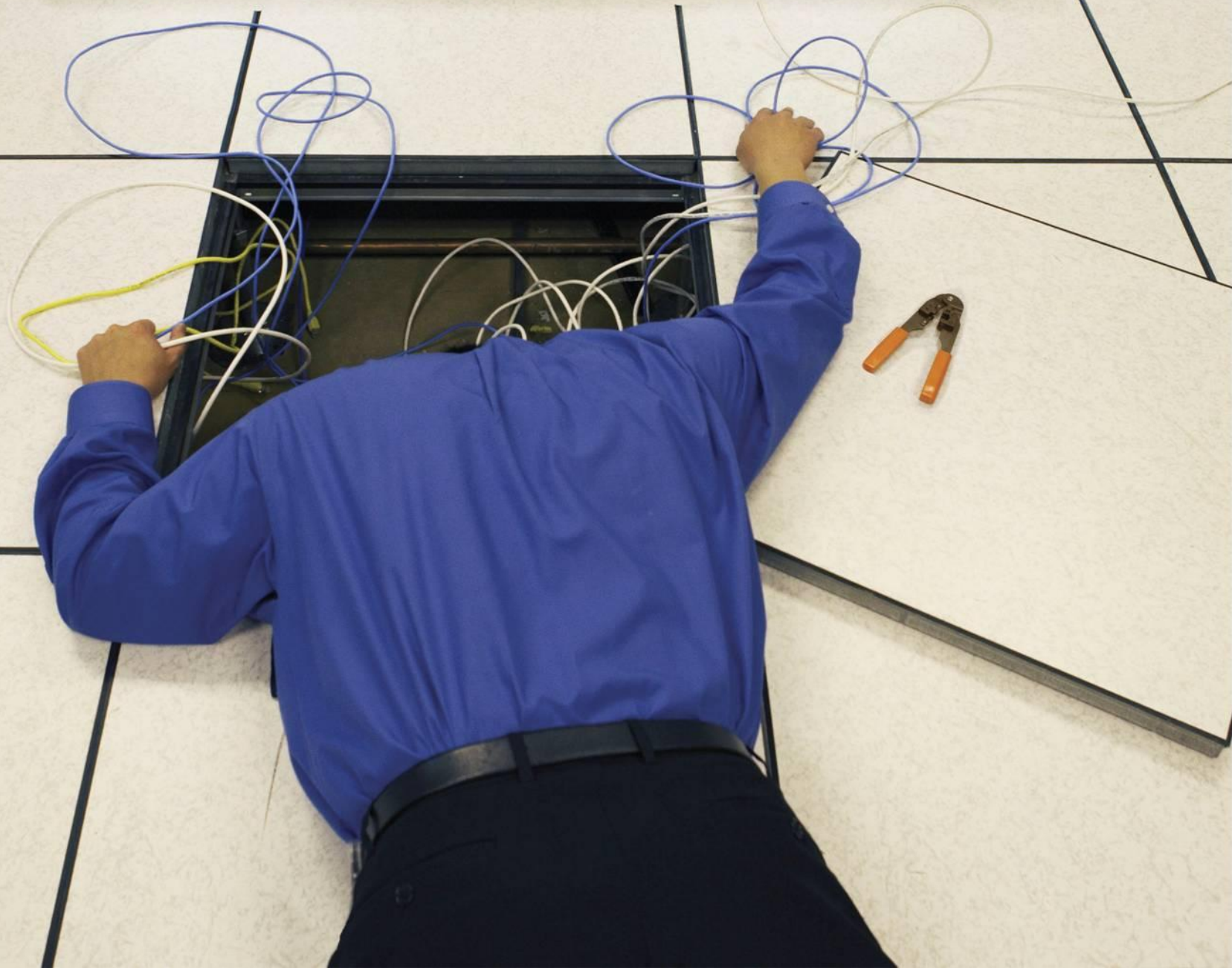


Business Challenges

1. The content must always be available.
2. The content is always growing.
3. Storage of the content must be radically more affordable.



YOU CAN DO-IT-YOURSELF

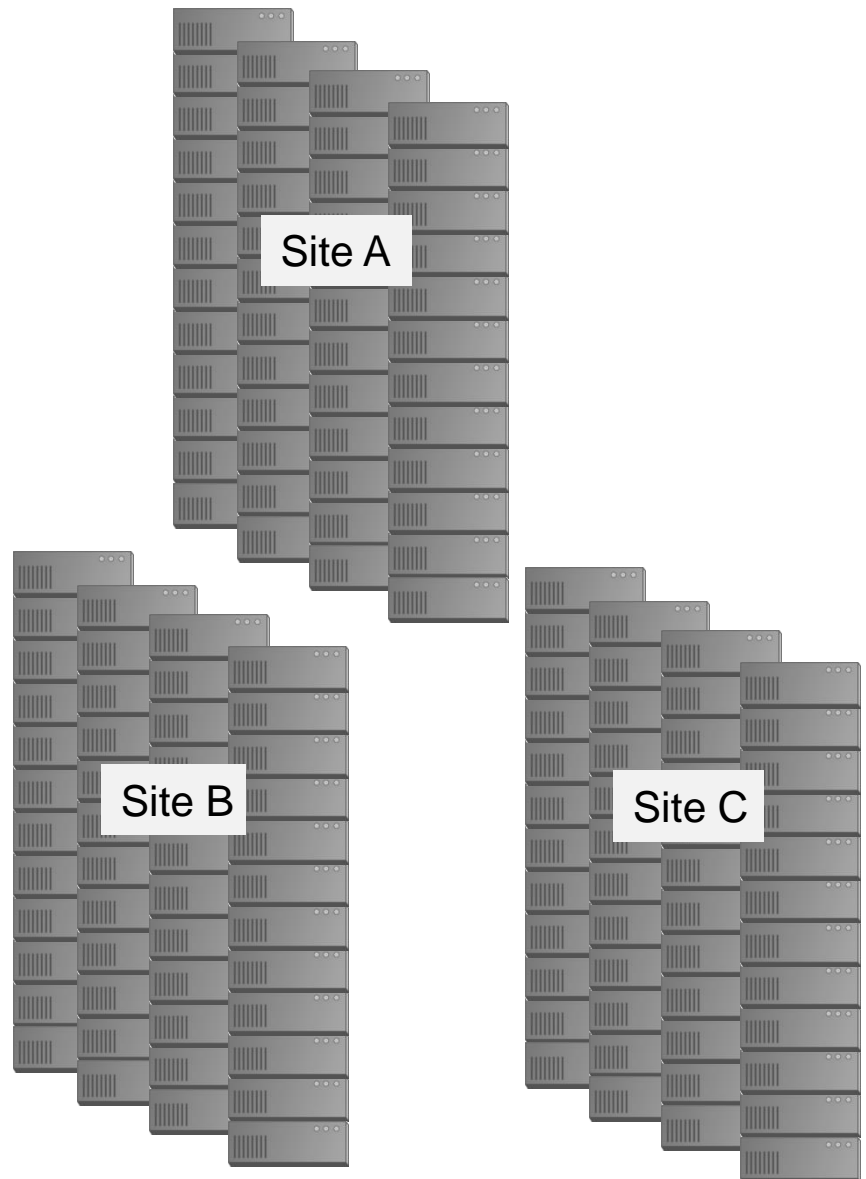


Grid Approach

Building block component:
Industry Standard Servers with
Direct Attached Storage

Issues:

- Density, utilization of floor space
- Power consumption
- Tightly coupled CPU and storage
- Infrastructure - networking
- Triple replication often required
- Separate software to virtualize and manage resources
- High staffing requirements



Grid Approach



More servers More drives More space More power
More people

SQUARE PEG, ROUND HOLE

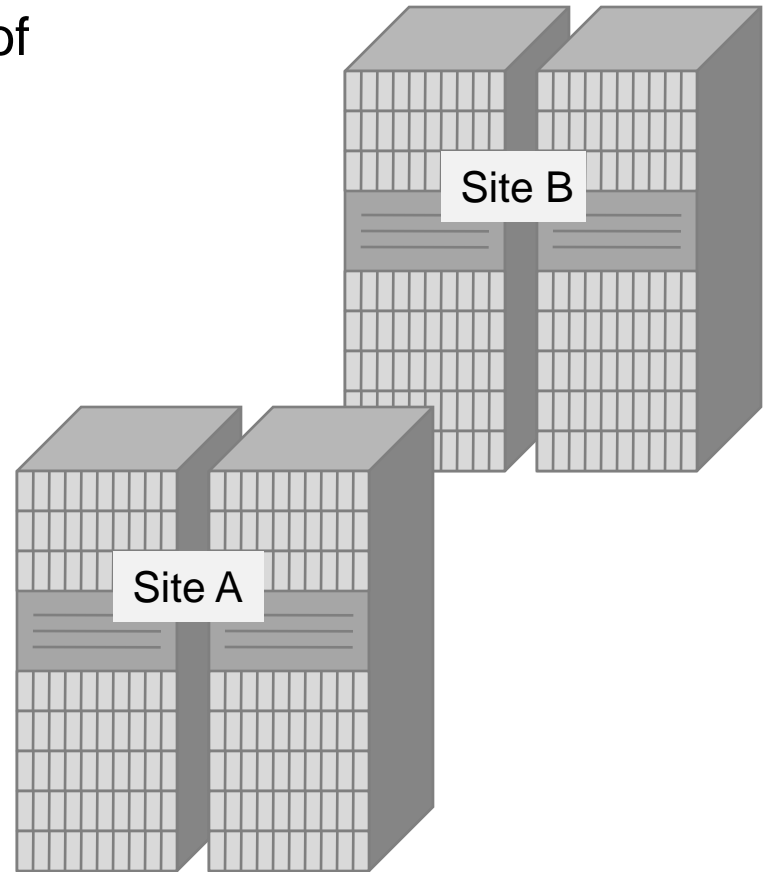


Monolithic Approach

Building block component:
NAS Filers or NAS Gateways in front of
SANs

Issues:

- Density, utilization of floor space
- Power consumption
- Infrastructure – networking and SAN
- High specialized staffing requirements



What if...?

- You could build a **very large** storage infrastructure which is highly available?
- You could **rapidly expand** those systems by 100's of terabytes at a time with minimal effort?
- You could do this at **industry-leading price/terabyte** and **terabyte/cubic foot**?
- You could **independently scale** your **storage capacity** and **performance**?
- You could use this system to support not only your file system needs, but also your general **application** needs?

HP 9100 Extreme Data Storage System

Solves the challenges, enables the opportunities

Extreme scalability

- Ability to scale performance and capacity independently
- Non-disruptively add servers and storage online with a single command

Unified manageability

- System configuration and control from single management interface
- Reduction in time and staff required to deploy and maintain system as a whole
- Elimination of application tier

Extreme affordability

- Archived materials can now be moved to more affordable content on demand system
- Lower acquisition cost
- Lower management costs



HP 9100 Extreme Data Storage System

Integrated hardware/software solution

1. Performance Blocks

HP's Industry Leading BladeSystem

- Up to 12.8 cores/U
- Starting at 4 blocks, expand up to 16 blocks
- Flexible industry standard platform



2. Capacity Blocks

Industry Leading Density

- Up to 12TB/U
- Starting at 246TB, expand to 820TB
- Scales in 82TB Storage Blocks



3. Software

Proven in Content Rich Environments

- Integrated system management
- Multiple access protocols
 - NFS, HTTP, Application IO
- Applications can run directly on blades



The Punch Line...

HP 9100 Extreme Data Storage System

- Delivers up to **140%** better floor space utilization
- Reduces number of managed switch ports by up to **3,700%**
- Delivers dramatically higher levels of affordability

Acquisition cost under \$2/TB

Reduced operational costs

Power & Cooling



Living Proof



- Over **6 Petabytes** today
- Growing to **20 Petabytes** in 2010
- **Hundreds** of HP Scalable NAS nodes
- **Three** separate data centers
- Managed by a very small team (**Petabytes per admin**, not terabytes)
- Built on HP
 - HP StorageWorks
 - HP Scalable NAS
 - HP BladeSystem

Why HP?

- We have the leading product for this space
- Power of HP portfolio
 - Portfolio of industry standard servers, storage and software to deliver packaged solution
 - Volume economics of value solution
- HP has experience building extremely scalable systems
- HP has a worldwide presence and sales force
- More customers trust their data to HP than to any other vendor



HP 9100 Extreme Data Storage

Enabling new business models



Extreme Scalability

Unified Manageability

Extreme Affordability

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Q&A



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