Exposing the Cloud:
It's More than a Buzzword

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Exposing the Cloud:
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Discussion Agenda

- Cloud Storage Target Uses – When is it right? When is it wrong?
- Specific Use Cases – Data Backup, Archiving
- Case Study – Cloud Storage Transformation
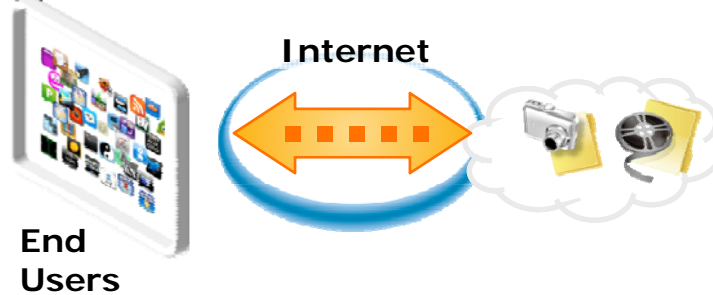- What To Look For In A Cloud Provider – They Are Not All Alike

Target Use Cases for Storage as a Service

Internet web content

Web 2.0 user-generated content, digital catalogs, public files, iPhone app content

Internet

End Users

Intranet file storage

Employee portals, digital libraries, document collaboration, training media

Corporate Network

Employees
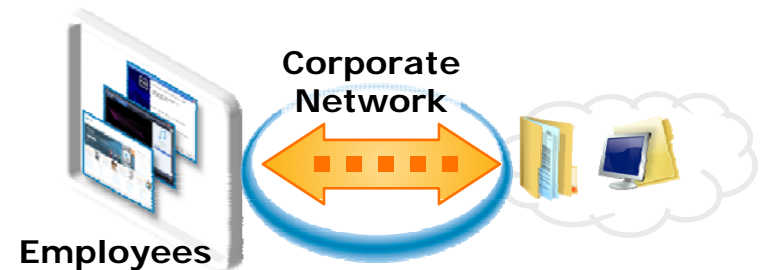
Long-term data archival

Historical records, email messages, documents or other unstructured content

Corporate Network

Archive Manager
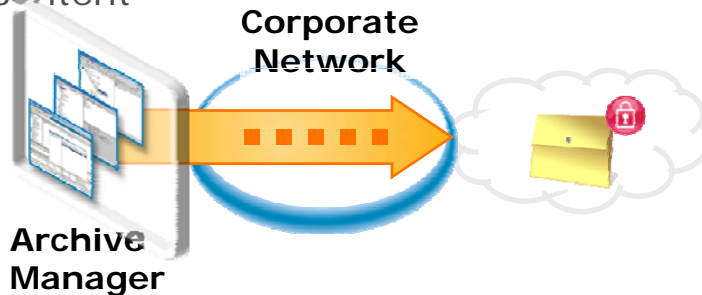
Short-term data sharing

Audits, compliance, discovery, M&A, joint ventures, court cases, data escrow
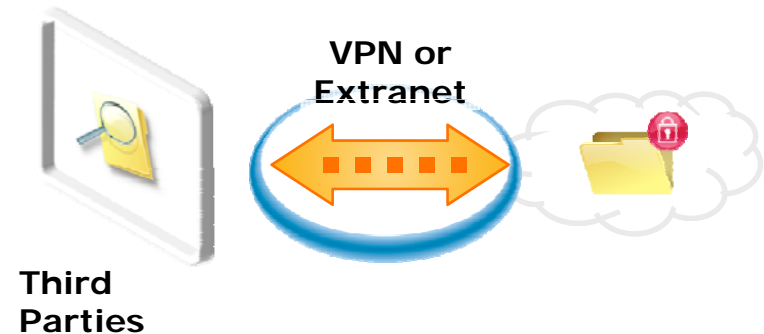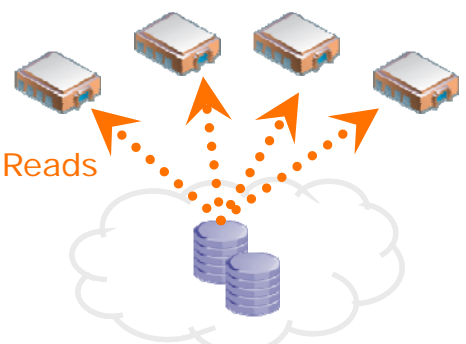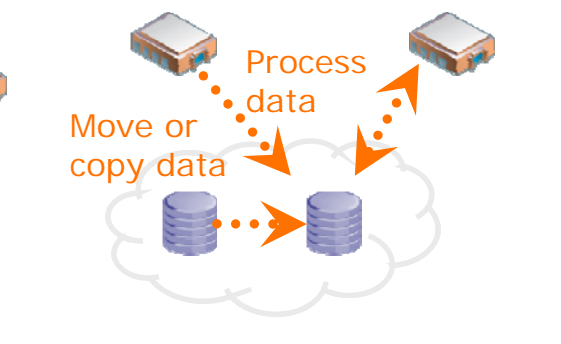
VPN or Extranet

Third Parties

Where does Cloud Storage as a Service fit?

Choosing the right storage solution depends on your data and anticipated usage; Cloud Storage is often a good fit for:

Distributed Reads	Distributed Writes	Storage Container
Fixed content is accessed by many servers or user systems across the WAN	File content is uploaded, copied or streamed from many sites on the WAN	An on-demand 'bucket' holds data for short term access, analysis or processing
▪ Web content (download) ▪ Streaming media ▪ Distributed file shares	▪ Web content (upload) ▪ Data backup or archival ▪ Video monitoring	▪ Data warehousing ▪ Development, testing, QA ▪ Third-party audit/discovery

When is Cloud Storage As A Service right for you?

Flexible, on-demand data storage capacity meets critical business needs:

Business Applications
✓ Web application content
✓ Streaming media
✓ Distributed file shares
✓ Video surveillance
✓ Medical imaging

Compliance & Protection
✓ Data backup and restore
✓ Disaster recovery
✓ Long term data retention
✓ Audits and discovery

Operational Support
✓ Data warehousing
✓ Development or testing
✓ Migrations or transitions
✓ Temporary storage area

High-performance Storage remains a better fit for:

Highly Transactional
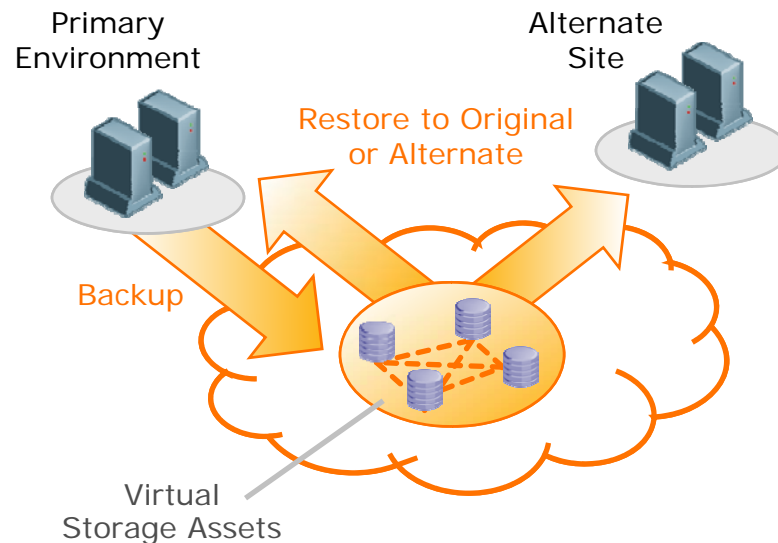◉ Database Transactions
◉ OLTP
◉ e-Commerce
◉ Real-time data

Cloud Storage as a Service can be used to protect your data

Plug into Cloud Storage and use your existing software to back up critical data from servers, PCs and laptops across your business

Primary Environment

Alternate Site

Restore to Original or Alternate

Backup

Virtual Storage Assets

Backup → Retain → Restore

Data Backup Use Case

- Connect your **backup software** application to Cloud Storage using Web Services API

- The backup master server at your site manages the overall backup operation for systems across your enterprise

- Client backup software on individual systems can send backup data directly across the network to Cloud Storage

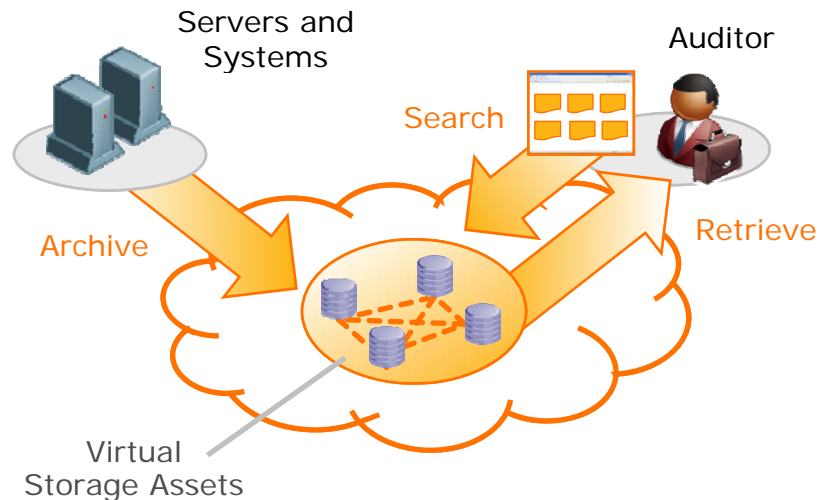- In case of outage or data loss, files can be restored to the original system or to an alternate environment

Cloud Storage as a Service can be used to archive your data

Plug into Cloud Storage and use your existing software to archive aging data from servers and PCs across your business

Servers and Systems

Auditor

Search

Archive

Retrieve

Virtual
Storage Assets

Copy → Retain → Discover

Data Archival Use Case

- Connect your **archival software** application to Cloud Storage using Web Services API

- Based on rules that you specify in your archival software, data is copied or moved to the Cloud Storage online archive

- Archived data is kept secure in Cloud Storage for as long as you need it

- You can set rules in your archival software to automatically delete data after the retention requirement is met

- In case of an audit or legal discovery, the data is fully searchable and retrievable

A satellite imaging company finds success with Cloud Storage as a Service

Business Challenge

- Securely distribute content globally
- Ability to integrate into current operations
- Storing 100's of TBs in 12 months
- Large files often exceeding 10 GB each
- Need to easily access the data

Solution

- On-demand image storage using Synaptic Storage as a Service
- Domestic US, expanding to EU and A/P

Business Value Delivered

- Resources and cost alignment
- High scalability and performance
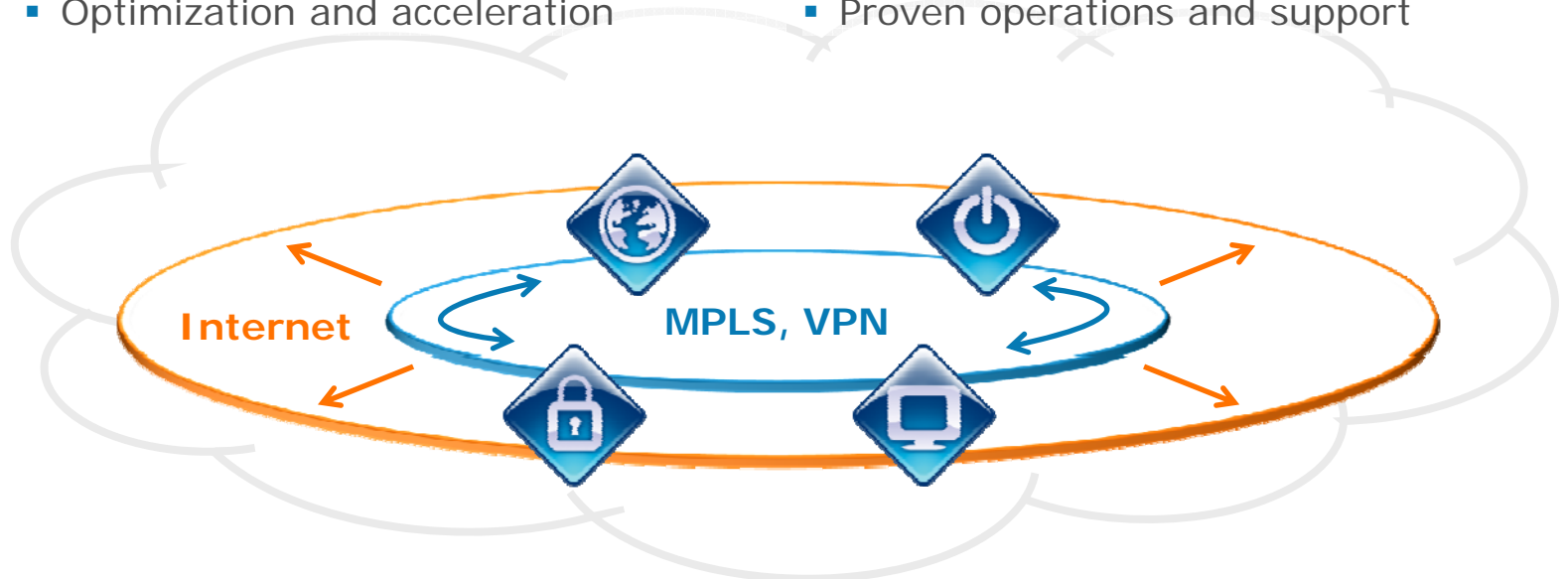- Lower burden on internal IT

What to look for: Cloud Storage providers

Performance

- Big bandwidth, low latency
- Globally consistent experience
- Optimization and acceleration

Reliability

- Redundant, scaled architectures
- Data center availability over 99.999%
- Proven operations and support

Internet

MPLS, VPN

Security

- Integrated, multilayer security model
- Intrusion detection and prevention
- Network-resident DDoS protection

Control

- Diverse networking choices
- Flexible, open APIs
- Enterprise and SMB billing options