Thinking Out Cloud
Exploring Backup-as-a-Service

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Agenda

- Market Landscape Overview
- Customer perspective
- Why or why not adopt BaaS?
- Making an educated investment
- Resources
What is Backup as a Service?

• Pure software-as-a-service model
  – 3rd party vendor providing remote access to off-premises software and shared storage resources for data backup/restore over a WAN connection

• Hybrid model
  – 3rd party vendor providing remote access to off-premises software and shared storage resources for data backup/restore over a WAN connection AND maintain an additional copy of the backup data located on-premises.

• Both are considered cloud services
Use of Cloud Services

Primary Site

- LAN
- Backup Server

WAN

3rd Party “Cloud”

Management Interface

SaaS (D2C)

Hybrid Backup (D2D2C)

Primary Site

- LAN
- Local Storage Appliance

WAN

3rd Party “Cloud”

Management Interface

Electronic Vaulting (D2D2C)

Primary Site

- LAN
- Backup Server

WAN

3rd Party “Cloud”

Management Interface
What is Driving Backup-as-a-Service?

• The cloud
• IT staffing pressures
  – Levels
  – Focus on core business support
• Reducing CAPEX/OPEX
• Two-for-one BC/DR opportunity
Customer Perspective
(based on ESG’s 2011 IT Spending Intentions Survey)

• IT budgets continue to stabilize
• Staffing largely to remain flat
• IT investment justification
  – Reduce OPEX, business process improvement, ROI
• Managing data growth and improving backup/recovery
Are you a candidate for BaaS?

- Sweet spot for pure SaaS model
  - 2-4TB of data
  - Recovery times not as strict
Are you a candidate for BaaS?

- Hybrid: Medium to Large Enterprise
  - >4TB
  - Tighter SLAs

![Hybrid Backup (D2D2C)]

Primary Site

Local Storage Appliance

3rd Party "Cloud"

Management Interface

WAN
Good and Bad

- Top online backup concerns
- Top drivers of online backup usage
- Making an educated investment
Top 10 reasons organizations have no plans to utilize online backup

(Percent of respondents, N=194, multiple responses accepted)

- Data privacy/security concerns: 51%
- Don’t see the benefits (i.e., satisfied with current on-site process): 41%
- Regulatory compliance concerns: 28%
- Performance concerns (i.e., impact on backup and/or recovery): 20%
- Organizational/cultural resistance: 20%
- Concerned about long recovery times: 20%
- Don’t have adequate network bandwidth: 18%
- Data volumes and/or growth rates don’t make it feasible: 18%
- ROI not compelling enough: 18%
- Potential complexity it brings to backup process: 15%

• Security
• Access
• Control
Top 10 factors driving adoption of online backup services
(Percent of respondents)

- Ability to store data remotely for disaster recovery: 37% (Current users) 41% (Planned adopters)
- Predictable costs (i.e., simpler budgeting): 28% (Current users) 36% (Planned adopters)
- More cost-effective than in-house solutions and processes: 25% (Current users) 34% (Planned adopters)
- Improved service levels: 29% (Current users) 30% (Planned adopters)
- Ability to eliminate on-site backup hardware and software: 17% (Current users) 30% (Planned adopters)
- Service allows us to take advantage of advanced technology: 24% (Current users) 29% (Planned adopters)
- Better management/reporting capabilities: 27% (Current users) 32% (Planned adopters)
- Improved support for ROBO locations: 27% (Current users) 24% (Planned adopters)
- Offload regulatory compliance requirements to a service provider: 17% (Current users) 17% (Planned adopters)
- Facilitates chargeback to internal business units: 12% (Current users) 16% (Planned adopters)
Making an Educated Investment

• Provider selection, ESG segmentation
  – Small/hands off
  – Regional
  – National
  – Large enterprise

• Range of Services
  – Data protection assessments
  – DR planning assistance
  – Recovery services and options
  – Traditional consulting services
Making an Educated Investment

• Security, access, and control
  – “Hire” your provider as you would a member of your staff
  – Fully understand the SLA you are negotiating
  – Data center compliance
    • SAS 70 Type I or II
    • Visit the facility if possible
Making an Educated Investment

• Choosing the right technology
  – Agentless
  – Backup methodology
    • Incremental forever
    • Block-based or file-based
    • Deduplication
    • Encryption
  – Seeding options
    • Onsite appliance/hard drive
  – Physical and virtual machine backup?
Making an Educated Investment

• All about recovery
  – Single file
  – Volume
  – Application
  – Bare metal

• Recovery options
  – Overnight data on disk
    • Is it encrypted?
  – Onsite recovery services (consulting)
  – Physical to virtual recovery?
Backup Delivery Models

**Licensed Software**
- Perpetually-licensed software
- Dedicated end-user infrastructure
- Managed locally

**Electronic Vaulting**
- Perpetually-licensed software
- Dedicated end-user infrastructure
- Managed locally
- Additional off-site copy on shared off-site storage

**Managed Service**
- Perpetually-licensed software
- Dedicated end-user infrastructure
- Managed by third-party from off-site location

**Backup SaaS**
- Subscription service
- Shared off-site infrastructure
- Managed at off-site location

**Hybrid SaaS**
- Subscription service
- Shared off-site infrastructure
- Managed at off-site location
- Additional on-site copy
Pros and Cons

• No HW/SW costs
• Fully managed
• Laptop backup
• Reduce OPEX
• Much easier to budget
• Easy as getting cable

• Backup performance
• Too much data
• RTOs too aggressive
• Data not local (for pure SaaS model)
• ROI doesn’t fit
Other Considerations

• Disaster Recovery
  – Data shipped securely offsite
  – Some providers offer application recovery (quasi HA)

• BaaS providers
  – Many provide other complementary services
  – Multiple data centers
Resources

- ESG Market Landscape Reports
  (Free for end-users)
  - Backup-as-a-Service
  - BC/DR Replication Technologies

For more information, please contact:

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Transforming the Information Infrastructure: Build, Manage, Optimize.