Tivoli Talk

How to Compete and Win v HP with Tivoli Storage Manager and Tivoli Storage Productivity Center

November 11, 2010

Tivoli software

How HP Attacks

- **Global brand**
- **Leads with Servers**
- **Focus on SMB**
- **Generates storage buzz with mostly hardware acquisitions**
  - **AppIQ** - acquired in 2005
    - Heterogeneous SRM
  - **PolyServe -** acquired 2007
    - Clustered file services
  - **LeftHand Networks** - acquired in 2008
    - iSCSI SAN appliances
  - **IBRIX** - acquired in 2009
    - Scale out file services
  - **3PAR** - acquired in 2010
    - Mid and high end storage arrays

- **HP corporate messaging**
  - "Converged Infrastructure"
  - Servers, networks and storage from a single supplier with management software and Virtual Connect to put them together
- **Selling the Future**

How HP Positions it's Software Data Protection Products

- **HP Data Protector**
  - Traditional tape and disk backup for enterprise and SMB servers
- **HP Data Protector Express**
  - "Express Basic" free with all HP tape products – limited to tape, upgradeable
  - "Express" for multi-system, disk, d2T, VTLs
- **HP Data Protector Notebook Extension**
  - Workstation backup online/offline
- **HP StorageWorks RDX Removable Disk Backup System**
  - CDP for a single system
- **HP Application Recovery Manager Software**
  - Application support of HP EVA and XP hardware flash copy
- **HP StorageWorks Storage Mirroring Software**
  - Windows and Linux host based replication and failover
  - OEM of Double-Take

Perspective on HP Data Protector

What Data Protector (OmniBack II) was designed for

- Application systems are in the data center

  and

- Backup to tape

  and

- Backup performance

Perspective on Data Protector – What has Changed

What Data Protector was designed for

- Application systems are in the data center and remote locations

  and

- Backup to tape for archive, disaster recovery and some non-critical applications with most data now going to disk

  and

- Backup performance to meet windows and restore performance to meet business service level requirements

HP Response to Changes – First Attempt

- Data Protector legacy architecture - differential and incremental backups that require periodic fulls
- Periodic full backups
  - Need large amounts of CPU and bandwidth
  - Often the cause of upgrades to a higher capacity and more expensive network
- Synthetic backup (and Virtual Full Backups)- the first attempt to fix this gap
  - Partial backups combined at the Data Protector server
  - Multiple restrictions on use
  - Don't eliminate periodic fulls – or even their frequency
  - Resources must be sized for periodic fulls – or data exposure results

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- Tivoli Storage Manager uses incremental forever and avoids the need and problems associated with periodic and synthetic full backups

Weakness of Data Protector – Why Synthetics Are Ineffective

Data Protector Synthetic and Virtual full backups have serious limitations

- What HP says about Synthetic fulls
  - Synthetic backups consume space – full copies are kept after each merge
  - Virtual Full backups use pointers and eliminate the need for multiple copies
    - Virtual Full backups space saving is not effective with small files
    - Limited to the use of a single file library
  - Unavailable for restores while accessing media
  - Does not support databases - file system only
  - No export or import of media
  - No encryption
  - When a chain of Synthetic or Virtual Full backups is broken a full backup is required, resources must be sized for periodic fulls – or data exposure results
  - Impact on performance
    - Object consolidation overhead
    - Longer restore times for different version than last consolidated
    - Other vendors position synthetic backups for remote locations with low change and in cases of high change rate synthetic backups are no more helpful than a traditional full backup

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- TSM does not need to do synthetic full backups and avoids these limitations.

HP Response to Changes – Second Attempt

- OEM of Sepaton VTL as HP Virtual Library System
  - VTL in 2005 targeted for the data center
  - Added deduplication in 2008
- Server side only VTL with deduplication does not solve Data Protector problems
  - Data Protector still needs to do periodic full backups
  - Does not solve: remote location WAN bandwidth, VMware, ease of use for SMBs or need for quick restores
- Hardware deduplication more expensive than backup software deduplication with commodity disk

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- Tivoli Storage Manager provides
  - Both client side and server side deduplication that can be used individually or together
  - Many times more scalability than HP Data Protector with HP VLS with less server hardware
  - A single infrastructure for enterprise backup with lower cost and complexity

HP Response to Changes – Third Attempt

- HP D2D VTL
  - First announced in early 2007 targeted for the remote location and SMB
  - Updated in June 2010 with deduplication feature “StoreOnce”
  - Models with 3 to 36 TB back end capacity
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Storage Resource Management

HP Storage Essentials

HP at a glance

- Full systems vendor with systems, storage, services and software

How HP attacks

- HP leverages large install base and take advantage of customer loyalty to bundle
- Positions Storage Essentials as having strengths in Chargeback, Email and Database Management against IBM TPC.
- HP Enterprise Services (EDS) promotes integration with Opsware based HP Operations Orchestration with pre-configured workflows (called “Opsflows” in OO) and custom automation via OO Studio Interface with SE CLI

How to Win against HP

- Warn the customer
  - Installation can be difficult and lengthy
  - Interface can be complex to use
- Focus on advanced storage planning and provisioning of TPC for IBM storage that HP can’t match
- Stop HP from being the strategic storage vendor and dragging along HP Storage Essentials by teaming to go after non tier 1 storage opportunities
  - Slash storage Capex by extending life of current mid range disk systems with IBM Storwize V7000 or SVC and drag TPC
  - Reduce storage Opex with TPC with TSM to archive stale data off high cost disk
- Reduce the complexity in mixed vendor storage environments
  - Where multiple SRM tools already installed and customer can’t afford to replace, work with IBM GTS to sell IBM NovusCG Storage Enterprise Resource Planner (SERP) to unify the clients disparate SRM tools into a coherent management reporting infrastructure and contain the influence of HP’s SRM product.

HP Storage Essentials

1. **Storage Essentials requires a full agent**
   - Storage Essentials uses a host agent to gather host related info requiring agent deployment and maintenance
   - TPC Storage Resource Agents (SRA) provide an alternative to full agents for disk capacity and asset reports
2. **Storage Essentials File System Viewer/ Backup Manager have limited ability to clean up data**
   - File System View is only Windows and Solaris , just identifies candidate files and cannot delete or archive them
   - TPC has Windows, Solaris, HP-UX, AIX and Linux to find unwanted data , archive to TSM and then delete them
3. **Storage Essentials lacks support for critical IBM application, HA and storage software**
   - Storage Essentials lacks support for IBM DB2, GPFS, IBM HACMP and IBM SDD
   - TPC supports DB2, IBM GPFS on AIX, IBM SDD and EMC's PowerPath (multi-pathing software)
4. **Storage Essentials is weak in enterprise scalability**
   - Use of full agents
   - TPC Storage Resource Agents (SRA) have replaced full agents on all supported OSes
5. **Storage Essentials lacks support for IBM enterprise disk and SVC**
   - Storage Essentials optional Provisioning Manager wizard for volume, path and zone planning does not support IBM SDD multi-pathing , does not provide complete end-to-end automated provisioning for the IBM storage environment. And does not have disk array optimization.
   - TPC has basic and advanced support for IBM enterprise disk Storwize V7000 and SVC for Disk Configuration, Disk Monitoring, SAN Planning, Bottleneck Analysis, Thin Provisioning and Replication Management
6. **Storage Essentials lacks integration with IBM Tivoli data center management tools**
   - Storage Essentials is focused on managing storage with the only tie into broader IBM Tivoli systems management being SNMP traps and e-mail alerts
   - TPC is integrated with Tivoli Provisioning Manager, Tivoli Storage Manager, Tivoli IT Monitoring and Tivoli Enterprise Portal, Tivoli Application Discovery and Dependency Mapping and Tivoli CCMDB and Tivoli NetCool/OMNIbus

Solutions To Consider Selling Competitively

- **Storage Infrastructure Management**
  - IBM Storwize V7000, IBM SAN Volume Controller and IBM Tivoli Storage Productivity Center
- **Tiered Storage Management**
  - IBM Storwize V7000, IBM SAN Volume Controller, IBM Tivoli Storage Productivity Center and IBM Tivoli Storage Manager
- **End-to-End Disk Management**
  - IBM Storwize V7000, SVC, TPC, TSM, TPM, SPM, CCMDB
- **Datacenter Event and Configuration Management**
  - IBM Tivoli Netcool OMNIbus, TPC and IBM Tivoli Change and Configuration Management Database (CCMDB)

Questions

Supporting Tivoli Sales – Storage

Supporting Tivoli Sales

TCA Self Service Portal (Wiki)

Competitive Info by product, company and portfolio for major competitors

Business Continuity

Visit the TCA Competitive Portal at http://ciportal.tivlab.austin.ibm.com

Deduplication

Infrastructure Management

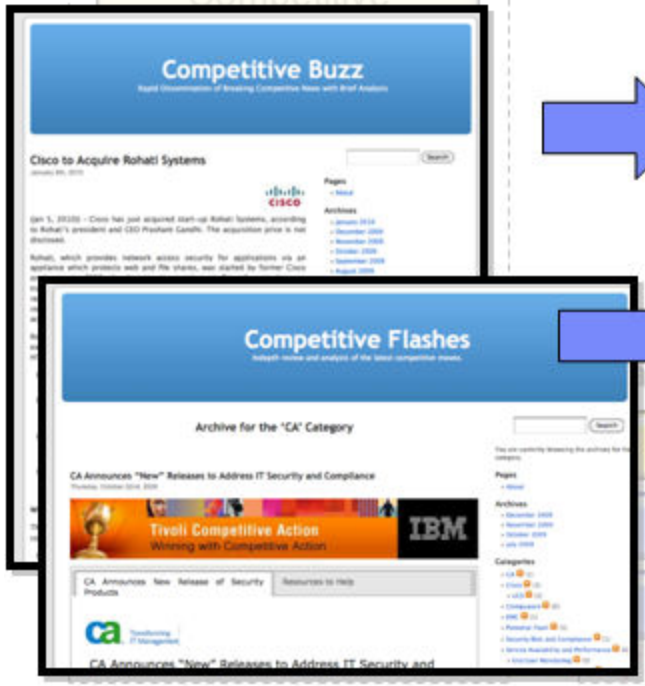
Device Resource Management

Sales Support

Tier 1

TCA Self Service Portal (Wiki)

Tier 2



TCA Blogs:

Competitive Buzz:

Rapid Dissemination of Breaking Competitive News with Brief Analysis

Site: http://ciportal.tivlab.austin.ibm.com/TCAblogs/buzz/

RSS Feed: http://ciportal.tivlab.austin.ibm.com/TCAblogs/buzz/feed

Competitive Flashes:

In-depth review and analysis of the latest competitive moves.

Site: http://ciportal.tivlab.austin.ibm.com/TCAblogs/flashes/

RSS Feed: http://ciportal.tivlab.austin.ibm.com/TCAblogs/flashes/feed

Beat CA/Wily

Sun-Oracle Take Out

opportunities

धन्यवाद
Hindi

谢 谢
Simplified Chinese

תודה רבה
Hebrew

Спасибо
Russian

Gracias
Spanish

Thank You
English

شكرا
Arabic

Obrigado
Brazilian Portuguese

Grazie
Italian

감사합니다
Korean

Danke
German

Merci
French

நன்றி
Tamil

謝 謝
Traditional Chinese

ขอบคุณ
Thai