Manage Storage With Solutions

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Technical Consultant
Sun Microsystems
Build Out Solutions Portfolio

Business value

Customer benefit focus

Justifications / Reasons

Customer solutions

Based on Sun products

Data

Heterogeneous Storage Products

Cost

TCO

Data Economy Solutions

TCM

Data Visibility Solutions

Risk

TCR

Data Security Solutions

Complexity

Data

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Infinite Mail Box Solution

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Cost

Data Cost Risk Complexity

Infinite Mail Box Solution
Business Issues

- Email is mission critical
  - Estimate 50-70 emails/day per employee
  - Large attachments commonplace

- Growth!
- Compliance issues
  - Regulation, legislation
  - Litigation
  - Etc.
Storage Management
What is a 3 year old document worth?

- **Total Cost of Ownership** is tied directly to management of lifecycle of data
- **Value of Data** should dictate storage media
- Infinite Mailbox is designed to enforce these best practice storage principles
Mail storage Growth:

Without InfiniteMailBox Solution

Mail storage Growth:

With Infinite Mailbox solution

* Fix backup window
* Double savings in a clustered environment
* Planable storage costs
Delivered Solution With Key Software

Utilization Suite
- Policy based auto archiving
- "Instant" recoverability

Provides automated management of on-line storage to maximize storage utilization and IT operational efficiencies
Key features of Utilization Suite / SAM-FS

- Automatic data protection
- Drastically reduced backup windows
- Superior performance
- Fast recovery times
- Up to 4 copies on different media
- Tape drive sharing on the network
How does IM work?

- Archives documents and shifts them to another location.
- Documents are transferred to an Archive Domino Server using a SAM-FS drive.
Infinite Mail Box for Lotus

Features

• Soft Quota applied to mailbox
  – Maintain mailbox size < soft quota
  – Mails archived according to age

• User Transparent
  – No user training required

• Native implementation (Lotus Script)
  – Platform independent
  – Windows, AIX, OS/400, OS/390, Linux, HP-UX, Solaris, etc

• No client license fees
  – IBM have per-client license cost
Infinite Mail Box for Lotus

Features

• No additional relational database required
  – IBM CommonStore requires DB2
• Mobile users fully supported
  – MyArchive
• Digital signature and encryption preserved
  – Whole document is archived
• Solution can help with regulatory compliance
  – SEC 240.17a-4
  – NASD 3010, 3110
  – HIPPA, FDA, etc.
Screenshots

Infinite Mailbox

Policy

<table>
<thead>
<tr>
<th>General</th>
<th>Mail Quotas</th>
<th>Archive Quotas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Name: NormalUsers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinal Number: 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master User: #Admin</td>
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<td></td>
</tr>
<tr>
<td>Members: NormalUsers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<th>General</th>
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<th>Archive Quotas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archive Quota: 1000 MBytes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archive Slice Size: 100 MBytes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mail Quotas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft Quota: 100 MBytes</td>
</tr>
<tr>
<td>Doc Lifetime min.: 14 Days</td>
</tr>
<tr>
<td>Doc Lifetime max.: 1000 Days</td>
</tr>
<tr>
<td>Doc Lifetime Method: Delivery/Creation</td>
</tr>
<tr>
<td>Min Doc Size to Archive: 50 KBytes</td>
</tr>
</tbody>
</table>
Current Customers

- DAIMLER CHRYSLER--largest Notes environment in the world

- Feb 2003: Daimler Chrysler reached 40,000 users in production on Sun StorEdge Infinite Mailbox

- Customer estimates saving as much as 40% in primary disk space: “Solution is paying for itself.”

- Primary decision points were: cost, performance, scalability, support for mobile users, and relief of load on Domino servers

- Current plan to move toward 170,000 users in production over 8 sites worldwide
On The Road Map

- Infinite Mail box for Exchange
- Infinite Mail box for SunONE massaging
- Infinite Storage
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Data Security Solutions

Enterprise Continuity Solution
Business Issues

- Data growth – all the way to PB capacity
- Business regulations required secured data and data protection
- High Service Level Agreement (SLA)
Delivered Key Software Functionality

ESM

- Industry's first CIM compliant SAN manager
- Realtime Health Management & Expert-Based Advice; End to end diagnostics
- OpenSAN Environments
- End-To-End SAN Management
Delivered Key Software Functionality

Performance Suite

- True SAN file sharing
- Massive scale and performance
Delivered Key Software Functionality

Traffic Manager

- Dynamic load balancing across HBA's
- Automatic path failover
- Solaris, Windows, HP-UX, AIX
The Data Continuance Environment

- **Tape**
  - Archival: No protection, Consider removal and/or archive
  - Operational: Backed up
  - Essential: Backed up, Some level of data replication
  - Mission Critical: Comprehensive data replication, Automated storage allocation

- **Disk**
  - Archival: No protection, Consider removal and/or archive
  - Operational: Backed up
  - Essential: Backed up, Some level of data replication
  - Mission Critical: Comprehensive data replication, Automated storage allocation

**Recovery Speed**
- Days: Non-Critical, Critical
- 24 Hrs: Non-Critical, Critical
- 12 Hrs: Non-Critical, Critical
- Seconds: Non-Critical, Critical
Full Heterogeneous SAN Portfolio

Enterprise Continuity Solution

Multi-Site

- Multiple sites are geographically dispersed while acting as large SAN
- The SunPlex™ Cluster acts as one unified application cluster
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Delivered Key Software Functionality

SRM
- Storage Resource Discovery
- Predictive trending
- Scriptable agents
- Consumption Management
- Activity Analysis
N1 Data Services

Storage Area Network (SAN)

N1 System Admin

N1 Storage Management

Logical Storage Pool

Operating Systems:
- Linux
- Windows
- Solaris
- AIX
- HP-UX
Infrastructure Components

Data Center
- Sun Fire™ 12K, 15K
- Sun StorEdge™ 9900 Series

Midrange
- Sun Fire™ 3800 – 6800 Midframe
- Sun StorEdge 6120, 6320, 3900 and 6900 series, T3

Entry Level
- Netra™ X1 – Sun Fire V880
- Sun StorEdge 3000

Availability

Infrastructure Components
- Sun StorEdge L7, L8
- Sun StorEdge L25, L100
- Sun StorEdge L180
- Sun StorEdge L700, L5500, L6000
Solution Components

SAN Infrastructure

Data Center
Midrange
Entry Level

Data Services Software & NAS

Support & Professional Services

Management SW
Data Center
Gained Share and Credibility

Sun StorEdge 9900
- Grew share ~10%
- 35% attached to heterogeneous environments
Midrange
Gained Traction with New Products

SE 3900 and 6900
- 1 Petabyte/quarter
- Over 200 customers

Now
SE 6320 & 6120
- Already shipped many TBs
- Great SPC-1 test and price performance results
- SPC-1 IOPs is 25340.29
- $15.40/SPC-1 IOPS
Refreshed Tape Family

- L5500
- L6000
- L700
- L180
- L100
- L25
- L7/L8
- Veritas NetBackup
- Solstic EBS
- StorEdge Utilization Suite
Expanded Storage Solution Practice

**Partners**

Storage Elite Partners:
- Increase in average monthly storage revenue
- Increased attach rate

**Services**

Storage Services Practice:
- New services
- Heterogeneous support
- Partners
- Many storage projects
- >20% growth

**Direct Sales**

- Coverage
- Training
Summary

• Sun provide storage solutions that solve customer issues
  – Infinite Mail Box
  – Enterprise Continuity Solutions
  – Storage Resource Management

• It's about N1 data services
  – Decreasing complexity
  – Improving efficiency in the data center
  – Increasing Business Value

It's About Solving Customer Problems
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