Real world observations from a Midsize Enterprise company transitioning to a Virtualized Environment
SC Series Storage

SC All-Flash

Leading performance
High IOPS and throughput, low latency

Leading efficiency
Advanced tiering, Intelligent Dedupe and Compression

Enterprise features
Federated, multi-protocol, highly integrated

 Lowest price
<$1/GB effective for all-flash with all software included
## SC Series Family

| Memory/Proc. | 32GB  
6c/1.7GHz | 128GB  
8c/2.4GHz | 256GB  
2x 8c/2.5GHz | 512GB  
2x 8c/3.2GHz | 128GB  
8c/2.4GHz | 256GB  
2x 8c/2.5GHz |
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<tbody>
<tr>
<td>Media</td>
<td>Hybrid (0-100% Flash)</td>
<td>All-Flash</td>
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<tr>
<td>Protocols</td>
<td>FC, iSCSI, SAS</td>
<td>FC, iSCSI</td>
<td>FC, iSCSI, FCoE</td>
<td>FC, iSCSI</td>
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<tr>
<td>Data reduction</td>
<td>Compression</td>
<td>Compression + Deduplication</td>
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<tr>
<td>Multi-array</td>
<td>Federation (Live Migrate), Snapshot Mobility, Volume Advisor, Replication</td>
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<td>Business continuity</td>
<td>Sync Replication, Auto-Failover (Live Volume), Metro DR, RecoverPoint for VM, D@RE²</td>
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<tr>
<td>Management</td>
<td>HTML 5 Unisphere for SC, CloudIQ, Dell Storage Manager, Openstack, QoS, Vvols</td>
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<tr>
<td>Architecture</td>
<td>Dynamic RAID Tiering, Always Thin, Virtualized Page Pool, Distributed Sparing</td>
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1 – Max raw capacities assume 7.3 firmware and 2MB page size. 4MB and 512K page size options also available. For maximum flash performance, 512K page sizes are recommended. Discuss performance and expansion capacity needs with your Dell EMC representative or Authorized Partner.

2 – External key manager
Gerrie Electric

Overview
• Canadian, family owned business in operation since 1957
• One of Canada’s largest independent electrical distributors
• Annual sales in excess of $150 million
• Well-known and respected in the industry
• Reputation built on service

Markets Serviced
• Industrial, OEM, Contractor, Institutional, Commercial, IP Network, Utility, and Retail
Business Challenges

Operational Transition
• Moving from older HDD storage to flash
• First time implementation of Virtualized environment

Speed and Availability
• Need real-time report generation
• Downtime not an option

Customer Satisfaction
• Top priority
• Customers cannot tolerate downtime
• High customer satisfaction needed
IT Challenges

Security
Email

Business Needs

- 24X7 access
- Single support contact
- Ease of use and scale
- High performance
- Affordable
Storage Solution

PowerEdge

PowerEdge

PowerEdge

SC7020

PS Series

SC runs all SQL, ERP, CRM, email, Authentication Security
Business Results

Metrics
• 75% less power than before, space reduction from 12U-15U to 3U
• 40,000 IOPS reads of 2GB
• Negligible latency and zero wait for our customers
• Reads 2 GB sequential

Customer satisfaction
• Data what they want when they want it
• Instant access to almost everything
• SC gives real time data, very fast, very efficient
• Reports in minutes rather than hours
Virtualized Environment Recommendations

- Cloud Considerations
- Network Challenges
- VM Migration
We're an all dell shop
Unparalled software services hardware support
Easiest way to do business
We need application and infrascture
All mission critical apps (phone, ERP, databases) run on HW
   we need the best, we partner with Dell
   We can't afford downtime, everything has to be online all the time
   extended hours for services, 24 hour support

We have PowerEdge servers 410, 810, PS series and SC7020
   SC with all flash was desirable, easy migration from PS to SC
   SC runs all SQL, ERP, CRM, email. Authentication Security

My experience with the SC Series
   Fantastic numbers and performance
   The SC series has exceeded expectations
   We don't spend a lot of time reconfiguring or worrying
      "it just works" and "it does what you want it to do"
   It is the product they want for virtualized environments

Results
   • 75% less power than before
   • 12U-15U to 3U
   • 18 MB/s to
   • Much faster 300 MB
   • 40,000 IOPS reads of 2GB
   • Negligible latency

   • Reads 2 GB sequential
   • Zero wait

Customer satisfaction
   • Data what they want when they want it
   • Instant access to almost everything
   • They insist upon it
   • No wait times when customers are placing an order
   • Eliminated wait times
   • SC gives real time data, very fast, very efficient
   • Reports in minutes rather than hours