



Storage Virtualization & Replication “Success Story”

Company: Central Brooklyn’s leading healthcare center.

Background: Customer has spent the last 18 months implementing a new IT architecture and design, using advanced IBM technology and virtualization.

Challenge/Problem/Requirements: Customer has a challenge with limited floor space, power availability, as well as remote replication requirements.

Solution/Implementation: Customer had many stand alone servers with all direct attached storage. We architected and implemented the following designs.

- This implementation was across two hospital buildings
 - IBM Blade and System X
 - Dell and HP Intel server consolidation into IBM Blades and xSeries running VMware
 - Three Blade Chassis and 40 Blades
 - Four large xSeries servers, running four instances of VMware ESX server and VMotion, as well as using P2V server migration tool.
 - All SAN attached to central IBM Storage, DS8000/DS4000
- IBM System P
 - Migrate standalone pSeries p650 servers into six 16-way p570’s, with 6 LPAR’s each
 - Implement VIO and SAN attached to central IBM Storage, DS8000/DS4000
- IBM Storage
 - Implement large Cisco SAN, with 9216, 9509 and 9513 technology
 - Implement TSM for full enterprise Backup and recovery, with IBM TS3500 and LTO3 and 3592 Tape technology with encryption
 - Implement IBM SVC technology to virtualize all the Disk Storage and enable remote mirroring between buildings

IBM Systems Implementation:

- (6) p570 Servers with 24 LPARs
- (4) System X servers running VMware with VMotion
- (3) IBM Blade Centers, 40 Blades
- (1) DS8000 with 20TB’s
- (1) DS4300 with 11TB’s
- (2) SVC 2-node clusters with remote mirroring and Flash Copy
- (2) IBM TS3500 Tape Libraries, one with LTO3, one with encryption 3592 drives
- (4) Cisco director/switches, 9216, 9509 and 9513
- (2) TSM servers for Enterprise Backup and Recovery
- Benefits (*Maximize investment of resources*)
 - Server consolidation of 50 standalone systems
 - Eliminate dedicated processors
 - Maximize utilization of all processors
 - Virtualized systems with VMware
 - Virtualized Storage with SVC
 - Remote replication for business continuity