



## iQstor Cures Campbell Hall of its Storage Challenges

### iQstor Customer: Campbell Hall Episcopal School

What factors does a school look for when it wants to simplify its information technology and backup system? Lower cost, ease-of-use and an all-in-one solution, that's what Mario Santonastaso of Campbell Hall was looking for, and it led him directly to iQstor Networks.

As the IT Director of the school, Santonastaso is responsible for the entire school's IT infrastructure. Campbell Hall was running out of storage, backing up to tape was taking longer than the allocated backup window and adding more disk drives to their servers individually was just taking too long. Santonastaso knew that he had to make things easier.

"Before installing the SAN, we were backing up our servers directly to tape on a daily basis, and it took too long. We needed an automated solution that was easy-to-use and expandable. The trouble with tape backup is that the amount of data to be protected has gone beyond the time it takes to copy the data to tape. Backup windows are too small, data is growing too fast, and recovery takes too long. The result is that tape backups take longer to complete," Santonastaso said.

### Selecting the Right Storage Solution

Campbell Hall was also looking for a storage solution that was flexible and would allow them to provide virtual storage to the school's various servers quickly and easily. "I had some sales people from other storage companies come here, but they were not listening to what I was saying. They were telling me what they had to offer, which were too complicated and I was not ready to implement," continued Santonastaso. "After some research I noticed that iQstor had good storage systems that had already been successfully tested by the networking magazines. I also received positive references from two of my colleagues that had reviewed the iQstor storage systems, had checked the installation and had examined how the storage system, specially the snapshot feature worked."

Campbell Hall selected iQstor's iQ1250 iSCSI IP SAN with 2.4 terabytes of Serial ATA (SATA) disk storage for as their primary storage system together with the snapshot feature. The iQ1250 was the best fit for Campbell Hall's requirements and represented a new technology [iSCSI IP SAN] that would also allow for future implementation of capabilities that would not be possible otherwise, such as migrating to blade servers - which is something that Santonastaso plans to investigate in the near future.

"We needed an automated solution that was easy-to-use and expandable. After some research I noticed that iQstor had good storage systems that had already been successfully tested by the networking magazines. We are very pleased with iQstor's service and support."

Mario Santonastaso  
Director of Technology  
Campbell Hall

### Business Challenge:

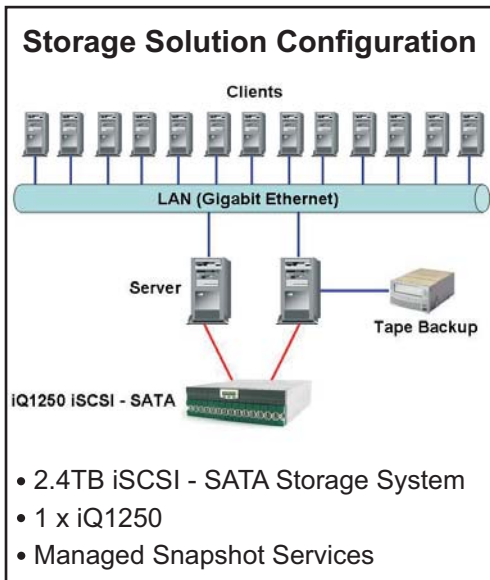
Campbell Hall wanted to select a cost-effective, easy-to-use storage solution to reduce their backup window, allow for data consolidation and support future expansion of their storage network infrastructure.

### Solution:

iQstor iQ1250 iSCSI storage system was deployed to simplify management of backup tasks and increase storage utilization through storage and server consolidation.

## Advantages of iSCSI IP SAN

iSCSI offers block-level access and storage I/O intelligence, transforming storage systems from server-attached to network-attached, where they can be managed, partitioned, and allocated to servers and applications much more efficiently. iSCSI delivers better reliability and availability than direct-attached storage. There's no need to take down a server to add storage to an iSCSI SAN, and once added, that storage can be made available to any SAN-attached server. iSCSI SANs offer a lower cost alternative to Fibre Channel. iSCSI is inherently less complicated than Fibre Channel SANs since it does not require specialized host adapters, switches and cables. Campbell Hall used their existing Ethernet infrastructure to implement the iQ1250 IP SAN. With iQ1250, block-level data is transported over TCP/IP to and from servers that are dispersed throughout the school and located at a distance from the storage system.



In addition to disk-to-disk-to tape (D2D2T) backup using the embedded snapshot feature, the iQ1250 is also used for administrative functions such as creating images of server disks on the SAN and deploying those ghost images on new servers, maintaining student records databases, school's web site and the entire school's IT environment.

Another advantage of the iQ1250 is its capability to centralize storage. As a result, Santonastaso does not have to shut down servers and replace disk drives with larger drives as the amount of data increases. The iQ1250 solves this problem through its integrated Volume Manager-based Virtualization (VMV). Virtualization involves the consolidation of all storage resources into a virtual storage "pool." When an application requires storage, the iQ1250 allocates capacity from the pool. Since the space allocated to an application can increase at will, there is no need to over-allocate storage. Furthermore, new disks can be added to the pool when increased demand is anticipated. As a result, storage utilization can be maximized without sacrificing flexibility.

### About iQstor Networks, Inc.

A privately held company based in Newbury Park, CA, iQstor is a leader in the innovative design and delivery of storage solutions with embedded enterprise level functionality to channel partners worldwide. Its storage solutions include FC, iSCSI and SATA intelligent storage systems and expansion enclosures, policy based storage management, data services software, professional services, support and training.



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