

# Storage upgrade for Be Well Primary Health Care Center in Brooklyn, NY



CLIENT

Be Well Primary Health Care Center is an Article 28 Diagnostic and Treatment Center located in Brooklyn, New York and has been serving the community since 2004. The center is a one-stop-shop health care facility serving patients of all ages.

In addition to providing evidence-based comprehensive primary care services with a strong focus on preventative care, patients have access to an extraordinary range of specialty services including dentistry, ophthalmology, optometry, and physical therapy. Be Well Primary Health Care Center is a state-of-the-art facility designed to improve patients' overall health outcomes and well-being.



**This has been fantastic. I couldn't have gotten it done this fast alone. Thank you!**

**120+**  
users



Support



Projects



Procurement



Resources

REQUIREMENT

Be Well needed to replace multiple storage devices that were end-of-life, as well as HDD based units that ran the data storage for their entire network. These devices were experiencing latency issues as well as poor performance from the virtual machines and hosts connected back to the infrastructure.

They approached Techary after their previous solution provider was unable to source the components for the project.

Techary were required to formulate a storage solution that would not only deliver improvements but also provide a scalable storage design for the organization as they continue to expand.

SOLUTION

Techary performed a full review of the current infrastructure. Through this process, our Technical pre-sales team were able to build a full proposal for the project.

The first step was to identify and design the best solution to connect the VM host infrastructure to the storage. We opted to use direct 10Gbp/s iScsi LUN connections, using direct attach cables, from the primary storage appliance through to the physical hosts, as well as redundant 10Gbp/s connections for the network breakout.

This design enabled us to ensure the connectivity between the hosts and primary storage would achieve the maximum speed throughout, with minimal latency. As part of the project scope, our team planned and verified the Network Interface Cards that would be required for the existing hosts. Our procurement team reviewed multiple providers for the storage units, with the client opting for a Synology solution. We then leveraged our existing relationships with Synology and the associated distributors to gain a commercial incentive for Be Well, resulting in a 40% + list saving on the equipment. Overall, the design made the project seamless, with all components working correctly upon the first point of installation and the technical design working exactly as specified.

Working on this solution during late 2021, the market, especially for SSDs (Solid-state drives) was extremely fluid, with supplies constantly in constraint. Given that Be Well had been let down by their previous provider, primarily due to the supply constraints, it was essential for us to work with our distribution partners to secure all the components needed for the solution. We were able to secure the stock required for all components of the project, as well as co-ordinate lead-times from various distribution partners.

We centralized the procurement process by having all items delivered to our New York Lifecycle facility for pre-configuration and staging of the equipment. Ultimately, this saved the client from having multiple components arrive before the project began, or being billed for items ad-hoc. It also removed any risk of components being misplaced in the build up to the project. All lead times were fulfilled within the project timeframe.

Utilizing Techary's Lifecycle facility was key to success, as it meant that the devices could be pre-configured with all components fitted and ready for installation on the customer premises. This allowed us to deliver the units just two working days before the on-site installation, omitting the need for the customer to store items for the project and reducing the time needed for engineers to configure components on-site.

Techary devised a project plan which involved engineers attending site after business hours to perform the physical installation work. Given the current cabinets were low on available space, we fitted components to the physical server hosts and installed new storage arrays in place of the current devices. The team then reconnected the old storage units back to the network, to allow for the data migration process but also to allow for swift decommission of the equipment once the migration had completed, without the need to amend any of the existing infrastructure in the cabinets. All physical work was completed out of hours to allow for downtime, with engineers then able to work remotely to complete the data migration from the old devices to the new arrays.

Benefitting from the staging work undertaken at the Lifecycle facility, Techary worked with the customer to plan the data migration process. Phase 1 of this task entailed connecting the new devices into the network. With the old devices still running the current datastores, the first task was to finalize the configuration and connect the new storage infrastructure into the virtual environment. As mentioned, Techary designed this solution with 10Gbp/s iScsi LUN connectivity directly to the host infrastructure. Once the device configuration was completed and the LUN connections set to the virtual environment, Techary began working on the actual data migration. Given the fluidity of the operations provided by the center, there were certain applications that needed to be available through the migration. We carefully selected Virtual Machines and moved their datastore to the newly created SSD virtual storage. VMs were selected based on their disk size and priority. Techary engineers allocated specific bandwidth and core capability of the relevant hosts to priority virtual machines, to ensure they would be available for production environments when required. 75% of the workloads were transitioned during this phase, with subsequent out-of-hours phases planned to migrate all workloads. All workloads were migrated within two weeks of installation of the units.