The Time One of Connecticut's Largest Non-Profit Needed a Complete Network Redesign & Installation in 60 days

INTRODUCTION

Harc is a non-profit organization that provides lifetime support to people and their families with intellectual and related disabilities so they can enjoy lives of quality, inclusivity, and dignity. They take care of disabled individuals from the moment they are born and continue to support them throughout their lives. The services consist of support, enrichment, employment, and residential help throughout the Greater Hartford area.

Harc is one of the most popular non-profits when it comes to helping others, but staying up-to-date with the latest technology was a challenge due to budget constraints. They had a six-story building with around 425+ users facing ongoing network problems.

Their IT team consisted of two personnel; one of them left before we were brought on to help. The other IT person was responsible for maintaining and updating the whole network. Finally, Harc decided to get the assistance of Protected Harbor's dedicated team.

AT A GLANCE

- Server installation, network redesign, and migration in 2 months only
- Increase in uptime, leading to approximately 99.99% uptime throughout the year
- 80% faster issue response rates to end-user problems
- Seamless remote work set up anywhere in the world in 5 min.

CHALLENGES

It was challenging for two staff members to provide maintenance, updates, and support for such a large building with hundreds of users. All the data and files were not stored on a virtual network but on local machines, causing inadequate information management. Likewise, no permissions were in place to enhance the confidentiality of sensitive data, and anyone in the building could access those files. Additionally, there was no backup of any files on any network, leading to the occasional loss of information.

Protected Harbor's dedicated team ran thorough assessments of their site and found out they were running broken VM (Virtual Machine) Clusters and old legacy systems.

The problems that the team discovered were:

- Non-existent backups for a large amount of data
- Poor firewall setup and content filters which may expose them to ransomware
- No optimization of storage
- High rate of server downtime (2-3 times a week)
- No central control to store, secure, or manage data
- Negligence towards network and system maintenance
- Inefficient Wi-Fi coverage and access point placement

PROTECTED HARBOR

THE SOLUTIONS

1 **Creation of Backups:** For large-scale projects like Harc's, the priority is to create backups to stabilize the system. So, the team put in a backup server where users can store data and have access to it whenever they need. In the past, Harc employees were storing data on their local desktops/laptops or even on Google Docs, but with no backup for essential files. Furthermore, the older backups on the network were almost non-existent. Usually, they would reach up to 25%, and the backup process would stop. Hence, the first step was to create a path to store all the data in a central backup network.

2 **Virtual System Redesign:** The next step was to create a standard virtual environment for all the users in the network. The older UI was not user-friendly, and it was not very efficient. The team came up with a user-friendly but minimalistic network design for the end-users and installed a new virtual environment using our hardware. The reason for choosing a basic layout was so the users did not require much complex technology. Their usage revolves around sharing files/documents and using some basic applications. Therefore, our purpose was to design a virtual system according to their needs.

3 **Data Migration and Organization:** Once Harc got its new virtual environment, the next challenge was to migrate the existing data and users to the new virtual remote desktop setup. The team successfully migrated all of their previous data and the users to the new virtual server. Also, the data was reconfigured to improve the database structure and organization. Consequently, the file permissions were set up, only allowing authorized users to access the relevant sensitive files.

4 **Network Optimization:** Various vendors in the past handled the switching and cabling at Harc. It led to unoptimized cabling and switching issues. The team prepared a structured switching layout for the client to prevent network downtime. Besides, there was no firewall or content filter to use the browsers. Therefore, Protected Harbor's staff implemented a standard firewall system and appropriate content filters to enhance network optimization. Further, we disabled the old legacy systems and shut them down completely.

5 **New Wi-Fi System Installation:** Harc was using an old SonicWall Wi-Fi system which had several connection issues and poor placement of access points. The internet coverage was inadequate, leading to no internet connectivity in some areas. We partnered with a cloud Wi-Fi routing and security leader, Cisco Meraki, to install and secure the new internet system within the client's building. Similarly, we switched their current ISP (Internet Service Provider), AT&T, with Comcast, that improved internet connectivity and speed.

THE RESULT

Harc has the utmost trust in Protected Harbor and takes consultation from us regarding all technology needs. They do not need any in-house staff to take care of their technology needs which helps them lower their hiring costs.

Their server uptime has increased by 50%, overall 99.99%, with almost no downtime. The issue response rate increased to 80%, thanks to our dedicated team for Harc. Previously, their users had to wait weeks for general problems regarding most common network issues, but now any problem is resolved in almost no time.

Harc has a secure and backed-up virtual environment for their business operations. The data management and structure have helped them manage their files and information seamlessly.

All their operations and activities have become smoother which helps to keep down their technology costs and save money. "I guess we don't need on-site staff; everything is running great," said Harc's Interim President, CEO, and CFO Daniel McLaughlin.