

121-year-old New York City dry dock boosts worker efficiency with faster WiFi

Caddell Dry Dock and Repair expands connectivity and voice service by leveraging Spectrum Enterprise

Since 1903, Caddell Dry Dock and Repair Co. Inc. has served vessels travelling to and from the ports of New York Harbor. With seven dry docks and 13 piers set along a half-mile stretch of the Staten Island coastline, the repair yard is busy 24 hours a day, seven days a week. A yearly average of some 450 boats and ships dock there for service.

High demand taxed existing connectivity and revealed gaps in WiFi coverage. Sal Molino, Vice President, Caddell Dry Dock, decided it was time to update their coverage with fiber connectivity. He called on Spectrum Enterprise to discuss a technology partnership.

“We specifically needed better WiFi for streamlining our internal operations and reporting processes — our daily reports that our supervisors produce and our ability to produce certified payroll,” he says. “Because we have city contracts, we have certain requirements to fulfill. Managed WiFi gave us the ability to take things from a pen and paper operation and introduce technology to digitally enhance our operation.”

To provide robust bandwidth for its WiFi and other core digital services, Spectrum Enterprise expanded its [Dedicated Fiber Internet \(DFI\)](#) presence.

Servicing a nexus of commerce

Serving the Port of New York and New Jersey, Caddell Dry Dock provides repair and emergency maintenance services. The vessels serviced range in size from tugs and ferry boats to offshore supply vessels and wind farms.

“The work we do can be anything from surface preparation, hull coatings and protections to internal and external structural steel repair, shaft work and alignments,” Molino explains. “We provide a comprehensive range of marine repairs for public and private maritime corporations operating within the Port of New York and New Jersey.”

For many years, Caddell Dry Dock struggled to find WiFi powerful enough to cover its extremely busy work area, which stretches across 7,200 feet of dock space. When AnnMarie Boyle, Account Manager, Spectrum Enterprise, told Molino a solution could be quickly achieved, he was interested.

“In the beginning, they really thought it was an impossible mission to get WiFi across the entire dock site,” Boyle recalls. “We had to take a car ride to see its farthest section. Meanwhile, most of their work was being managed manually, which you can imagine was quite a burden for them.”



Sal Molino, Vice President, Caddell Dry Dock and Repair Co. Inc., wanted reliable bandwidth for hundreds of workers across a half-mile stretch of coastline. That powerful connectivity is achieved using two Dedicated Fiber Internet (DFI) circuits.

Client profile



Company

Caddell Dry Dock and Repair Co., Inc.

Industry

Professional Services

Services

Managed Network Edge with WiFi and Cameras
Dedicated Fiber Internet (DFI)
Enterprise Trunking

Overview

- Servicing one of the world's busiest shipping hubs, Staten Island's Caddell Dry Dock and Repair Co., Inc. needed to upgrade its connectivity.
- City contractual requirements presented dry dock management an efficiency challenge solved by migrating to an advanced network platform that utilizes automated daily reporting and certified payrolls.
- Strong WiFi was needed to deliver bandwidth to multiple land and sea operations spanning a half-mile of waterfront.

Outcomes

- A powerful network, strategically bolstered by access points, has extended WiFi capability and resiliency across all parts of the dock using Managed Network Edge.
- A steady surplus of bandwidth powers the entire worksite 24/7/365, utilizing two high speed Dedicated Fiber Internet (DFI) circuits.
- The dry dock can now readily accommodate more service functions and client types, including offshore wind operators.

Why it matters

- As yearly volume surges to some 450 vessels, Caddell Dry Dock knows it must leverage technology to maximize their service efficiencies and employee productivity.
- Facial recognition technology utilizing the added bandwidth has increased employee efficiency by 40 to 50 hours a week by eliminating time-card verification.
- Dock security and proper workplace safety protocols are more closely monitored with cameras across the dry dock, protecting the business, its employees and its customers.



To better manage a large workforce simultaneously working under ship hulls and high over them, Caddell Dry Dock and Repair Co. Inc. counts on total WiFi coverage. This is made possible using Managed Network Edge augmented by dozens of strategically placed access points.

She also explained the benefits of network oversight, a managed firewall and a camera monitoring system, all of which could be incorporated into a single solution. Once Molino agreed, Spectrum Enterprise engineers and technicians set about installing [Managed Network Edge](#).

"It's very user friendly," Molino notes after six months with the platform. "I like the simplicity of the dashboards and that I can see the status of my cameras, switches and access points, what's up and what's down. I can set up zones to measure traffic and alerts for certain periods. There are just a lot of things we can do."

Building out a full fiber solution

Caddell Dry Dock had begun its relationship with Spectrum Enterprise some years ago with a single fiber circuit. Molino decided on a total fiber overhaul from Spectrum Enterprise to expand connectivity. They set up a second, larger dedicated internet circuit.

"To me, fiber is just more reliable," he notes. "Having Dedicated Fiber Internet has given us the ability to extend our connectivity coverage

across the entire yard, opening it up to considerably more connectivity than we could before."

The Spectrum Enterprise team, led by engineer George Brockmann, ran lateral lines off the two circuits to extend the fiber's reach across the entire site. "Sal has a great understanding of the entire site. He was very instrumental in guiding us as to where everything should be placed and where we had access," Brockmann recalls. "It was a very large project, and working around dock equipment, ship parts and construction machinery was especially challenging. In the end, we were very pleased at what was accomplished."

"This is a 24/7/365 operation. The waterfront doesn't stop, maritime doesn't stop, global trade doesn't stop. The people at Spectrum Enterprise understand that."

- Sal Molino, Vice President, Caddell Dry Dock and Repair Co., Inc.



The many different work areas at Caddell Dry Dock and Repair Co. Inc. thrive on coordinated efficiency. Operations run more smoothly than ever with the installation of over 40 cameras connected to Managed Network Edge. Using AI-enhanced facial recognition software, these cameras automatically capture and track employees entering and leaving worksites, eliminating the time-consuming process of verifying employee time cards.

Expanded bandwidth allows Molino and his team to optimize their use of Managed Network Edge. It also accommodates workers using as many devices as they need at the same time.

Intermittent service blackouts, Molino says, are a thing of the past:

“There haven’t been any issues since the installation. To be honest, it seems like it’s faster. We have more devices hooked up to it now than we did before, and I haven’t seen a reduction in speed.”

“Within our city contracts, we have certain reporting requirements inherent to government projects. Managed Network Edge gave us the ability to take things from a pen-and-paper operation and make it into more of a digital platform.”

- Sal Molino, Vice President, Caddell Dry Dock and Repair Co., Inc.

Another Spectrum Enterprise solution is a voice communications platform. Like the Dedicated Fiber Internet circuits, it comes with a service-level agreement guaranteeing 100% uptime. Molino appreciates the functionality and reliability of the [Enterprise Trunking](#) PRI service.

A new way of doing business

Molino can now do more with his network platform and advanced connectivity. Facial recognition systems have been installed to capture employees arriving and departing the work area. They no longer need to punch in and out.

“Using this, we streamlined our ability to produce a certified payroll, something that had been taking us 40-50 hours a week to produce administratively,” Molino says. This enables Caddell Dry Dock to instantly and comprehensively comply with government regulations for certifying dock worker payrolls.

Workflows are simpler, as well. Using devices connected to their WiFi, workers can now communicate with

each other over OneDrive instead of radios, adding speed and clarity to the process.

“We can review documents together half a mile away from each other,” Molino notes. “We all have unrestricted access to view and edit and share information both up and down the chain, so we operate more efficiently.”

Adding on for the future

Since the initial Managed Network Edge installation, Molino has had several cameras added to his set-up, bringing the total to over 40. These cameras automatically monitor physical security and workplace safety.

Over the last few years, business has been expanding. Caddell Dry Dock clientele includes offshore shipping firms as well as ferry boat services to New York, New Jersey and Delaware. The worldwide drive for sustainable energy has stimulated the launch of many offshore wind farms. Caddell Dry Dock provides repairs for these operations, too.



There are no dead spots in a typical work day at Caddell Dry Dock and Repair Co. Inc., as seen from above. Now there are no dead spots in their WiFi coverage, either, thanks to Managed Network Edge.

“What we do here helps support the entire maritime operation in and around the Port of New York and New Jersey,” Molino explains. “This includes maintenance, repairs and all the other services we provide. The faster we do that, the faster and more efficiently our customers can operate, and the better the Port functions.”

“Since the fiber has been installed, I have never lost internet and the connectivity has been faster. We have more devices that are hooked up to it, and I haven’t seen any reduction in speed.”

- Sal Molino, Vice President, Caddell Dry Dock and Repair Co., Inc.

Molino sees other ways of putting the added bandwidth and improved communications Caddell Dry Dock and Repair now enjoys to good use, including automating inventory management.

“This is a building block for us,” Molino notes. “We have a key partner in Spectrum Enterprise for building out our technology infrastructure.”

About Spectrum Enterprise

Spectrum Enterprise, a part of Charter Communications, Inc., is a national provider of scalable, fiber technology solutions serving many of America’s largest businesses and communications service providers. The broad Spectrum Enterprise portfolio includes [networking and managed services solutions](#); [Internet access](#), [Ethernet access and networks](#), [Voice](#) and [TV solutions](#). The Spectrum Enterprise team of experts works closely with clients to achieve greater business success by providing solutions designed to meet their evolving needs. For more information, visit enterprise.spectrum.com.

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