SIEMON™   **IT Infrastructure Solutions**

Siemon and Moorings Park Prove That Technology Never Retires

If your idea of retirement revolves around front porches and rocking chairs, the folks at Moorings Park have news for you. Located in Naples, Florida, Moorings Park is one of the country's premier continuing care retirement communities (CCRC) and focuses on the needs of today's more active retirees. President and CEO Guenther Gosch explains that the bricks and mortar, long-term planning and financial stability of Moorings Park reflect the vision of its residents, board of directors and over 500 employees. "For over 28 years it has been our mission to provide facilities, services and programs for successful aging, and to provide compassionate care to our residents," said Trish Biebricher, Vice President of Marketing and Communications at Moorings Park.

Technology plays both a key role in delivering Mooring's Park's many programs and is itself a central service by supporting the communications and entertainment needs of their increasingly tech-savvy residents. "We are a best-in-class facility and rely on cutting edge technology to deliver the best possible services for our residents" explained Steven Astley, Executive Director of IS at Moorings Park. "We work to ensure that everyone has, at very least, the technology access they need, if not much more."

In order to support both resident and business office technology needs, Moorings Park started by addressing the basic foundation of their IT network - the physical infrastructure. Their approach was simple: use the best. And the IT team was quick to add their definition of "best." "There were no compromises," explained Astley, "We knew what our needs were today, had a very good handle on what we would need in the future and were focused on the best solution to meet both."

To guide their product decisions and implement the solution, Moorings Park turned to Joe Baublis of Fiber Solutions, a network infrastructure design and installation firm based in Fort Myers, FL. "We worked very closely with their IS people to ensure we understood their needs." Baublis noted. "Then we did a lot of homework zeroing in on the network design and solution set that met or exceeded the guidelines." Through this process, Fiber Solutions and Moorings Park selected Siemon's category 7A TERA copper cabling solution - the highest performing twisted pair cabling system available. This Siemon cabling infrastructure is supported in the data center by the Siemon VersaPOD network cabinet system.

The network design centered on the facility's operations building, which houses the administrative offices and the central data center. According to Baublis' design, each of the workstations in the operations building is supplied 4 network connections - 2 TERA outlets and 2 category 6 UTP outlets. The 2 category 6 UTP outlets service the current Gigabit Ethernet transmission needs and provide a redundant connection. The 2 TERA outlets were installed primarily as a future migration path to 10Gb/s. However, through its unique cable sharing capability, TERA offered immediate benefits.

Cable sharing is the practice of running multiple applications over a single cable. Utilizing the category 7A TERA outlet, up to four low-speed applications can be supported over a single cable and outlet. The connector's four quadrant fully shielded design and a variety of 1,2, and 4-pair patch cord options allow support for a variety of application combinations:

- 10Gb/s and Gigabit Ethernet: 4-pairs
- Analog Voice: 1-pair
- VoIP: 2-pairs
- Video over IP: 2-pairs
- CATV: 1-pair w/balun
- CCTV: 1-pair w/balun
- 10/100BASE-T: 2-pairs
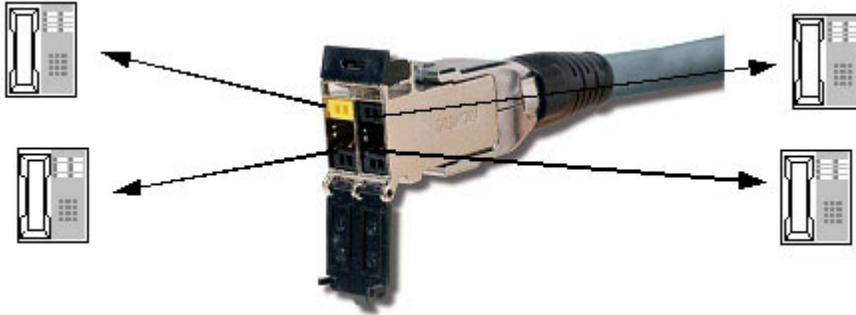
Typical call/fax center cable sharing implementation
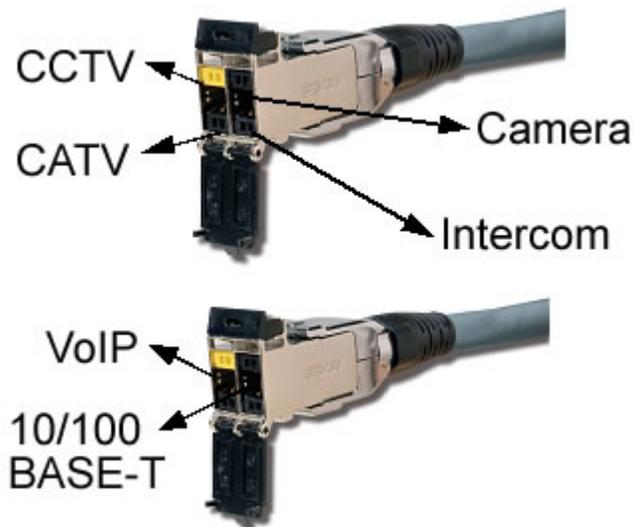
Typical multi-application cable sharing implementation

Moorings Park utilized the TERA channels to support multiple analog phone and fax connections in the work areas as well as video and VoIP feeds in conference areas. 1 pair applications such as analog voice and 2 pair applications like 10/100 Ethernet and VoIP are supported through hybrid TERA to RJ patch cords, making integration into current RJ-based equipment connectivity extremely easy. Up to 4 high definition CATV feeds can be supported through hybrid TERA to balun cords, a capability that was also leveraged to deliver video to common resident areas.

"The TERA solution provided amazing flexibility," explained Baublis. Even with the redundant category 6 outlets in place we would have to at least double the amount of channels to achieve this with other systems. And when the time comes to migrate to 10 Gb/s, they already have the infrastructure in place. All they need to do is swap to 4-pair TERA patch cords."

The data center supporting the Moorings Park cabling infrastructure continues their cutting edge technology approach. Within the operations building, the data center needed to support current network requirements with spare capacity for expansion, and do so in the smallest possible footprint. Fiber Solutions chose Siemon's

VersaPOD data center cabinet to meet this need. In fact, Moorings Park was the first organization in the world to implement the new and unique VersaPOD solution.

The VersaPOD solution integrates bayed Data Center cabinets with high density zero-U vertical patching and cable management. The VersaPOD's unique design leverages the vertical space between bayed cabinets for patching or cable management, freeing critical horizontal cabinet space for active equipment and improving overall density. In the Moorings Park data center, this vertical space is leveraged as an efficient cable management system. In the horizontal cabinet space, angled Siemon TERA-MAX patch panels allow patch cords to be routed directly into the vertical patching channels (VPC) limiting the need for space consuming horizontal cable managers. Cable management fingers mounted along each side of the VPC help cleanly route cords and manage slack.

"The VersaPOD gave us a great deal of capacity to manage the patching environment," explain Baublis. "It is neat, aesthetically pleasing and there is plenty of room to grow."

Fiber Solutions also saw that Siemon's VersaPOD's offered future capacity beyond cable management, As Moorings Park's network needs expand, the vertical areas between bayed VersaPODs can also be leveraged as vertical patching channels (VPP). Should the need arise to add more equipment into the horizontal spaces, the current horizontal patching capacity can be migrated into the vertical zero-U VPPs. The VPPs can supply up to 288 patching ports in both the front and/or rear vertical space between cabinets. By freeing horizontal cabinet space, Moorings Park will be able to realize greater active equipment density, reducing the number of cabinets required by up to 20% and saving valuable data center floor space.

Siemon's VersaPOD

Baublis saw this capability as perfect for Moorings Park: "We installed the TERA cabling infrastructure as a future-proof solution and we took the same approach with the cabinets. As they increase the volume of active equipment to support their needs down the road, the VersaPOD gives them the ability to expand without adding more cabinets - they can simply migrate horizontal patching into the vertical patching areas as needed to open up horizontal rack space."

The project is now complete and actively delivering Moorings Park's high-end technology services. "We are extremely pleased with the results," notes Astley. "Fiber Solutions' design and installation were, as always,

exceptional and the Siemon infrastructure gives us a great deal of confidence that we will continue to be able to provide our residents with a world-class network well into the future."

About Siemon:

Established in 1903, Siemon is an industry leader specializing in the manufacture and innovation of high quality, high-performance network cabling solutions. Headquartered in Connecticut, USA, with global offices, manufacturing and service partners throughout the world, Siemon offers the most comprehensive suite of end-to-end UTP and shielded twisted pair copper systems in category 5e, category 6 (Class E), category 6A(Class EA) Z-MAX and category 7/7A (Class F/FA) TERA , as well as multimode and singlemode end-to-end fiber cabling systems. Siemon also manufactures a wide array of cabinets, racks and cable management products, including its unique VersaPOD data center cabinet solution. With over 400 active patents specific to structured cabling, from patch cords to patch panels, Siemon Labs invests heavily in R&D and development of industry standards, underlining the company's long-term commitment to its customers and the industry.

About Fiber Solutions:

With over ten years in the industry, Fiber Solutions provides the most reliable network solutions available. We are a world class communications contractor and consultant. Fully licensed and bonded, Fiber Solutions specializes in the design, installation, certification, maintenance, and support of state-of-the-art systems for all data, voice, and video networking needs. Our clients rely on Fiber Solutions superior craftsmanship and quality products to make their networks more stable and robust. Our strict attention to industry standards, along with a keen awareness of technological advancements, insures the network Fiber Solutions builds for you today will meet your needs for many years to come.

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About Moorings Park:

Moorings Park is a nationally accredited, not-for-profit, Medicare certified community and the only independent A+ Fitch rated continuing care retirement community in the country. Nestled on an 83-acre campus, Moorings Park is the only Continuing Care Retirement Community (CCRC) in the City of Naples.

Life Care at Moorings Park includes Independent Living, with unlimited access to assisted living in Orchid Terrace and skilled nursing at the renowned Chateau.

For more than 28 years, Moorings Park has established a reputation as the premier retirement community in Southwest Florida.

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