CHALLENGE
Implement a telecommunications solution that would seamlessly scale and support upgrades, reduce monthly telephony expenses and integrate with an existing legacy platform.

SOLUTION
The Panasonic KX-NS1000 IP Business Telecommunications Server was used to convert an aging network infrastructure to a managed switching platform capable of supporting multiple VLANs, WLANs, Power over Ethernet (PoE) and fiber optic backbone network.

RESULTS
By combining disparate systems onto one network, Panasonic’s KX-NS1000 Business Telecommunications Server improves communications, enhances existing paging capabilities, increases safety with network camera integration and decreases monthly telephony costs.
Based in Rockville, Maryland, St. Jude Regional Catholic School is home to students of all religious, racial, ethnic and income backgrounds who range from prekindergarten to eighth grade. St. Jude’s mission statement is to educate the whole child, delivering academic excellence within a Catholic community of faith. When current principal Glenn Benjamin assumed his leadership role two years ago, upgrading the school’s technology infrastructure became one of his primary objectives. Benjamin entrusted a technology team composed of St. Jude staff and IT vendor specialists as his counsel, and together they outlined several upgrade projects to modernize the campus.

The school’s telephone system lacked capabilities such as Power over Ethernet and LAN switching capable of layering, which resulted in three different Internet providers, two telephone systems and multiple private lines. The first step in the process to improve campus communications was to install a fiber optic backbone network to support the school’s fragmented systems on a single network, minimizing the number of vendors and reducing St. Jude’s high operating costs.

RELIABLE KX-NS1000 COMMUNICATIONS PLATFORM
After retrofitting the campus wiring and repairing the infrastructure, Panasonic’s KX-NS1000 Business Telecommunications Server—a scalable, pure IP-based platform that eliminated the need for expensive paging servers and IP paging solutions—was installed. The NS1000 utilizes SIP telephone extension licenses and SIP paging speakers to deliver paging over one IP network throughout St. Jude’s campus that includes talk-back, all call and zone paging. The Panasonic IP telephones include KX-NT366 self-labeling telephones for St. Jude’s administrative staff and KX-NT346 and KX-NT321 for school staff.

Unlike hosted solutions, the Panasonic KX-NS1000 provides vital communications for schools, including emergency communications features. While reliance and dependence upon the Internet are critical for hosted telephone solutions, the NS1000 provides resiliency by offering both legacy analog and PRI connectivity in addition to the SIP/IP trunk services and, unlike many hosted IP phone solutions, may still function even if Internet connectivity is lost.

The NS1000 also integrated with St. Jude’s legacy Stromberg-Carlson paging speakers and a paging amplifier, helping the school to cost-effectively leverage existing technology until it can be replaced. A variety of the NS1000’s teleconferencing and call routing functions help ensure St. Jude’s personnel who are working within or away from the campus stay connected. The automated attendant feature routes calls for each tenant and allows for customization between the school and church, as well as among other users at St. Jude.

IMPROVING SECURITY
Panasonic’s Business Telecommunications Server has also increased the safety and security of the campus. Using the Panasonic Communications Assistant Software, the NS1000 integrates with Panasonic network cameras to monitor and control access within the premises. The cameras display images on desktop computers to St. Jude staff whenever a party requests access. Staff may communicate with the party through door phones and control the door by using their Panasonic phones or desktop Communications Assistant Pro to open doors without having to leave their desk.

RETURN ON INVESTMENT
Return on investment was an important consideration in St. Jude’s plan to modernize its technology infrastructure. With the Panasonic NS1000 and SIP trunks for telephone services, monthly costs that once approximated $1,300 per month have been reduced by $325, a significant cost benefit. Once extension of the fiber backbone is complete throughout the campus, St. Jude will benefit from an additional $500 in monthly savings, totaling more than $10,000 per year. Additionally, St. Jude’s IT staff benefits from the NS1000’s significant increase in uptime thanks to its solid-state hard drive design, which translates to no moving parts and decreased vulnerability of single point of failure that conventional hard drives are prone to suffer.

“We’ve found Panasonic’s Business Telecommunications Server to be an outstanding solution toward improving campus-wide communication, reducing monthly telephony costs and enhancing our school’s safety and security,” said Glenn Benjamin, Principal of St. Jude Regional Catholic School. “The NS1000’s flexible and scalable integration options have enabled us to incrementally perform upgrades to our technology infrastructure and deliver on our promise to provide academic excellence here at St. Jude.”

St. Jude’s modernization project serves as a model for other schools that are looking for reliable technology to efficiently connect their communication needs to drive better outcomes for faculty, staff and students. Due to the success of the pilot program, Benjamin and his team are considering other Panasonic solutions, including interactive whiteboards, short-throw projectors and Panasonic’s wireless infrared audio system for use in classrooms to deliver an enhanced learning experience to students.

SOLUTIONS FOR UNIFIED COMMUNICATIONS
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