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Gary Girolimon,
IT Director, Goffstown School District

COMPANY NAME:
Goffstown School District

COMPANY SIZE:
Five campuses

INDUSTRY: K-12 Education

COMPANY WEBSITE:
www.goffstown.k12.nh.us

GEOGRAPHIC REGION:
Southern New Hampshire

CASE STUDY: K-12 EDUCATION

SCHOOL DISTRICT GRADUATES TO A LEADING EDGE NETWORK WITH NETGEAR® PROSAFE® M6100 SERIES SWITCH

BACKGROUND

With a population of approximately 18,000, Goffstown is a scenic town encompassing 37 square miles in Southern New Hampshire, less than an hour's drive North of Boston, Massachusetts. The Goffstown School District consists of five school campuses plus a business office. The schools include a preschool and kindergarten, two elementary schools, a middle school, and a high school, and serve 3,000 students. Like many school districts across the country, Goffstown is experiencing exponential growth in the use of wireless devices amongst faculty and students, with an average of two to three devices per person connecting to the network. In addition, new district-wide online testing programs are creating a dramatic increase in network traffic and performance requirements. The district's existing network infrastructure is neither capable of keeping up with the demand for wired and wireless connectivity, nor supporting the rapidly increasing range of devices.

PROBLEM/OBJECTIVE

MIXED HARDWARE LIMITS PERFORMANCE AND INCREASES MANAGEMENT COMPLEXITY

The district's existing network is 10 years old and has grown piecemeal over the years, with switches, routers, and wireless access points from numerous vendors. As a result, the network serves the district's basic needs, but is not capable of supporting more advanced functions. "We had it working, but it was a hodge-podge," says Gary Girolimon, Director of Information Technology for Goffstown School District. "For example, VLAN support was limited, so we had to separate traffic with hardware, which adds a layer of management complexity and prohibits much in the way of scalability."

Knowing that it would need to make major changes to effectively serve the needs of its student and faculty population, last year the district invested in an 802.11ac Gigabit wireless infrastructure. But despite the investment, network performance was still constrained by hardware limitations. "Our access points were connected to HP Power over Ethernet switches that were limited to 100 megabits, so we couldn't even take full advantage of the investment," says Gary. This year, the district authorized an upgrade in the wired network infrastructure from 1 Gigabit to 10 Gigabit speeds, so Gary and his team knew that they finally had an opportunity to resolve the challenges and deliver the level of connectivity and performance the district really requires.



SOLUTION

NETGEAR® PROSAFE® M6100 MEETS ALL REQUIREMENTS AT AN AFFORDABLE PRICE

Gary and his team narrowed their search to HP, Brocade, and NETGEAR, based on past experience and advice from fellow IT professionals. HP could certainly meet all of their needs, but the solution was cost prohibitive for the district's limited budget. Both Brocade and NETGEAR gave them demo switches to try in their environment; after a few weeks, the team was sold on NETGEAR. "NETGEAR was much more user friendly, and at a better price," says Gary. "We compared all three brands and NETGEAR beat them easily while meeting all of our requirements."

Gary and his team selected the NETGEAR ProSAFE LAN Access and Aggregation Chassis M6100 Series for the hub of the Main Distribution Frame (MDF) of the Goffstown network. With layer 2, 3, and 4 services, as well as IPv4 and IPv6 support for Enterprise edge deployments, and 1 Gigabit/10 Gigabit mixed infrastructures in server rooms, the M6100 is a versatile enterprise-class switch that can be effectively deployed at the core, distribution layer, or at the network edge. The team placed the M6100 at Goffstown High School, which serves as the core of their network, with multi-mode fiber connections to a NETGEAR ProSAFE M5300 Series Managed Switch in each of five Intermediate Distribution Frame (IDF) locations. Many additional ProSAFE switches are then connected directly to the M5300s in each of these closets. To tie it all together, the entire network is managed using the ProSAFE Management System (NMS300).

"The ProSAFE M6100 is a great piece of hardware," says Stephen Bourget, Computer Technology Instructor and Technician at Goffstown High School. "It has enabled us to increase the performance and security of our network, and provide enhanced functionality to our users."

RESULTS

A WORLD OF POSSIBILITIES

Goffstown School District deployed the new all-NETGEAR network six months ago with outstanding results. The network is supporting 10 Gigabit wired and 1 Gigabit wireless speeds at all five schools and the administrative office building, securely partitioning student, faculty, and administration traffic with multiple VLANs, quickly onboarding a wide range of user devices, and centrally monitoring and administering the entire network from intuitive, web-based user interface. "NETGEAR delivers a cost-effective infrastructure that has really opened doors for us in terms of what is possible," says Gary. "We never expected to be able to have the network speed and all of these capabilities, and certainly not at such a great price."

In addition to its advanced networking capabilities, Gary's team also appreciates that the ProSAFE M6100 is easy to administer and maintain. "In addition to a robust command line interface, the NETGEAR M6100 has an intuitive, full-featured web-based user interface," says Geoff Johnson, Network Technician at Goffstown School District. "Additionally, the NETGEAR network monitoring software allows us to view detailed information and the status of all of our NETGEAR switches district-wide from one centralized location."

Today, Goffstown School District is safely and securely supporting BYOD at all of its schools while delivering the speeds required to meet current and future demand across the entire network. In the past, we had such a patchwork of equipment, even covering basic needs became complex," says Gary. "Our switched environment is 100 percent NETGEAR throughout the district and it's much cleaner and easier. It just works."



ProSAFE® M6100



ProSAFE® M5300

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