Case Study: Saudi German Hospital-Dubai Remains the Most Advanced Hospital Network in the Middle East with the OptiView XG

At a Glance:
Customer: Saudi German Hospital-Dubai
Industry: Hospital and Medical Services
Location: Dubai, United Arab Emirates

Challenge:
The Saudi German Hospital-Dubai is widely considered the most state-of-the-art hospital in the Middle East. An advanced IT network and hundreds of applications enable an all-digital patient health record management system. The network features 3,500 nodes with virtualized server and end-user client architectures. This advanced network and all-digital environment benefits doctors and patients, but also increases the expectations of the hospital’s IT team. There is no room for error. Doctors must have immediate access to critical records and applications to make the right patient diagnosis and treatment decisions. With life-and-death consequences at stake, the network and applications must perform 24/7 with no downtime and absolutely no exceptions. With each disparate system operating in a silo and requiring different monitoring and management tools, the entire system was unnecessarily complex and time-consuming to administer.

Result:
The OptiView XG eliminates the need for each hospital system and application to have a separate management and reporting tool. The device provides complete network visibility across the hospital’s virtualized architecture, helping the IT team see where problems and performance issues arise so they can be addressed quickly before hospital operations and patient care are adversely affected. If a remote problem does arise, the OptiView XG can be taken to that physical location for on-the-spot analysis and troubleshooting.

Product:
NetScout OptiView® Network Analysis Tablet

“Detailed network and application monitoring may seem like a luxury, but luxury quickly becomes necessity in a hospital environment where life-and-death decisions are made around the clock. The OptiView XG delivers. I cannot imagine my job without the OptiView XG. Now that we have its proactive monitoring and reporting, we cannot survive without it.” - Hasnain Juzer, IT manager at Saudi German Hospital-Dubai
Overview

Saudi German Hospital-Dubai is the sixth tertiary care hospital in the Saudi German Hospital Group, the largest private hospital group in the Middle East. The 316-bed hospital provides emergency, surgical and other medical services across a wide array of specialties, including cardiology, diabetes, pulmonary, dialysis and renal, audiology, sports injury and much more.

The Saudi German Hospital Group includes nine hospitals, with two more planned in the coming year. The Dubai branch is currently the newest and most state-of-the-art hospital in the group, blending leading healthcare with cutting-edge technology.

“Saudi German Hospital-Dubai leadership truly understands that technology can empower better healthcare,” said Hasnain Juzer, IT manager at Saudi German Hospital-Dubai. “Our technology team works directly with Dr. Reem Osman, our CEO, to ensure that our network and applications contribute to patient care and hospital operations.”

The hospital is completely digital. Central electronic records, medical imaging and the hospital’s picturing archiving and communications systems ensure the most complete care possible by providing doctors with the entire patient experience – from the time they come through the door to the time they leave. An advanced IT network and hundreds of operational and medical applications enable this digital patient experience. The network features 3,500 nodes with virtualized server and end-user client architectures. The entire hospital is wireless-enabled, extending application availability from the waiting room to the operating room.

Challenges

Saudi German Hospital-Dubai’s advanced network and all-digital environment benefits doctors and patients, but also increases the burden on the hospital’s IT team. There is no room for error. Doctors must have immediate access to critical records and applications to make the right patient diagnosis and treatment decisions. With patient care consequences at stake, the network and applications must perform 24/7 with no downtime and absolutely no exceptions.

With all systems operating separately and requiring different monitoring and management tools, the entire system was unnecessarily complex and time-consuming to administer. If a problem arose, the team immediately focused on the network. If the network wasn’t the issue, the attention shifted to the next likely culprit until the root cause was isolated and resolved. The process was anything but effective given the hospital’s high service level expectations.

Solution

Saudi German Hospital-Dubai found a solution with NetScout and the OptiView XG Network Analysis Tablet. The OptiView XG performs end-to-end network performance and stress tests, automatically detecting and analyzing network problems before offering step-by-step resolutions. The OptiView XG supports both 1GbE and 10GbE along with full 802.11 a/b/g/n/ac wireless LAN analysis. It can be used in any environment, including a data center, with virtualized servers or out at a remote or wireless connection site.

The hospital evaluated several network management systems with ongoing testing at various branches. The OptiView XG scored highest with its user-friendly interface and logical workflow to help easily isolate and resolve issues. Most compelling, the Saudi German Hospital-Dubai IT team found it could use the OptiView XG to get a macro-level view of the entire network, and then dive into packet-level data to see micro-level issues.

“The OptiView XG delivers network visibility at any level, allowing us to drill down to the root cause immediately,” said Juzer. “We should have had this device from the very beginning. Now that we have the OptiView XG, we cannot survive without it. The proactive monitoring and reporting delivers tremendous value.”

The OptiView XG licensing model was a major selling point for Juzer. The OptiView XG monitors and troubleshoots any device connected to the network with no per-device license required. Competitive solutions require a separate license for each device on the network. The hospital experiences a varying influx of guest users on the network, ranging from visiting medical staff to the patients themselves, which would have made pinpointing an exact count for licensing purposes extremely difficult.

“In today’s BYOD culture, how am I supposed to know exactly how many devices will be on the network and need monitoring at any given time?” asked Juzer. “I could come up with an estimate, but that would result in an excess or shortage of licenses from day to day. Anticipating a per-device license is just too bulky for the level of performance and monitoring we need.”
Results

The OptiView XG is now deployed, providing ongoing, proactive monitoring and reporting across the wired and wireless networks. The device provides complete network visibility across the hospital’s virtualized architecture, helping the IT team see where issues arise and address them quickly before hospital operations and patient care is adversely affected. If a remote problem does arise, the OptiView XG can be taken to that physical location for on-the-spot analysis and troubleshooting.

“It’s impossible for my eight-person team to check the physical status of all 3,500 network nodes each day,” said Juzer. “We conduct rotations to ensure each node is physically checked on a regular basis, but we can’t be everywhere all the time just waiting for a problem. With the OptiView XG, we don’t have to. Its proactive monitoring will alert us if something happens between rotations.”

The visibility provided by the OptiView XG eliminates the need for each hospital system and application to have a separate management and reporting tool. From digital imaging to hospital records, the OptiView XG monitors each application and network node, delivering the right information to the right person at the right time. It didn’t take long for Saudi German Hospital-Dubai to get a demonstration of the OptiView XG’s capabilities. Recently, a problem arose with the physical status of a switch—a problem that wouldn’t have been detected without the OptiView XG’s proactive monitoring capabilities.

“Detailed network and application monitoring may seem like a luxury, but luxury quickly becomes necessity in a hospital environment where life-and-death decisions are made around the clock,” said Juzer. “The OptiView XG delivers. I cannot imagine my job without the OptiView XG. Now that we have its proactive monitoring and reporting, we cannot survive without it.”