



Hospital ensures network health and improves performance seven-fold

King Fahd Armed Forces Hospital (KFAFH) secures network with Dell SonicWALL SuperMassive and enables BYOD for employees

Customer profile



Company: King Fahd Armed Forces Hospital (KFAFH)

Industry: Healthcare

Country: Saudi Arabia, Jeddah

Employees: 5,500

Website:
<http://kfafh.med.sa/main.html>

Business need

The hospital needed to support and protect two data centres and five city-wide satellite clinics that form part of a national network of healthcare facilities. In addition, KFAFH required a solution that enabled employees to be productive from virtually anywhere.

Solution

After upgrading its infrastructure to 10Gbps, KFAFH deployed the SuperMassive Series to provide multiple layers of security to protect its data centres. To support employees on the move, the hospital complemented its deployment with a Dell™ SonicWALL™ E-Class Secure Remote Access (SRA) solution.

Benefits

- Increased overall network performance by up to seven times
- Cost-savings of up to 35 percent
- BYOD policy is implemented, enabling employees to be productive from anywhere with reliable, secure remote access to internal resources
- IT department achieves time-savings of up to 70 percent

Solutions featured

- Network Security
- Secure Remote Access

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Abdullah Y. Alfi
Director of Communication and Information Technology
King Fahd Armed Forces Hospital

King Fahd Armed Forces Hospital (KFAFH) located in Jeddah, Saudi Arabia, contains 450 beds and five city-wide satellite clinics, which form part of a national network of healthcare facilities directly managed by the Medical Services Division (MSD) of the Ministry of Defense (MOD). The hospital provides a wide range of primary, secondary and tertiary medical services to members of the Saudi Arabian Armed Forces and their dependents.

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*Zeeshan Khan
Technology Manager of
Communication and
Information Technology
King Fahd Armed Forces
Hospital*

After increasing its infrastructure to 10GBbps, KFAFH was faced with several security challenges. The hospital did not have secure or reliable access to online services, internal services or web services. The hospital had difficulties finding the right UTM device with the balance of speed and cost. Its system was unprotected from threats and slow. Before the installation of SuperMassive the hospital did not have internal and external portals and the hospital was unable to provide inbound secure access to staff. KFAFH had been using Network Box, a managed security services company, to handle its requirements.

The hospital required a robust solution that could protect its applications and two of its data centres. "We found ourselves vulnerable. Our network was slow and we were unable to work outside of the hospital securely," said Abdullah Y. Alfi, director of communication and information technology. "We needed to protect our data centre as well as connect our satellite clinics in a secure manner. We also wanted to enable our doctors and staff to have access to our internal resources wherever they are."

Alfi continued: "We're now able to roll out our BYOD initiative and make our services available to employees in a more efficient way."

KFAFH required a solution that was scalable and affordable. "In the beginning we were a bit skeptical about Dell SonicWALL SuperMassive because it sounded too good to be true," said Alfi.

In addition, doctors and staff requested access to corporate network resources from their personal smartphones, tablets and laptops. The hospital needed a secure way to roll out its BYOD initiative.

Implementing SuperMassive would ensure that BYOD features would be well-managed and controlled. It was essential for doctors to have access to KFAFH's network outside of the hospital. "The SuperMassive deployment protected our data center and made BYOD possible. It enabled us to provide connectivity to staff who really needed it," said Alfi.

"Now our consultants and staff can save time by working anywhere. With BYOD, the on call staff no longer have to travel all the way to the hospital and can easily access the required services from anywhere. This has resulted in doctors saving several hours during a day," said Alfi. "Doctors can assess and diagnose a condition just by accessing our portal, no matter where they are in the world."

Technology at work

Hardware

Dell™ SonicWALL™ E-Class SRA EX6000 appliances

Dell SonicWALL SuperMassive™ E10200 Next-Generation Firewalls

Software

SonicWALL Mobile Connect™

KFAFH implements faster, secure network

"Dell SonicWALL gave us the results that we required and the speed that we needed for optimum performance. Our systems are now seven times faster than before. We successfully deployed two Dell SonicWALL SuperMassive E10200 next-generation firewalls, which provided us better performance and maximum security," said Alfi. "The SuperMassive is a high performance tool and works well in a demanding environment. We've also been able to utilize deep-packet inspection, IPS, anti-malware and other services without compromising performance. As a result of the implementation, we reduced costs by 35 percent. We have peace of mind knowing that our network is protected," said Alfi.

Workforce can be productive from virtually anywhere

In parallel, KFAFH implemented the Dell SonicWALL E-Class SRA EX6000, which supports 250 concurrent users. Doctors who are often on call and on a rotation schedule now have access to internal resources wherever they are, allowing for efficient communication between all staff. Doctors on call can now process patient records faster, analyze patients and communicate with other medical staff via the internal network. Productivity has increased 70% as a result of the deployment. "It has resulted in faster service and better care for the patients," said Alfi. "In addition KFAFH's medical consultants have the option of accessing the hospital's internal network to evaluate and diagnose patients instead of making the trip to the hospital."

KFAFH remote clinics are also connected to the main location in Jeddah. While some of them are connected as part of the network, others are connected through SSL VPN, allowing the clinics to link to the Jeddah head offices.

"Now that we are connected to the head office, there is a sense that we are a unit and that our employees can be successful at their jobs. Our goal was to enable a connected workforce regardless of location," said Alfi.

The SSL VPN solution delivers simple, secure access to a broad range of applications from a variety of devices, while ensuring easy administrative control. "With the ease of performance and functionality, this solution has become a very important part of the hospital," said Alfi. "We have offered our employees remote access and, as a result, our staff can work from anywhere, including their homes."

Embracing a BYOD strategy, KFAFH also implemented SonicWALL Mobile Connect for iOS, which allows doctors and staff to use iOS tablets and smartphones to connect safely. Staff has the option of connecting via the SSL VPN client or through web access, if they choose to use their laptops. The devices are not corporately owned but belong to the employees who have signed a clause acknowledging the hospital's security standards.

"Based on the user identity there are different levels of security access. We have two categories, the first which is for our senior doctors, who have access to all the possible applications," said Alfi. "The second category is for staff who need email facilities, published material and access to

general intranet applications, such as nurses' junior doctors and our admin staff. Dell has helped us categorize our services more efficiently and effectively for the users."

Positive feedback from employees

"When we announced that we would have this facility, our employees were very excited," said Alfi. "Staff brought their devices in for us to configure but we informed them that it would be self-configuring. The fact that Dell made this automatic meant that our workload and time in the IT department was reduced by up to 70 percent."

Future plans

KFAFH plans on migrating to an e-government system and increasing the number of its licences to 250. "Future plans may see us implement the Dell SonicWALL E-Class SRA EX9000, which can support up to 20,000 users. Our staff have responded well to the SRA implementation; it has changed our work dynamic," said Alfi.

KFAFH plans to create an online portal so patients can access their results remotely, thereby reducing the number of people who come to the hospital.

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