

Elekta uses Zentyal to prevent security threats in medical equipment



Elekta found in Zentyal a solution which brought together all the required elements in one integrated package. What is more, the support and partnership provided to develop it into a unique and tailored product was excellent. Zentyal's flexible and responsive involvement was essential to the delivery of this important component of our radiotherapy product suite."

James Troke
Project Manager, Elekta

Modern healthcare needs to integrate IT systems that, due to the vital function they are designed to perform, need to be completely safe of any malware that could compromise their optimal performance. Thus, Elekta trusts Zentyal in order to deploy a unified threat management software to safeguard medical therapy equipment.

The challenge

Advanced medical equipment nowadays run full-featured operating systems and as such, are exposed to an increasing number of security vulnerabilities and cyber threats. This particularly occurs when the devices are connected to hospital LANs meaning that virus, worms and all kinds of malware including trojans might lead to unauthorized remote accesses.

Elekta first found out about Zentyal when they were searching for unified threat management (UTM) software that could be integrated in a PC based multi-threat security appliance for use in hospitals to safeguard medical therapy equipment. The software Elekta was looking for had to be proven and reliable, but simultaneously offer maximum flexibility in order to adapt to their specific needs and to solve future challenges.

As a well-proven and effective Unified Threat Management (UTM) solution that includes an advanced firewall, constantly updated antivirus software and an intrusion detection component, Zentyal fully met the requirements. Furthermore, Zentyal offered reduced maintenance costs and higher flexibility in comparison with other evaluated solutions.

The solution

Even though medical software usually runs on non-Linux based operating systems, integrating the full solution into a single appliance is possible if virtualization technologies are used. For this project, KVM virtualization software was used to run Microsoft Windows on top of Zentyal.

In the resulting solution Zentyal not only provides perimeter security to the virtual machine running the medical software, but in addition to the UTM capabilities, it also acts as a shared storage server between the medical device used for making the diagnosis and the doctor's computer.

User authentication, advanced file access control lists, file access audit and antivirus file scanning have been set up to guarantee a full featured and secure file sharing server. In addition to these features, Zentyal allows to log every access, modification or file deletion in the server and report immediately all threat events like files infected by virus or unauthorized access attempts to network administrators.

Technical specifications



Communication server



Office server



Network



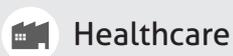
Gateway & UTM



Servers



Sector

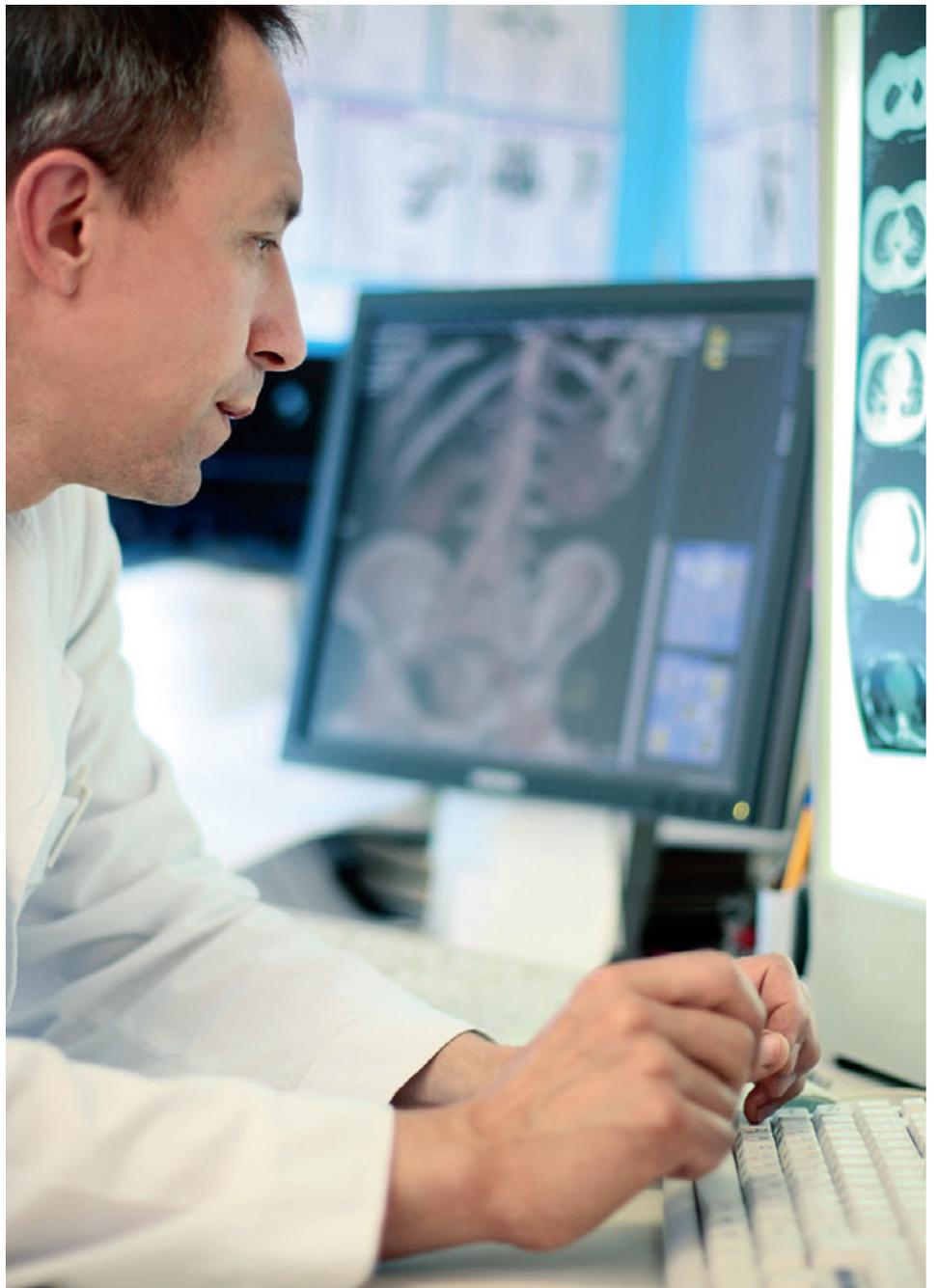


Technical support level



About Elekta

Elekta is a human care company pioneering significant innovations and clinical solutions for treating cancer and brain disorders. The company develops advanced tools and treatment planning systems for radiation therapy and radiosurgery, and workflow enhancing software systems across the cancer care spectrum. Through its products and services, Elekta aims to improve, prolong and save patient lives. Elekta solutions in oncology and neurosurgery are used in over 5,000 hospitals globally, and daily more than 100,000 patients receive diagnosis, treatment or follow-up with the help of an Elekta Group solution. Elekta, with corporate headquarters in Stockholm, Sweden, employs approximately 2,500 people globally.



About Zentyal

Zentyal designs and develops IT solutions for small and medium businesses since 2004. The company provides SMBs and their local IT providers all-in-one IT solutions that are easy to use, from the server to the cloud. Zentyal-based solutions allow to reduce and rationalize IT investments, improve the security and minimize system downtime.