COMMSCOPE®

MMC and ImVision®: more efficient device management and strategic support

Customer

Máxima Medical Center (MMC)

Country

The Netherlands

Challenges

Máxima Medical Center (MMC) is the largest medical facility in the Southeast Brabant region of The Netherlands. MMC is spread across two locations (Eindhoven and Veldhoven), employs 3,000 people and has more than 600 beds.

Recently, a solution based on CommScope SYSTIMAX® imVision® was implemented at the Veldhoven site. Thanks to this solution, the ICT department always knows exactly where each piece of equipment—from medical to ICT devices —is located. Furthermore, all equipment data is continuously updated.

This brings a number of significant practical advantages. The hospital ICT department can now manage updates and maintenance in a smarter way, but can also advise management about strategic purchasing and rolling out new resources.

"In the past, finding out where all the equipment was located was an ongoing challenge," says Rob Aerts, Head of ICT within the Care and Information Technology department (Afdeling Zorg en Informatie Technologie) at MMC. "We kept track of devices in an old-fashioned, rather labor-intensive way: walking around with clipboards and writing down which devices were in different locations. But, as soon as we had inventoried the equipment in a room, devices might already be somewhere else just minutes later. We could never get an accurate, up-to-date overview. So we asked ourselves: How can we know for certain exactly where each device is located at all times? And how can we help colleagues as best we can with this information?"


Bryan in 't Zandt, Senior System Engineer

Questions answered quickly

MMC is home to tens of thousands of devices and platforms, from VoIP systems to wireless transmitters, PCs, servers, medical devices, mobile computers and portable telephones. All these devices are connected to nearly 10,000 active network ports and a multitude of active patch points. The vast number of devices—and the dynamic way in which these are used—made it difficult to map all resources in a configuration management database. Even more so because devices might be used at multiple locations and are sometimes moved around freely by employees.

"Together with several colleagues, we thought up and built a solution," says Bryan in 't Zandt, who programs and is responsible for Wi-Fi, telephony and the paging system for medical staff. "We decided to use each device's unique MAC address as an 'identifier' and connect multiple information systems. Now we can quickly and easily retrieve information from various subsystems. We can also quickly answer users' questions."

MMC has developed a GUI (graphical user interface) that establishes the relationship between devices, room numbers and physical connections and the network. The solution presents this information in a smart, insightful way. Data is retrieved from imVision using an API (application programming interface). This makes it possible to trace each device's current location, type and manufacturer, as well as information on product types, serial numbers, operating system and software versions. In the future, up-to-date accounting information, such as purchase value and maintenance contracts, may also be added.

imVision, CommScope's solution for automated infrastructure management, provides useful insights and a highly granular overview of the physical layer and all wired connected devices. It shows exactly what is on the network, the interaction between devices, and what possibilities there are for optimization. An "image" is created for each device in MMC, in which the operating system and all drivers are recorded. On the basis of this, it is possible to determine in advance whether a particular combination of hardware or software will work or not.

Rob continues: "Helpdesk employees can immediately see what type of device they're dealing with, and which software. That allows them to solve problems very quickly, in a targeted manner. In addition to this 'first-line' help, we can now also manage software through the MMC dynamic configuration management database, in which all information sources come together. imVision, which shows the relationships between data connection points and room numbers, plays an important part in this. For each device, we can see which software has been installed and whether it is actually being used. Licenses for unused software do not have to be renewed. In most organizations, software licenses are a larger cost item than hardware."

Because it is perfectly clear what data and software is on each PC, this can easily be copied onto new devices. This is extremely important in a medical environment, where privacy-sensitive data is frequently consulted on site. Another example: Certain specialists work with two screens when making diagnoses. These specific configurations are easy to replicate over when the hardware is replaced or moved. People within the organization have already remarked that IT staff now finalize installations on their first visit.

Bryan with Rob Aerts, Head of ICT within the Care and Information Technology department at MMC

Smart asset management

"Software management has improved, especially with regard to version control and security patches," says Rob. "We can check exactly when software has been updated and whether a more secure version is available. The latter is of great importance in a medical institution that cannot afford any 'downtime.' What's more, legal and regulatory requirements are becoming more extensive."

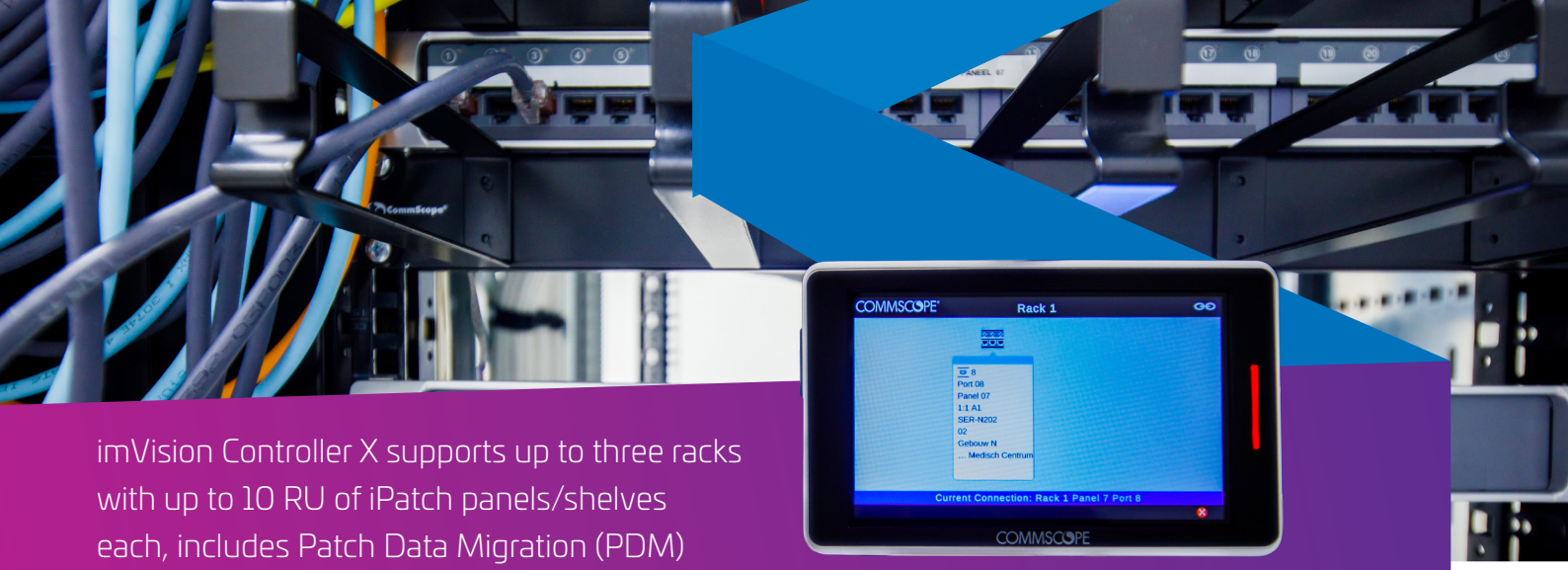
"We might also decide to remove a phone or printer that is never, or rarely, used, or move it to a location where it will be better utilized," adds Bryan. "Managers can control costs based on actual use and improve purchasing. If the information retrieved from your systems isn't accurate, you won't be able to make smart investment decisions. We can also clearly indicate the impact on users when preparing new projects and identify potential risks."

Minimum number of actions

The MMC dynamic configuration management database can be deployed at operational, tactical and strategic levels. The ICT team can optimally determine where equipment should be used, but can also identify and solve problems based on real user information.

Says Bryan: "Without imVision, we would never have been able to create the necessary dynamic link with room numbers. If you're planning to introduce a solution like this, I'd recommend first ensuring your challenge is as clear as possible. Think about how you can best configure this solution so that it is optimized for your own institution. We can basically add an unlimited number of devices to the structure we now have, as long as the devices feature a MAC address or other useful information—and an API is available."

"Other hospitals have expressed interest in our solution, which could also be of interest to other sectors," concludes Rob. "The need for up-to-date and reliable information is increasing and we can now perfectly meet requirements with a minimum number of actions. Our work is less 'ad hoc,' our knowledge is increasingly deployed, and we can better inform and advise medical and technical colleagues, project managers and management."



imVision Controller X supports up to three racks with up to 10 RU of iPatch panels/shelves each, includes Patch Data Migration (PDM) tool support, and has a secure SSL connection with System Manager

5-inch diagonal full WVGA screen (800x480) with capacitive touch

CommScope imVision: intelligent infrastructure management

- Integrated hardware/software solution accurately records end-to-end connectivity
- Real-time tracking of changes to connections in the physical layer
- Notifications for unauthorized or unplanned changes and changes to critical circuits
- Find and track connected devices
- Generates electronic work orders for guided implementation
- Full reporting options, including creating customized reports
- Find available ICT resources and cabling
- Powerful process automation simplifies and streamlines workflows
- Enhance security throughout your network
- Detect network devices—and problems—in less than 60 seconds
- Improve change management and simplify processes, audits and compliance
- Monitor all sites worldwide from one location
- Improve operational efficiency, operating time and productivity
- Open standards-based API allows customers to move beyond tracking and monitoring physical infrastructure. imVision can be easily integrated with other applications and reporting tools (such as ITSM tools, allowing users to make the most of valuable information captured on their network.

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