ARUBA ESTABLISHES HIGH-PERFORMANCE, SECURE NETWORK FOR DUTCH HOSPITAL.

Martini Ziekenhuis

Martini Hospital is a top clinical training hospital, offering a wide range of specialist medical care in a safe and hospitable environment. There are 32 different specialisations in the hospital. In particular, the hospital is well recognised for its Dialysis Center and Burns Unit.

Like others in the global healthcare sector, Martini Hospital is looking to drive digitisation across the hospital to raise patient-care service levels. It sees digitisation as a means to better share medical data including PACS images, enable seamless prescription and medicine distribution, or improve facilities management.

"Unfortunately, the building design was a bit of a Wi-Fi killer," says Catrinus Van der Meer, IT infrastructure manager, Martini Hospital. With the old environment, we did not have 100% coverage and we were working on a previous standard. Widespread use of Wi-Fi is an important pillar for a modern hospital environment. "

HEALTHCARE GOES MOBILE

This was more than a simple inconvenience. Van der Meer says new healthcare systems are increasingly mobile and device-centric: "We see more and more systems that come with a Wi-Fi connection. And we cannot even think of adding new digital services if that network environment is not stable. Medical staff, hospital management and patients expect mobility."

REQUIREMENTS
- Accelerate digital care (secure records exchange)
- Make patient records available on the move
- Increase productivity and mobility for clinical and ancillary staff alike
- Pave way for the use of growing numbers of mobile medical devices
- Enable roadmap for a raft of mobile care, security and maintenance services

SOLUTION
- 802.11ac Wave 2 Aruba APs
- Aruba 7200 Mobility Controllers
- Aruba Mobility Conductor for high availability
- Aruba ClearPass Policy Manager
- Aruba AirWave Network Management

BENEFITS
- A reliable and stable platform for future innovations
- Already deployed mobile Pharmacy, Dietician and Maintenance Apps
- Un-interrupted connectivity for 170+ 'computers on wheels'
- Enhanced performance for existing VDI solution
- Seamless high-density Wi-Fi connectivity across all facilities & sites
- Singular view of entire network for simplifying management & security

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> **CATRINUS VAN DER MEER**
> IT INFRASTRUCTURE MANAGER, MARTINI HOSPITAL

As one of the most pressing priorities, Van der Meer wanted to enable the uninterrupted use of 170 'computers on wheels' around the hospital. These allow doctors to log in to any device, using a Citrix VDI solution, to monitor up-to-date patient records. They are the most visible example of the shift to mobile Electronic Patient Records.

"With the previous network, we have to do a lot of configuration work to make this work optimally. Both on devices and on the network." says Van der Meer. "The VDI solution is sensitive to network fluctuations. Martini is now using VDI on an Aruba Wi-Fi with tested and proven stability."

Cost, management and roadmap

In the search for a solution, Van der Meer and his team reviewed the options from different vendors, "We have looked at functionality, cost, management and reducing complexity, and whether the solution would work in this environment and what the possibilities are in the future", says Van der Meer. "The immediate advantage of the Aruba solution was", he continues, "that it was an open platform. This was a major attraction for us."

Martini Hospital had already deployed Hewlett Packard Enterprise data centre servers, storage and network solutions. The closeness of this relationship allowed HPE to build the case for Aruba, benefitting from a unique insight into the hospital. This included a Proof of Concept, demonstrating how the Aruba solution would cope with the steel-framed building.

MAPPING A COMPLEX SITE

The next challenge was mapping out the site. "We quickly realised we'd need access points in every patient room, but we didn't want to over- or under-spec," says Van der Meer. "We had the benefit of a great consultant on this project, Axians. They conducted an exhaustive survey of the site."

The Aruba solution is based on Aruba 200- and 300-series 802.11ac Wave 2 access points, along with Aruba ClearPass Policy Manager. The latter allows Martini to create context-aware role-based policies to manage access for different user groups. In addition to covering the entire site with robust Wi-Fi, the solution ensures visibility and single-pane-of-glass management of the Wi-Fi environment with the Aruba AirWave platform.

A breadth of use-cases

The system went live in a part of the hospital in July 2017, the rest will be transferred to the new Wi-Fi environment at the end of the year. "We'll finally have the stable, site-wide Wi-Fi environment we needed," says Van der Meer. "It gives us the platform on which to deliver healthcare innovation."

The earliest adopters provide a clue as to the breadth of the impact the Aruba solution will have. Martini facilities management teams use a mobile app called Ultimo. They can photograph and report issues around the site – at the location of where these issues are discovered – without having to make sometimes long journeys back to their desks. This saves time and money and make services more seamless and efficient.

As another example, nutritional assistants use special applications on tablets to approach patients for their meal choices. This improves patient involvement and quality of care.

With access points in each patient room, and Aruba ClearPass Policy Manager to ensure secure connectivity, Martini patients can use the internet on their own devices via a host network.

A leader in Dutch healthcare

Van der Meer says use-cases will grow as staff appreciate the solidity of the Wi-Fi network. He says wayfinding and medical equipment or asset tracking applications are short term options, as well as an application to inform patients about hospital-related information He also sees the opportunity for existing telemetry-based patient monitoring systems shifting over to Wi-Fi.

"We see opportunities to improve productivity and improve the patient journey," he says. "Clearly, some business cases will be easier to make than others, but the bigger picture is to enhance digital information in order to raise the service given to patients."