

### CASE STUDY

# Delivering secure digital learning environments with the help of future-proofed technology



## **Highlights**

- Improves digital teaching and student learning with reliable, fast Wi-Fi
- Supports growth and innovation through a full-stack infrastructure
- Facilitates an ongoing partnership between Redway Networks, the Meraki provider, and the customer, The Forest of Dean Trust

### 50% reduction

in network administration time

Auto VPN has **reduced** daily technician troubleshooting time by 25%

Meraki MX helped block over 150 cyber threats within the first two weeks 66

We wanted a fully web-based wireless platform that could be managed efficiently over multiple sites and enable our staff to move between schools and connect easily to the Wi-Fi."

### EMILY STIGANT

IT Manager, The Forest of Dean Trust

#### LOCATION

Gloucestershire, England

#### INDUSTRY

K-12 Education/Primary Education

#### PRODUCTS

MS switches MX security and SD WAN SM Systems Manager Meraki dashboard MR wireless LAN MV smart cameras

### **Overview**

The Forest of Dean Trust (the Trust) based in Gloucestershire, England, supports over 1,100 students at both Dene Magna secondary school and Drybrook primary school. The Trust delivers engaging, modern learning experiences and believes strongly in equipping their students with the necessary skills to excel and make a difference in their futures.

Not only does the Trust take a future-thinking approach through their teaching, but with the technology supporting their schools as well. Emily Stigant, IT Manager for the Trust, partnered with Redway Networks to deliver on the goal of future-proofing its technology through a fullstack Meraki cloud-networking solution (including Wi-Fi, switching, firewalls, and physical security) to manage its multi-network environment and continue to support effective teaching and positive digital learning.

## Challenge

The Trust kicked off their journey toward adopting a new technology solution when their Dene Magna School expanded to include a sixth form (the final two years of secondary education). This expansion exposed the need for a new, modern technology stack to support the Trust's growth, as connectivity, security, and network management were all becoming clear pain points.

With the Trust's faculty and staff regularly moving between the schools, a secure network with a reliable Wi-Fi connection that allows users to connect seamlessly is essential. However, Wi-Fi was not the only concern.



With network requirements growing and student experiences expanding with the added sixth form, Emily and her team needed a cloud-managed product portfolio that would provide a full infrastructure of support for connectivity as well as a trusted cybersecurity and physical security setup. They needed a technology partner that would improve 1:1 and digital learning and teaching through every angle, while also reducing network management time for the IT team. Emily "wanted a solution that was easy to manage and would give her team the ability to make mass changes to any network without physically having to go on-site."

With growth and future-proofing top of mind for the Trust, Emily set out to find an independent networking vendor with the experience and product portfolio to not only provide the Wi-Fi but a full infrastructure with services and support. And thus began the partnership with Redway Networks, a UKbased IT infrastructure reseller who specializes in delivering the security and control needed to support digital transformation.



MERAKI FULL STACK

## Solution

Redway Networks was confident that a full-stack Meraki solution would be the perfect pairing for the Trust's needs and wants.

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When Redway Networks demonstrated Meraki and I saw the possibilities it offered us, I was blown away. Meraki's single, centralized dashboard is as close to plug-and-play as you can get, and [she] could immediately see how it would fit into our ICT environment.

**EMILY STIGANT** IT Manager, The Forest of Dean Trust

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# Enhancing teaching and learning experiences with reliable Wi-Fi

Redway Networks provided the Trust with Meraki MR cloud-managed access points installed in classrooms, as well as the larger, higher-density areas around the school grounds, including outdoor areas, to provide performance, security, and manageability at all three sites.

The decision to install external access points was made to further enhance the learning experience by allowing students to do project-based learning outside on their laptops or iPads instead of always having to use the library or classrooms.

With their new future-proofed wireless network, Emily's team has complete visibility from anywhere through the cloud. Staff can now move seamlessly between school locations with the peace of mind that they will always be connected.

# Reducing network management time with Meraki switching

Continuing in their journey to the cloud, the logical next step was moving to cloud-managed switching. Redway Networks paired the Trust with 29 Meraki switches to handle the Trust's increasing traffic and support their continued growth while consolidating their network management into a single centralized dashboard.

## Improving security with Meraki firewalls and Auto VPN

Following our Wi-Fi and switching upgrade, we were able to track network devices and data throughout each school location more accurately, which highlighted significantly more network traffic than we'd previously estimated." It then became apparent to Emily that the existing firewalls didn't have enough capacity to support their growing needs and it was time to upgrade. The Trust also has a VPN connecting Dene Magna to their sixth form (housed at Gloucestershire College's Forest of Dean Campus), which was dropping multiple times a day and interrupting lesson time.

Redway Networks supplied Meraki MX firewalls configured to the exact needs of the Trust. With the MX firewalls in place, the Trust was given the security and reliability they needed to ensure seamless connectivity during lessons.

# Protecting students, faculty, and school grounds with cloud-managed smart cameras

With the digital experiences now receiving more protection and security through MX solutions and the Cisco Umbrella, the Trust wanted to establish a new CCTV system to protect their physical spaces as well.

Redway Networks provided Meraki MV outdoor smart cameras to address the Trust's physical security needs. With the cloud-managed nature of the MV cameras, Emily and her team can access footage remotely through the dashboard, enabling her direct team and key members of the Trust's leadership to monitor and securely store footage from each camera.

### Delivering centralized management to save time with Meraki Systems Manager

One final addition to the Trust's Meraki tech stack was Systems Manager, which allows the Trust to create a secure device experience for students and faculty while providing the IT team with access to robust network analytics.

Meraki Systems Manager instantly provides resolution to network issues by giving complete visibility into the school's operating systems, applications, and devices. User profiles can be easily pushed to personally owned devices like student cell phones with links up to Google Workspace or Apple School Manager to sync app purchases and user accounts.

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The benefit of having all the Meraki products totally integrated, not just in the cloud but with each other, presents us with a perfect view of our network with a granular level of detail."

#### EMILY STIGANT

IT Manager, The Forest of Dean Trust

### Results

Equipped with their new full-stack Meraki product portfolio, thanks to the partnership with Redway Networks, the Trust now has confidence knowing the digital experiences of their students and faculty are not only secure and protected but reliable and efficient. Redway Networks is proud knowing they've helped "the Trust create a safe digital learning environment for all its students and staff that can be managed efficiently and cost-effectively with the scalability to grow as it onboards more schools."

The Trust is already seeing the benefits from their Meraki full-stack adoption. Emily and her team have seen a 100% reduction in IT notifications related to Wi-Fi issues, a huge win considering the IT team was constantly having to change Wi-Fi passwords and help staff connect. In terms of cybersecurity, the MX firewalls have been able to block more than 150 online threats in just the first two weeks of installation. Physical security has benefited as well from the new technology. Emily explains that "since having

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the Meraki smart cameras, we've saved money on storage costs as all the footage is kept in the cameras. We also had an immediate alert to an incident with students accessing our tennis courts out of school hours, which we were able to deal with promptly."

Physical security, cybersecurity, and connectivity are everything when it comes to an educational environment, especially one focused on future-ready learning. Emily sums up her experience with the new Meraki partnership perfectly: "Since installing Meraki, we've improved efficiency as well as reduced the amount of time previously spent on network troubleshooting and performing software updates, which has enabled us to focus on creating safe, flexible spaces where learning, teaching, and collaboration can take place."

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