Dinnington High School

Sector:



Education

Products:



MR - Meraki Wireless



MS - Meraki Switching



Meraki Dashboard

Services:

WiFi survey, network audit, fibre optic network design and installation, professional services and support.

Highlights:

- · Dinnington High school is benefitting from a futureproofed campus-wide Meraki network, designed and installed by Redway Networks and funded through a Connect the Classroom DfE grant.
- · The schools existing WiFi was a mixed, legacy estate with a disjoined IT infrastructure that needed upgrading.
- · Dinnington chose Redway Networks as it has experience in delivering successful DfE Connect the Classroom projects.
- · Meraki has rapidly transformed the school's network and delivered secure, WiFi connectivity with the flexibility and agility of Meraki's cloud-managed IT
- The impact of the new Meraki network on Dinnington High School has been revolutionary with students benefiting from exceptional online learning experiences.



Dinnington High School drives up digital learning standards following a high-quality WiFi and IT infrastructure upgrade by Redway Networks.

Dinnington High School, part of LEAP Multi-Academy Trust, has upgraded its outdated IT infrastructure and created a superior digital learning environment following a funding grant from the Department of Education (DfE).

The upgraded campus-wide network, designed and installed by Redway Networks, includes a Cisco Meraki cloud networking solution and a resilient fibre-optic communications backbone. Following the project, the school is now benefiting from a future-proofed Meraki network that meets DfE's criteria for a stable, secure highspeed network.

Dinnington High School in Sheffield is part of the LEAP Multi-Academy Trust . LEAP is an ambitious, values-led trust that consists of two large secondary schools - Dinnington High and Brinsworth Academy. LEAP always strives to achieve excellence within its schools by creating effective systems that improve pupil outcomes. So secure, reliable access to online digital learning material is essential.

> Redway Networks' Meraki designed solution has built a foundation for future-ready learning with exceptional online experiences.





Existing WiFi cumbersome and under-performing

Dinnington school was experiencing poor wireless connectivity with an inconsistent signal and slow access to online learning content, which was affecting lesson time.

The school's existing wireless network consisted of a mixed estate of Unify legacy switches and access points with a disjointed 'daisy chain' IT infrastructure of old fibre optics and copper cables with no redundancy built-in. This design was causing data build-up and meant the network was vulnerable if there was a data cable issue. To add to this, the network wasn't properly documented so troubleshooting was difficult for the IT department.

Connect the Classroom Programme

To future proof the school and remove the frustrations and limitations of its existing wireless network, Dinnington was invited to apply for a DfE Connect the Classroom grant to upgrade its WiFi and switching to a more superior, future proofed wireless network that would deliver an effective education-focused solution for maximising student learning.

With extensive experience in delivering successful DfE Connect the Classroom projects, Redway Networks was chosen to design and deliver Dinnington school's wireless network upgrade.

Redway Networks recommends Cisco Meraki

Redway Networks conducted a comprehensive technical WiFi survey and network audit to review Dinnington's current network layout of wireless access points, switches, and data cabling. A detailed report was then submitted to the Trust highlighting the school's entire infrastructure and recommending a new Cisco Meraki enterprise cloudnetworking solution with MR WiFi 6 access points and MS series switches with a 10-year licence and support agreement.

New Fibre Optic IT Infrastructure

As the IT infrastructure is the backbone to the Meraki network, Redway Networks worked with its trusted data contractor to replace the disjointed network of standard ethernet copper with OM4 fibre optic cabling with 10 Gigabit connectivity from the core Meraki switch to all 16 edge locations. Redway networks then installed 16 x Meraki MS355 edge switches, housed in communications cabinets with a direct link back to 2 x MS425 core switches (with dual power supplies for redundancy). The Meraki cloud-managed switches operate 108 x Meraki MR44 access points for internal use and 5 x MR86 for outdoor WiFi coverage.

Robust, secure Meraki network

Meraki has future-proofed the school's network and delivered secure, wireless connectivity with the flexibility and agility of Meraki's cloud-managed IT. The Meraki dashboard provides the school's IT team with complete, real-time visibility of the network for easy network monitoring.

The impact of the new Meraki network on Dinnington High School has been evolutionary. The school has gone from an old, cumbersome network with slow, restricted WiFi access to a future-proofed campus-wide digital learning environment with high-speed wireless connectivity across the whole site.

Improved Student Experience

Redway's Meraki designed solution has built a foundation for future-ready learning and is delivering exceptional online experiences to students and staff without extensive IT maintenance.

Richard Wheatcroft, CFO & Principal Business Manager at the LEAP Trust says: "We received a great service from Redway Networks and Meraki is delivering secure digital learning with the help of future-ready technology."











Wireless & Networking Solutions. Made Simple.

Redway Networks is a leading IT infrastructure reseller with expertise in the planning, design and installation of enterprise-wide WiFi, network switching and security solutions to the UK education sector. We only endorse world-leading technology and deliver bespoke, affordable solutions that improve digital learning and transformative experiences.

