cisco Meraki



Yu Chun Keung Memorial College No. 2

- Full stack Meraki solution provides one-stop network solution for the school
- Configuration took less than a few hours for the entire network and devices
- IT teacher is able to manage the network through Meraki Dashboard without 3rd party help



Yu Chun Keung Memorial College No. 2 is a school based in the Southern District of Hong Kong. Established in 1982, the school offers a bilingual curriculum to foster the all-round education of 240 full-time local and international students. The school offers a campus with 24 standard classrooms, special

teaching facilities such as STEAM* centres, science laboratories and a newly renovated library.

The Challenge

Without a full-time IT network administrator or a 3rd party resource, Randolph Yau, a full-time teacher of IT, Music and Mathematics at the school, is tasked to manage the computer network of the entire school. Given Mr. Yau has very limited time outside of his usual teaching duties, he required a simple, centralised and reliable networking solution that provides stable wireless coverage, secure network access, management of network devices and ultimately meets the expectations of staff and students.

A Full Stack Solution from Meraki

Mr. Yau evaluated multiple vendors for the school's network deployment. Meraki turned out to be the obvious choice due to its full stack offering (security, switching, wireless and mobile device management) and intuitive Meraki dashboard that enables comprehensive visibility and management of the network. Another evaluated vendor once caused school-wide outages and during the down time, Mr. Yau struggled with visibility and troubleshooting tools. Also, while managing multiple vendors was not an option the rest of the vendors offering single portfolio were excluded throughout the process.

The Deployment

The school decided to deploy Meraki MR42 access points for the entire campus – at least one per classroom, and multiple access points for larger facilities (staff rooms, halls and labs). The access points are supported by Meraki MS switches, and the school's traffic flows through the Meraki MX security appliance to keep student data private and the network secure. The school also deploys

Meraki Systems Manager to manage hundreds of mobile devices that access the school's network everyday, including the 200+ iPad tablets owned by the school. Mr. Yau only spent a few hours setting up the entire school's network and devices, all through the webbased Meraki Dashboard.

Network Reliability – The #1 Concern for Education

In the education sector, network reliability is the most important consideration for Mr. Yau. "Imagine a class delivered based on mobile devices can't connect suddenly. Students are about to lose focus, and teachers trying to figure out what's going on... Our staff will be under so much stress to bring the class back on track." Mr. Yau recalled his nightmare when the school suffered several hours of school-wide network outage with a past vendor, and is glad to have switched to Meraki as, "We have never experienced an outage since we started deploying Meraki."

In addition, through the Meraki dashboard, Mr. Yau is able to set up separate VLANs for teachers and students to ensure that the bandwidth available to the teacher's network is not impacted by students' network usage. The school's network is also protected by Meraki MX content filtering that blocks inappropriate content and limits bandwidth consuming content.

Education Meets Digitalisation

In order to enrich the learning experience of students and to equip for the students' diverse pursuits, Stephen Li, the principal initiated a STEAM curriculum that covers Science, Technology, Engineering, Arts/Aviation and Mathematics. To support this initiative, the school digitalised the campus by building "STEAM learning centres." These are digital laboratories that allow students to learn through computers and VR headsets. Furthermore, the school invested in iPads for students to use in school or take home. Meraki's mobile device management solution, System Manager, is deployed in order to easily manage the mobile devices used to support STEAM learning. Teachers are able to push digital content to the staff's and student's devices in one go, and the school is able to track the precise location of every mobile device, "We've never lost an iPad. I can check the real time location of any of our iPads".

The technological infrastructure that the school has invested in, has greatly enriched the learning outcomes of its STEAM curriculum, allowing students to experience learning beyond the traditional curriculum. For example, a virtual flight experience is made possible. Mr. Yau is keen to learn about how evolving technology can further enhance the education experience for both students and teachers, and regards Meraki as a trusted partner in the school's digitalisation journey.

*STEAM is an acronym that refers to the academic disciplines of Science, Technology, Engineering, Arts/Aviation and Mathematics