CISCO MERAKI FOR K-12

IT for the Connected Classroom

Cisco Meraki cloud-managed IT is built for the demands of modern school districts, from managing office or classroom networks, to streamlining standardized testing and everything in between.

- High performing wireless access points are optimized for heavy classroom use and district-wide deployments

- Complete visibility and control over network users, devices, and applications

- Block inappropriate sites, limit YouTube streaming, and prioritize educational apps with device and application management

- Protect students and faculty from the network all the way to the classroom with cloud-managed endpoint management, security appliances, built-in wireless intrusion prevention (WIDS/WIPS), and security cameras

- Self-provisioning, self-optimizing, and self-healing end-to-end solution makes it easy to deploy and manage without specialized training or dedicated staff

- Secure, manage, and troubleshoot iOS, Mac, Windows, and Android devices from the cloud with endpoint management

- The Meraki cloud architecture enables cost savings and future-proofing by eliminating hardware-based WLAN controllers and including all future firmware updates and feature releases

- Access points, switches, and security appliances are all E-rate eligible

"Cisco Meraki is so easy to use, we can focus on innovation, integration, and training."

— Dirk DeLo, Chief Technology Officer, Avenues: The World School

Proven in thousands of K-12 school districts

# Complete visibility and control without dedicated staff

Reduce management complexity

- A unified dashboard provides visibility and control over the entire network deployment, regardless of size
- Zero-touch provisioning and built-in dashboard tools enable remote network management and troubleshooting, saving countless hours or even days
- 3G/LTE failover and Layer 3 & 7 traffic shaping help provide connectivity in demanding environments
- Scale and adapt the network by quickly deploying additional hardware as needed, creating learning spaces anywhere, without added complexity
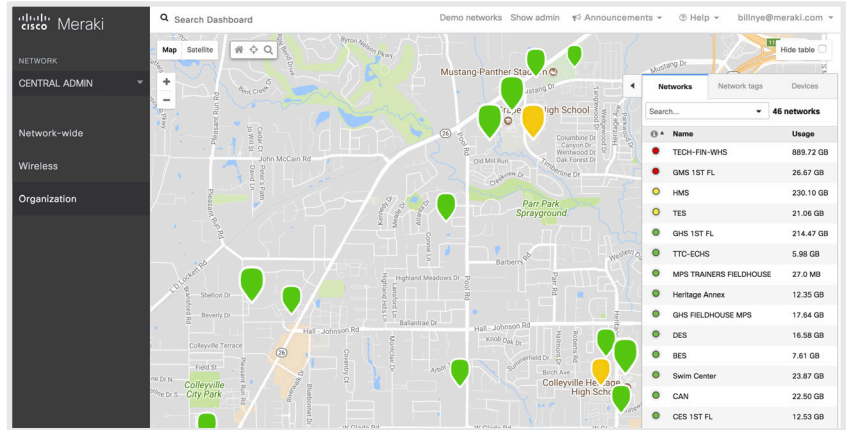
Effectively allocate resources

- Serve Wi-Fi to one or more classrooms with each 802.11ac Wave 2 or Wi-Fi 6 access point
- Provide robust Wi-Fi to classrooms, outdoor areas, and other learning spaces
- Limit excessive bandwidth usage with built-in QoS, Layer 7 traffic shaping rules, and per-port configurations on Meraki MS switches
- Define access and permissions by grade level or user group by partitioning SSIDs and setting granular policies
- Keep mobile devices up-to-date by remotely deploying applications and updates district-wide
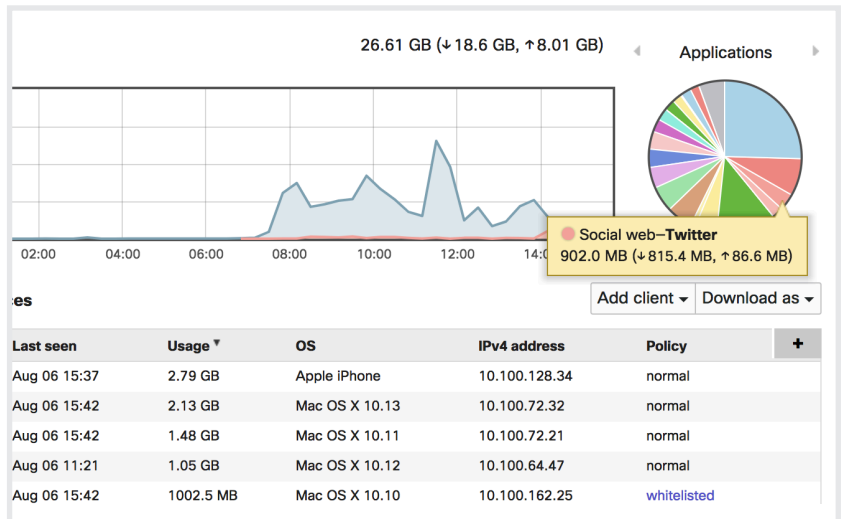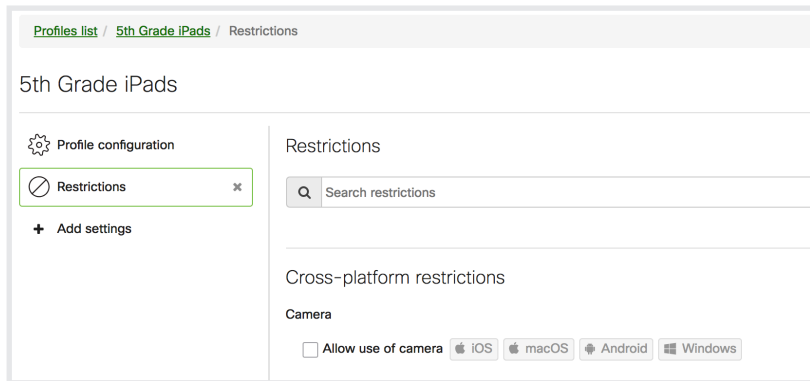
Protect students & maintain network security

- Ensure safe and secure learning environments with automatically updated, industry-leading content filtering
- Protect students from inappropriate content with built-in Google/Bing/Yahoo! Internet SafeSearch
- Enable educational YouTube videos without recreational or inappropriate content
- Create identity-based access policies, applying varying levels of filtering for teachers and students
- Locate students on campus using integrated Location Analytics, or by leveraging built-in, dedicated Bluetooth Low Energy radios in Meraki APs
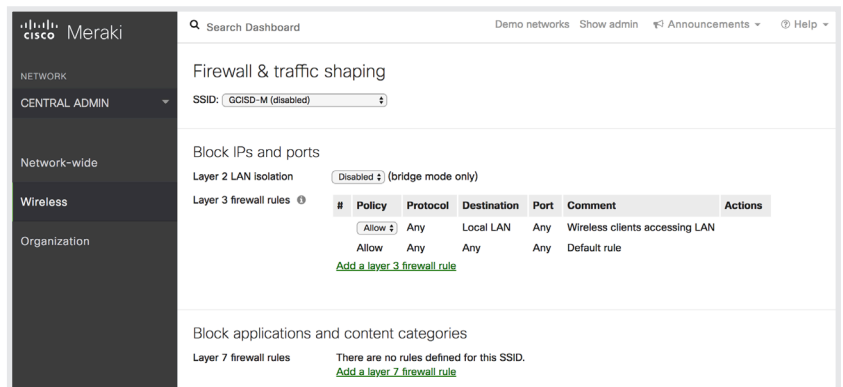
The easiest way to manage 1:1 and BYOD deployments

With an endpoint management solution, IT can easily manage and control school and student owned devices alike. Cisco Meraki Systems Manager provides an easy to use and reliable solution for provisioning, monitoring, and securing end devices.

Profiles list / 5th Grade iPads / Restrictions

5th Grade iPads

- Profile configuration
- Restrictions ✕
- ＋ Add settings

Restrictions

🔍 Search restrictions

Cross-platform restrictions

Camera

☐ Allow use of camera iOS   macOS   Android   Windows

Device list

| Tag ⌄ | Location ⌄ | Move ⌄ | Delete ⌄ | Command ⌄ | Quarantine ⌄ |

☐	#	Status ▾	Name	Tags	OS	Name (system)
☐	1	📱	Alan's iPad	employee	iOS 11.4.1	Alan's iPad
☐	2	📱	Bishopsgate Reception	LondonReceptioniPad	iOS 11.2.1	iPad

Security

Encryption: **Both file-level and block-level capable**
Passcode: **Present**
Jailbroken?: **No**
Geofencing: ✕ violating
Security policies: ✔ MerakiSecure ✔ BYOD ✔ No_Tor ✔ Data_Abuser ✔ Encrypted ✔ OSVersion

Provision school-owned and BYOD devices

- Create device profiles and customize settings based on department, class, grade-level, or other group

- Enroll devices in Systems Manager at scale with Apple DEP or Android Enterprise

- Preconfigure devices with access to the right Wi-Fi networks, email accounts, apps, and device configurations (including wallpaper, webclips, block app store access, etc.)

- Prevent users from removing Systems Manager on supervised devices
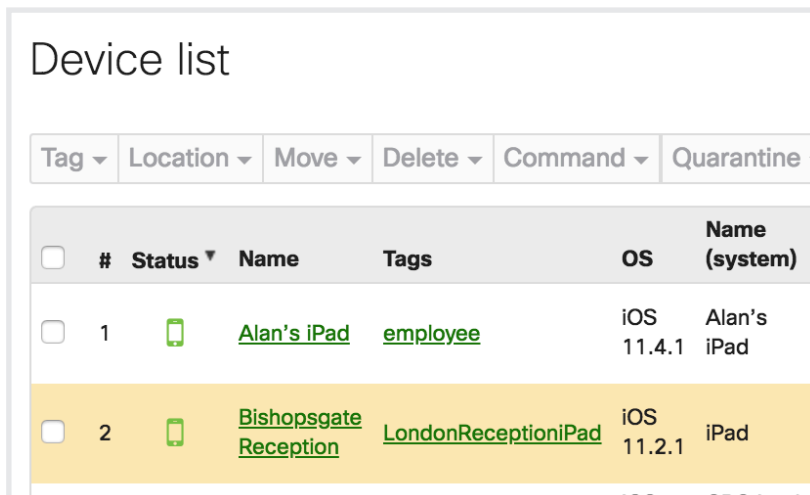
Keep Devices Up-to-Date

- Update devices en masse with the latest settings, applications, Wi-Fi profiles, and restrictions

- Integrate with Apple VPP to easily distribute free and paid apps and automatically keep apps up-to-date

- Silently push apps to supervised devices without entering Apple IDs or passwords

Integration with Apple School Manager and Apple Classroom

- Full integration for in-class learning tools and instruction

- Flexible deployment settings to support 1:1 or shared device models
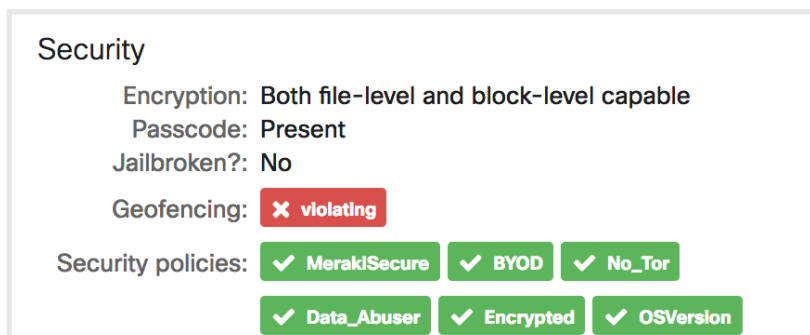
Ensure device security

- Enable web content filtering to prevent access to inappropriate content on school and off-campus networks

- Establish a geofence perimeter and adjust device settings and access based on location

- Alert admin teams when devices leave a certain location

# Ensure student and faculty safety from anywhere

Meraki smart cameras feature a unique architecture that stores video on the camera, not on an NVR or server. School districts can get an entire deployment up and running in a fraction of the time of a traditional solution: it's never been easier to keep students and faculty safe.

See the entire district at-a-glance

- Standardize all schools in a district around Meraki cameras and view everything from the browser-based video wall

- Scale seamlessly from one school to hundreds of schools

Easy access for those who need it

- Granular access controls for faculty and administrators

- First-of-its-kind access to live video feeds for law enforcement and first responders without VPN or specialized software
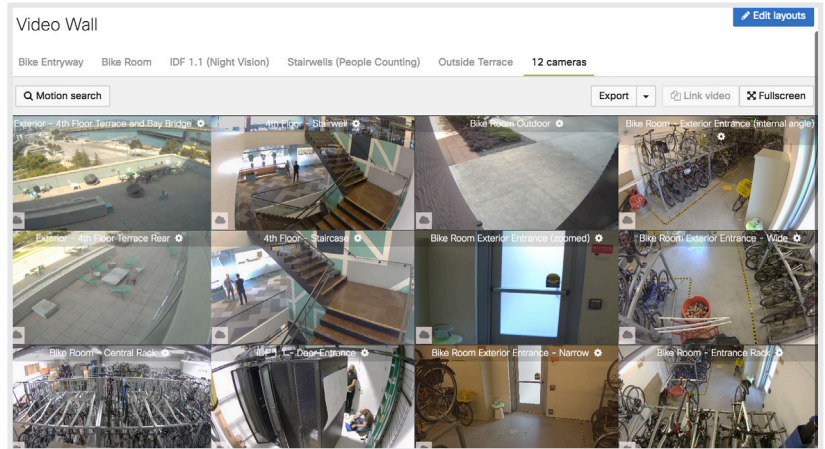
Be the first to know with camera alerts

- Set zones and schedules to trigger motion alerts

- Easily detect when students or unauthorized personnel enter sensitive areas

- Receive an email or SMS if a camera goes down and troubleshoot more efficiently
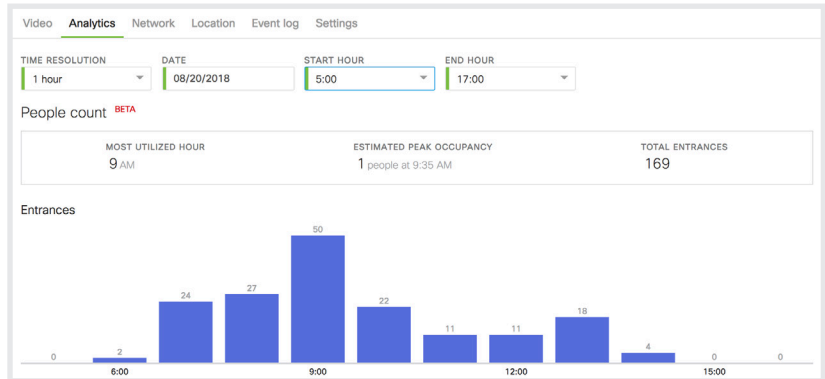
Deployment and management are as easy as 1-2-3

- Eliminate onsite infrastructure using onboard camera storage

- No standalone software or manual configuration required

Increase school efficiency and save money

- Make the most of school funding by optimizing where money gets spent using advanced analytics at no extra cost

- Replace the playground equipment that gets the most use and make a case for expanding the computer lab by quantifying traffic with built-in heat maps and people counting
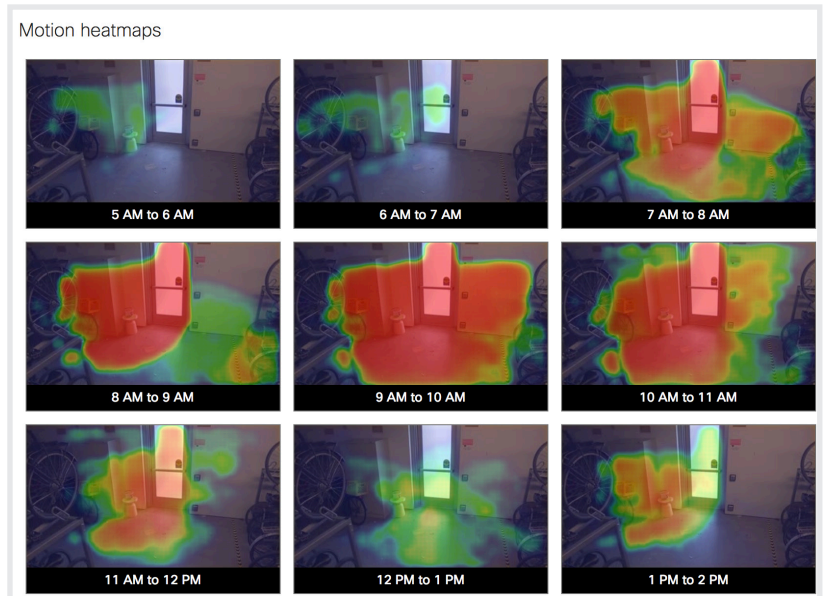
Case Studies

With access points providing district-wide wireless, security appliances aggregating network traffic, switches making troubleshooting a breeze, endpoint management securing iPads, and security cameras helping to keep students safer, Reading School District's full-stack Meraki solution provides an amazing network experience for students, teachers, and the IT team.

- Located in southeastern Pennsylvania, the school district has 13 elementary schools, four middle schools, one intermediate high school, and one senior high school, totaling 25 buildings

- Manage all of their access points, switches, security appliances, endpoint management, and security cameras through the web-based Meraki dashboard; enabling remote access, faster troubleshooting, and simplified deployments

- 1,400+ APs provide complete wireless coverage, with separated group policies for students and guests and pre-configured templates for faster deployments

- Built-in troubleshooting tools and network topology are automatically provided on the switches, saving hours of effort

- 300 shared iPads at elementary and special education schools use Systems Manager to push out applications remotely and track devices

- Six gigabits of traffic flow through the security appliances across all buildings, connected with site-to-site VPN

- Meraki MV security cameras eliminated their complex NVR system and allow security guards to isolate incidents in less than 20 minutes

"Thanks to the vastly superior management capabilities and the minimal amount of time spent managing, troubleshooting, or configuring Meraki hardware, we have more time that we can dedicate to making our classrooms 21st century learning centers." — C.R. Hiestand, Network and Systems Administrator

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Orange County Public Schools is leading the way for school districts across the nation by implementing a 1:1 device program district-wide, ensuring student success in today's digital economy. But to make this dream a reality, they required a robust and secure network to give students and teachers continuous Internet access.

- The 9th largest school district in the United States with 208,000 students and 200 schools in central Florida

- Cloud-managed access points and switches deployed district-wide to support growing 1:1 device program and enable remote management and troubleshooting

- Simplified deployment model allows the IT team to flip a school over to Meraki in under four hours

- Standardized SSID availability across the district, with separate rules for student, staff, and guest networks

- IT team can easily identify anomalous traffic and throttle bandwidth when needed - ensuring the testing application has the appropriate bandwidth needed on state-mandated testing day

- Instead of driving back and forth between 200 schools when there is a network issue, the IT team can just log into the dashboard from their office and easily see the problem

- With every student connected to a robust network on their own laptop, teachers can use new and creative applications to provide a more personalized learning experience.

"I can't say enough good stuff about the dashboard. It gives me an idea of what is going on; if there is an issue at the school, the network folks are able to get in there and pinpoint the issue much faster than if they had to go out to each switch and troubleshoot." — David Overton, Senior Director of Information Security

Cisco Systems, Inc. | 500 Terry A. Francois Blvd, San Francisco, CA 94158 | (415) 432-1000 | sales@meraki.com

100% CLOUD-MANAGED IT PRODUCT FAMILY

Wireless Access Points
Supports high density 1:1 classroom deployments and BYOD with built-in traffic shaping

Security & SD-WAN
Feature-rich security and networking, with CIPA compliant content filtering and SafeSearch

Switches
Centrally managed Layer 3 Ethernet switches designed for performance and reliability

Endpoint Management
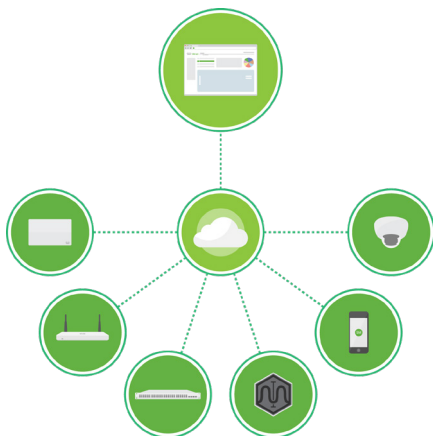Centrally manage iOS devices, Androids, Macs, and Windows devices

Insight
Works with MX to collect network/web traffic and visually identify and isolate web application problems

Smart Cameras
Scalable, easy-to-use physical security deployments with built-in storage and intelligence

AWARD-WINNING CLOUD MANAGEMENT ARCHITECTURE

- Network-wide visibility and control
- No on-site controller hardware
- Automatic monitoring and alerts
- Seamless over-the-web upgrades
- Scales to networks of all sizes

Try Cisco Meraki in your district, try **meraki.cisco.com/eval**

Arbor Park *School District 145*

"Is our internet fast enough? Do we need more speed? Where are the bottlenecks in our network? We were able to answer these questions thanks to the Meraki MX."

– David Termunde, Chief Technology Officer

Wayne HIGHLANDS SCHOOL DISTRICT

"The genius of a strong cloud-based dashboard is that you can troubleshoot with one click and move on, which is extremely powerful."

– Scott D. Miller, Director of Technology, Wayne Highlands School District

MORELAND SCHOOL DISTRICT

"For me, the interoperability is key. We knew the MDM would work seamlessly with the wireless APs and give us a level of detail we wouldn't get if we had separate systems."

— Denis Guerrero, Director of Technology, Moreland School District

Navigator Schools *Charting a new course in education*

"We can troubleshoot 20x faster within the Meraki dashboard than any other network I've interfaced with."

– Benjamin Moeller, Director of Information Technology and Operations

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