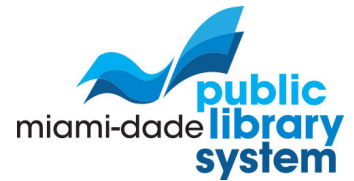




Miami-Dade Public Library System

- Wanted to use data & analytics to provide personalized services at each library
- Deployed APs, switches, and security cameras across all 50 branches
- Provide Wi-Fi, security, and unique programs for 6 million library visitors



At the center of every thriving and successful community normally one thing can be found - a public library. Libraries not only provide a welcoming environment for people to read, learn, and play, but also boost the local economy by enabling students to apply for colleges, residents to find jobs, and workers to learn new skills. The Miami-Dade Public Library System knows this all too well, with a mission to provide extraordinary services, spaces, and experiences that promote literacy and learning, personal growth, and limitless opportunities for its over six million library visitors every year. With 50 libraries across the county, each unique in size, demographics, and service requirements, the IT team wanted to use data and analytics to provide personalized experiences and resources for each location. But before they could start to harness the power of data driven decision making, the libraries needed a robust networking solution that would allow seamless access to digital services for library visitors, while also providing advanced analytics for the IT team.

With only two people on the IT team dedicated to managing the networks for all 50 libraries, Julio Campa, Systems Support Manager at the Miami Dade Public Library System, knew they needed a networking solution that would be easy to deploy and manage.

After evaluating several options, Cisco Meraki was the clear winner, with the ability to manage access points and switches from the same interface, while having increased network visibility and immediate access to built-in analytics. After seeing how easy it was to deploy and maintain the access points and switches, the team decided to also install Meraki security cameras for improved security and to be used as a sensor for additional data collection. Depending on the library's size, each location is equipped with one to 20 Meraki MS switches, one to 15 Meraki MR access points (APs), and one to 74 Meraki MV security cameras.

Improved Wireless for Better Service Delivery

With new Meraki MR wireless APs deployed across the libraries, visitors can now easily log onto the Internet from their own devices or use one of the 1,000 library wireless devices, allowing them to quickly access library resources, search the web, check-out books, reserve computers, and more. By leveraging the Bluetooth beacon technology built into every Meraki AP, the IT team can send relevant notifications to visitors while they are at the libraries. Whether it's a new book release or an upcoming event, visitors will be more informed and engaged while at the libraries.

Increased Network Visibility with Meraki Switches

Since Meraki MS switches became the network backbone for the libraries, network management and troubleshooting has become second-nature to the IT team. They were able to pre-configure all of their switches before they even left the box, making the deployment much faster than anticipated. Using the Meraki dashboard, the IT team can easily configure and troubleshoot the entire library systems switches remotely, without having to drive onsite to each location. They commonly run cable tests and use the port scheduling feature, in addition to monitoring what devices are connected to the network and from what locations, all in just a couple of clicks. Campa used to need additional tools and software in order to gain the level of network visibility the libraries needed; but with Meraki, he gets all of the information he needs right out of the Meraki dashboard.

“We were looking for a complete solution that could be managed centrally. Because our staff is limited, the two network administrators that maintain the security cameras also manage the switches and access points. With Meraki, we can easily scale, support, and maintain our entire system.”

– Julio Campa, Systems Support Manager

Smarter Security Cameras Provide More Than Just Surveillance

Prior to Meraki, the library's camera system was challenging to maintain and use. They had an NVR at every library for video storage, which each had to be managed onsite and could take hours to troubleshoot. They also had no way of knowing when a NVR or camera went down. After an incident, the team would go to pull the video footage, to then realize the camera had not been recording. Luckily, with Meraki MV security cameras, both of these problems were eliminated. With video stored directly on the camera, no NVRs are needed, greatly simplifying the camera deployment and ongoing maintenance. So much so in fact, that the IT Team was able to deploy all of the cameras themselves, without needing to hire a third party. Through the Meraki dashboard, the IT team can now immediately see if cameras are offline, and get them back up and running before any footage is missed.

In addition, the team has taken advantage of several other camera features. Using the motion search tool, the team can quickly find incidents when they do occur, without having to search through hours of footage. On one occasion, one of the libraries was vandalized, and the team was able to quickly isolate the incident, and export the footage to share with law enforcement.

From the IT team, to the library security guard, to the branch manager, different people need different levels of access to the security camera system. Meraki makes this much easier than with their traditional solution; with just an email address, Campa can give appropriate staffers access to all of the cameras, or just one locations cameras. They then view the footage through the Meraki dashboard, which is accessed through a web browser on their computers or mobile phones, with minimal training needed.

“Analytics is a bonus on top of the simplified management, excellent video quality, and easy installation.”

– Julio Campa, Systems Support Manager

Analytics is King

By managing the access points, switches, and security cameras all from one dashboard, Campa and his team now have increased visibility into the network, making deploying new devices and troubleshooting that much easier. With the time saved by not having to go onsite to manage aging infrastructure, the team has put a large focus on making their libraries data gathering platforms for business intelligence and informed decision making. With the data the team collects from the network and cameras, paired with the information they gather from other library systems, they can start making informed decisions and bringing personalized services to different libraries. By knowing how many people are visiting the libraries, who is using the Wi-Fi vs accessing the library computers, how they are using library resources, and more, the Library Administration will be able to determine which areas to spend budget on and what additional services their visitors need.

The team is working toward building a comprehensive analytics dashboard that pulls all of this information in, digests it, and makes it presentable for the Library Administration and county officials. This will help the Library Administration justify new library services, enhancements to wired and wireless connections, and advocate for budget. Campa explained, “Miami Dade county is huge, and all of our library locations are different. So by using analytics from Meraki, along with other library data, the Library Administration can use business intelligence to determine the needs at each location. The library will be able to customize programs and services for each library and the group of people that they serve.” Miami Dade Public Library Systems is a pioneer in the data and analytics space for libraries across the United States, and the technologies they implement today will impact the future of digital services for residents for years to come.