Brooklyn Public Library

- Deployed Meraki access points and switches at all 59 branches

- Control library-owned devices with Meraki endpoint management

- IT team and staff can focus on offering the best experiences for visitors

Walk into any one of Brooklyn's 59 public libraries to see kids making Lego robots, adults taking computer classes, students working on homework, and members of every generation enjoying one of life's great satisfactions: the discovery of a good book. Serving Brooklyn's 2.6 million residents as the sixth largest public library system in the United States, Brooklyn Public Library (BPL) is designed to serve patrons from every neighborhood and from every walk of life. To deliver on this mission and provide an extensive number of library programs, BPL relies on zero-touch and always-on technology to meet the growing demands of library visitors.

THE ROAD TO A SUCCESSFUL TECHNOLOGY DEPLOYMENT

The reliable network and library programs that BPL provides for the public did not appear overnight. Several years ago, Rawle Jackman, Manager of Technology Services, and Gerald Horton, Systems Administrator, had to be much more hands on with day-to-day network maintenance and troubleshooting. With consumer-grade equipment trying to support hundreds, or thousands, of library visitors at one time, Jackman and Horton, the mighty 2-person IT team, were constantly going onsite to distributed library branches to fix failing devices. With no way of knowing when a device was failing or if there was a problem, there were often large gaps in coverage. In addition, some iPads were available for library visitors to use, but the team had to manually place restrictions locally on each device, which was a cumbersome process. Plus, when a user tried to access a restricted function, the iPad would lock, making it unusable until the IT team went onsite to unlock it. With a growing number of libraries coming online, Jackman knew they needed a more scalable solution to give visitors reliable access to the Internet and library-owned devices, while giving the IT team the ability to centrally manage all of their branches. When Jackman saw how easy it was to deploy Cisco Meraki devices, and manage them all from the same cloud based dashboard, he decided to place Meraki access points and switches across the libraries, and control library-owned devices with Meraki endpoint management.

> "I wasn't even thinking cloud back then, I was just thinking centralized management. But Meraki presented a cloud option that made so much sense, and we've been there ever since."

— Rawle Jackman, Manager of Technology Services

A MERAKI SHOP IS BORN

In just a month and a half, BPL was able to deploy their Meraki access points at all 59 branches. This fast turn around was made possible by the ease of deployment with Meraki devices; the IT team just plugged them in and they were ready to go. This same ease of installation still comes in handy today; if an access point needs to be replaced for any reason, Horton doesn't even need to go onsite. Instead, a local technology resource specialist can just plug in the access point, and Horton can configure the hardware remotely through the Meraki dashboard.

The public now has a seamless experience when logging onto the Wi-Fi. When they visit any library branch with their own device, they are welcomed by a splash page that provides access to the public network, "BPL Unwired". The libraries do not limit the amount of time or bandwidth that visitors can use, and they actively work to make sure users have the fastest speeds and best coverage possible. The network used to be a nice-to-have across the libraries, but now, visitors rely on it every time they visit a branch. Patrons are thrilled with the improved wireless network, and often come into the libraries just to use the public Wi-Fi.

For Jackman and Horton, the simplified maintenance and troubleshooting has completely removed the need to go onsite when there is an issue with the wireless. Instead, Horton can just login to the Meraki dashboard, identify the issue, and make changes in real time. Generally, if he receives a complaint, he first checks to see how many clients are actively connected to the access point in question. If multiple people are having an issue, he can simply reboot the access point remotely. If there is ever a need to troubleshoot onsite, Horton can call the local technology resource specialist, who can easily identify the access point that needs attention from the blinking LED light that Horton is controlling on the backend.

After seeing how easy it was to manage the access points remotely, the team decided to deploy Meraki switches for increased visibility and additional troubleshooting tools. With Meraki switches deployed

at each branch, Horton can now easily maintain the entire public network from the same interface. With the increased visibility that the switches provide, they can quickly see if a problem is with an access point, the wiring, or something else. One of Horton's favorite features is the cable test, which allows him to remotely identify if a network problem is from faulty cabling. They often take advantage of the port reboot feature, which allows them to restart a single port instead of the entire switch. The synergy the access points and switches have has improved troubleshooting, increased network visibility, and saved the team valuable time.

> "It has really simplified our deployment process. Now, we are able to configure a device without even touching it. We can place all of the necessary settings and apply all of the apps that we want to, and upon turning the device on it is configured."

— Rawle Jackman, Manager of Technology Services

BPL also uses Meraki Systems Manager to centrally manage their library devices, including iPads and MacBooks. Using Apple's Volume Purchase Program (VPP) and Device Enrollment Program (DEP) in combination with Systems Manager has greatly simplified their configuration and deployment process. The team can configure devices through the Meraki dashboard before they even leave the box, leveraging an almost completely zero-touch provisioning process. They apply different configuration profiles depending on the device and how it is used. For example, the public facing iPads have more restrictions than the staff devices, including blocked access to iCloud, app installation, and saving personal data. Once the correct profile is applied with its applicable restrictions and pre-downloaded apps, the device is ready to be used by the public. The IT team can even ship new devices directly to the library branch and apply the appropriate profiles remotely. These iPads are used in a plethora of library programs, and constantly require new applications installed and settings updated, which is easy with Meraki. With Systems Manager now deployed on all library iPads, there have been no tickets regarding locked devices, giving Horton time back in his day to focus on other projects.

Cisco Systems, Inc. | 500 Terry A Francois Blvd, San Francisco, CA 94158 | 1 888 490 0918 | sales@meraki.com

IMPROVING VISITOR EXPERIENCES WITH LIBRARY PROGRAMS

"We don't have enough people on the IT team to be at every branch, so having a remote system allows us to do way more with less human resources, and without the ability to do that, the branches wouldn't have these programs or the proper tools to host them."

— Selvon Smith, Vice President, Information Technology and Chief Information Officer

With Meraki access points, switches, and endpoint management, the BPL team no longer needs to spend the majority of their time troubleshooting and monitoring the network. Instead, Jackman and Horton can focus their efforts on enabling library staff to offer the best experiences for library visitors. BPL offers a wide variety of programs, classes, and ways to connect with family and friends, all helping to improve the quality of life and economic opportunities for Brooklyn's residents. Kids can participate in the Brooklyn Robotics league, where they learn to code, make Lego robots that can perform designated tasks, and compete in a competition. Ask a Tech offers personalized technology assistance - where patrons can bring in new or broken personal devices and get assistance. Free meeting rooms are available, where small businesses can conduct meetings or citizens can host community groups. Teen Tech Time creates an environment for teenagers to get together and play games with new technology. Classes are available for all age groups to help with resume building, job readiness, basic computer skills, using email, art, and more. All of these programs are creating a thriving community for Brooklyn residents to take part in, and would not be possible without the reliable endpoint management and wireless access provided by Meraki.