



Teknologize Inc., a WA-based Datto partner, recently deployed over 30 Datto AP60 Access Points in a housing facility for government researchers in Richland, WA. The installation posed some challenges, according to Senior Network Engineer, Daniel Morgan. "There were a number of issues we had to work around," he said. "But mesh networking was well suited to address them. We looked at Ruckus and Xirrus as well, but ultimately chose Datto for the mesh capability."

The facility, which comprises three buildings and two courtyards, is home to approximately 300 students and researchers. "They're all on Netflix, Roku, and other streaming services," Morgan said. "It's fairly bandwidth-intensive." The facility is an older brick construction, a material notorious for knocking down WiFi

signals. On top of that, the customer, Paragon Housing, didn't want to run new cabling as a part of the project.

So, Morgan installed Datto AP60s every 20 to 30 feet throughout the hallways of each building using the existing fiber cabling. These access points, which are directly connected to the Internet, act as WiFi gateways.

To create the mesh network, he installed additional AP60s acting as repeaters throughout the facility, extending the WiFi signal beyond the coverage of the hardwired access points. "I think that's one of the strongest selling points for the access points—you don't need to run cable, cut holes in walls, etc," Morgan said. "For installations like this, mesh networking is an ideal solution." He also installed a Datto E24 Switch as part of the deployment.

Datto Networking products are designed to be fast, easy, and efficient to deploy and manage via the Datto Partner Portal. Access points self-organize into a self-healing, encrypted mesh network with WiFi roaming automatically enabled, and Datto switches offer plug-and play integration with APs.

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Daniel Morgan, Senior Network Engineer at Teknologize, Inc.

Morgan used Ekahau HeatMapper to plan out the deployment. HeatMapper detects WiFi signals and creates a WiFi heat map as a visual representation of WiFi coverage. That allowed him to strategically place



access points throughout the facility to ensure full WiFi coverage. He configured the network in such a way that APs acting as repeaters are never more than a single hop from a gateway to ensure consistent performance.

While he didn't specifically plan for outdoor WiFi coverage in the two courtyards, Morgan said that connectivity was available on the 2.4 GHz band which offers broader coverage with slower speed (Datto APs offer concurrent 2.4 and 5 GHz WiFi). "Based on my heat maps and disbursements, 2.4 GHz will cover outdoors, but 5 GHz won't reach," he said. Finally, he used Datto's native captive portal capability to create an Internet use terms and conditions page.

This was Morgan's first project using Datto Networking products, but he said that he is currently pitching a second installation. "Small to medium sized hospitality businesses with aging infrastructure represent a big opportunity to install Datto Networking," he said. "Mesh networking is ideally suited for that use case."