Background

- Six different buildings with a total of 193 rooms and three auditoriums, primarily booked for corporate conventions.
- Historic hotel with a very old infrastructure.
- Network upgrade needed in all six buildings.

Historic Hotel: Central Mexico

Meet the Project Leads

- Javier, venue property owner, responsible for improving the current network infrastructure.
- Alejandro, technology consultant, responsible for providing new network solution options to Javier.
Challenge

The historic property needed a network that could be used for years to come, in part because construction on the property needed to be minimized. The upgrade needed to accommodate for IPTV, data, and an improved Wi-Fi network, with particular emphasis on the convention rooms. Adding to the challenge, the historic walls were made of a very thick material, making it difficult for the signal to cover the building. However, reliable coverage was required over the entire property.

Meeting the End Users’ Needs

End-User Requirements:

- Updated network infrastructure in six buildings, providing increased reliability and decreased network troubleshooting time.
- Improved Wi-Fi connectivity and bandwidth speeds with the capability to host IPTV.
- Decreased deployment time for new installation, with minimal CapEx costs.
- Increased OpEx savings with reduced switching in the closet.
- Low-profile solution that could be deployed in extremely limited pathways.

Solution

Addressing the need for a future-ready network that could accommodate multiple technologies and requirements, the Corning® Optical Network Evolution (ONE™) Solution, specifically a software-defined local area network (SD-LAN), was deployed. The SD-LAN extended fiber deeper into the horizontal via networking electronics that enable IP-based wired and wireless services.

The property utilized a campus-style deployment that brought fiber to each building, where an optical splitter then distributed individual fibers to each guest room. The system supports HSIA Wi-Fi and IPTV via a fiber-deep passive optical network.

Savings were obtained by removing switches on the active devices, with optical line terminal ports replacing the switches. Total savings of 30 to 40 percent were realized, when compared to the next-best alternative. These savings are further maintained by delivering fiber deeper into the network and moving toward a fiber-to-the-room architecture.

See What’s Possible in Your Network