CASE STUDY: Crestron Electronics

Singapore Crestron Experience Center Provides Visitors with an Immersive Experience

INTRODUCTION
Crestron Electronics, one of the world's leading providers of a variety of technology solutions, has created an immersive, interactive, and awe-inspiring Experience Center in Singapore, its headquarters for the company's extensive operations in Asia. Providing a rich user experience, the Center showcases Crestron's extensive AV-over-IP capabilities while enabling people to explore new ways of working and learning. In addition, NETGEAR M4300 network switches, purpose-built for ProAV, interconnect all spaces, so content can be routed seamlessly throughout the entire area.

BACKGROUND
Crestron Electronics and NETGEAR have a shared mission: to give customers access to advanced but simple-to-deploy and manage AV and networking technology. Plus, both organizations strongly support dealer networks. Worldwide, Crestron and NETGEAR find themselves often involved in the same projects, which is why, “When we were building our Crestron Singapore Experience Center, it was natural to partner with NETGEAR. Just like our customers choose Crestron and NETGEAR, we are putting the best of both in our Experience Center,” says Joel Mulpeter, Director of Product Marketing, APAC, at Crestron Electronics.

Primarily based on AV-over-IP, the Center is designed to demonstrate Crestron technology in a very experiential way. Joel explains, “These are real, live working spaces that are used daily, as a demo space and serving our customers, but also for us to use as employees of Crestron.”

DIFFERENT SPACES AND USES
Areas in the Center are set up for different purposes. For instance, a hybrid learning environment provides a place for students to collaborate, both in-person and remotely. In addition, third parties are welcome to use the facility. There is a ‘town hall’ area for enterprise and government customers, featuring a large video wall on which digital signage can be displayed. Adds Joel, “We also use the space ourselves for team meetings, especially when collaborating across different offices.”

There is also an open office area and a closed conference room, with all spaces connected technically. “So, when we run events, for example, everything gets routed to everywhere, and we can demonstrate it as one piece of fabric, within which we can switch content and shared audio,” says Joel.

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Joel Mulpeter, Director of Product Marketing, APAC, at Crestron Electronics
Simplicity is essential to the Center’s design and is enabled by both Crestron and NETGEAR’s technologies. “These are very technically advanced spaces, but it is important that it does not require technically advanced people to operate them,” emphasizes Joel. “Minimal training is required, and Crestron’s salespeople can operate demonstrations without a dedicated AV technician being present, and recently an external trainer just walked in and started operating the technology. Also important to us is the ten-second experience: when people walk into the conference room, they can join a virtual meeting and speak to someone within that timeframe.”

UNDERLYING TECHNOLOGY

Beneath the ease of use is some powerful technology, including Crestron’s innovative NVX AV-over-IP platform, which seamlessly connects a wide variety of endpoints. Flawless video, audio, USB, and control are delivered in real-time at 1Gb, with no latency. Any NVX endpoint can be configured to accept any stream on a network, providing infinite flexibility, with the option to route audio separately to video if required.

Complementing Crestron’s technology is a backbone network based on the M4300 series of network switches from NETGEAR, purpose-built for AV and already deployed in many locations globally. Although they are being used in the Center primarily for 1Gb, they are engineered to support 10Gb applications too.

“We use the M4300s in the Center because they are aligned to what we are trying to achieve: to show a 1Gb network that is scalable in real-world conditions. The M4300 are designed around that same methodology.”

“Also, as much as possible, we use the simplicity of Power over Ethernet (PoE), which the NETGEAR switches support. So, we can run many devices on PoE from a single device, connected to one plug, one cable, and just one thing to fault-find.” The switches are distributed throughout the Center, connected at 1Gb with the NVX devices, and 10Gb for the uplinks.”

Simon Tsang, VP of Sales, APAC, NETGEAR, adds: “Together, Crestron and NETGEAR support applications with high QoS, multicast, 4K support, across just 1Gb. That puts a lot of powerful functionality in the hands of users, and for systems integrators. Also, the combination of Crestron and NETGEAR together can be truly plug-and-play. All the complicated, time-consuming configuration work is already done, minimizing training for installers: everything happens automatically, in just seconds.”

INSTALLATION AND RESULTS

Crestron installed and configured the switches themselves without any issues. “It was one of the easiest parts of setting up the Center. “Our team had previously trained and worked closely with the NETGEAR Pro AV team, so our people have the same knowledge as our dealers and integrators. We didn’t need any NETGEAR support, but it is good to know that at any time, the NETGEAR Pro AV team is ready to jump in and help.”

The Center opened at the start of 2022, and its use continues to gain momentum, with excellent feedback from users and visitors. “We hear from people that they experience new ways of learning and what the modern workplace can be.”

Joel continues, “The challenge is keeping up with technology advancements because they move so fast. The Center must last many years, yet technology can turn over within six months or a year. However, the way we designed the system – and the NETGEAR switches are an important part of that – means it is very flexible, so we can adapt and evolve quickly.”

“We will be continually upgrading as technology progresses. As AV over IP is a growing part of our portfolio year-on-year, we are very excited about the future and where it is all going. NETGEAR has the same innovative approach to the market as Crestron and releases switches that solve many problems for this industry: I am sure there is much more we can do together in the future.”