CASE STUDY
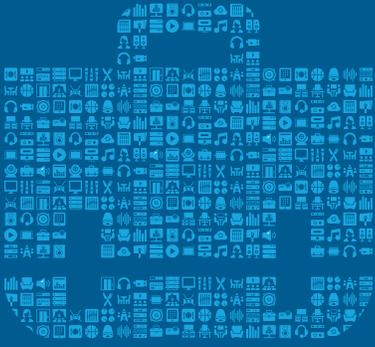
CORPORATE

OPPORTUNITY

Update 300-plus conference room campus with networked AV solution to ensure every projector, display, projection screen, CODEC, and echo canceller, and other IP-connectable device has a network connection.

SOLUTION

Juniper's completed AV matrix uses the network to handle all video inputs and switching and supports a number of mini-conference rooms, providing immersive teleconferencing from one space to another.

"

We had bold aspirations for the new headquarters, and the matrix was a novel design. We took a sensible risk and I'm delighted. This is the way of IT today."

JUNIPER NETWORKS

Before Juniper Networks unveiled plans for its brand new Sunnyvale CA campus, furnished with 300-plus conference rooms, no one had envisioned, much less attempted, such a tremendous deployment of AV-over-IP multicast on a network. SVSI, an established industry leader and pioneer in IP-based AV distribution and switching solutions, was integral in ensuring the success of this ambitious project. Every device on the Juniper campus, every projector, display, projection screen, CODEC, and echo canceller has a network connection.

Juniper was engaged in a more traditional design for its project but decided to reevaluate in order to maximize the conferencing experience and rein in the budget, says Joey D'Angelo, Vice President, Charles M. Salter Associates, San Francisco. "We quickly recognized that a standard AV integration design wasn't what Juniper wanted."

To accommodate these spaces, Salter's team experimented with a new prototype for the system, mocking up several different types of conference rooms using plywood, sawhorses, and SVSI encoders and decoders, D'Angelo says. "We used various table shapes and tried about 30 different camera types; the camera's field of view had to be specific. This SVSI prototype worked so well in the various mockups that we advised Juniper to apply it to the entire campus rather than including even a single traditional switcher."

The entire matrix features nearly 600 SVSI Encoders as input sources with more than 400 Decoders for output, 120 ATR Audio Transceivers, and 25 Windowing Processors. SVSI's involvement signals an open door for progressive integrators, IT professionals, and CEO's/CIO's of entities large and small to consider embracing this approach. The long-term impact of the Juniper project extends to architects, who should feel confident in designing buildings with capable network infrastructure and future-proofing.

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"The key principal in our vision was to enable everything on an IP network, highlighting a different way of executing an AV project," says Gary Clark, Juniper IT CTO & Vice President, Technology Services. "We hear constantly about how the internet is merging into our consumer lives, into our thermostats and home appliances. Yet the AV industry still harbors the notion of RS232 controllers. We wanted to drag AV into this century with this project."

As a networking company, Juniper was the ideal candidate for taking this risk. "We wanted to show that you could make a reasonable, cost-effective system to share expensive components on the network and to stream data over that network. The challenge was to IP-enable everything; the realization was in finding vendors who had IP capable product, and SVSI had a solid product base."

Now completed, Juniper's AV matrix, the largest in the world, moves the AV industry one-hundred percent onto the network, underscoring a seismic shift in networking implementation. Juniper's goal was to use the network to handle all video inputs and switching for their new headquarters. Their design includes a number of mini-conference rooms providing immersive teleconferencing from one space to another.

"We had bold aspirations for the new headquarters, and the matrix was a novel design. We took a sensible risk and I'm delighted. This is the way of IT today." said Gary Clark, IT CTO & VP Technology Services.

PRODUCTS USED

AMX SVSI NETWORKED AV SOLUTIONS

AMX SVSI 4K SERIES ENCODERS & DECODERS

AMX SVSI WINDOWING PROCESSORS

AMX SVSI AUDIO TRANSCEIVERS

> "This could have huge ramifications for the hardware-based CODEC market. If you are doing a smaller project with 50 video conference rooms, that's a lot of money."

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