Case Study

Empowered by Innovation NEC

Wright State University

Customer: Wright State University

Industry: Higher Education

Challenges:
- End-of-life voice infrastructure
- Extremely large capacity
- Complex requirements
- Multiple remote sites

Solution:
- Communications Platform: NEC UNIVERGE® SV8500 UMG
- NEC Professional Services: Lab Support & Traffic Analysis

Results:
- Seamless, cost-effective migration
- Minimal cutover time
- Investment protection
- Updated, agile infrastructure

Wright State University (WSU) is a research university in Fairborn, Ohio - a suburb of Dayton. Named after famous Dayton residents and aviation pioneers the Wright Brothers, WSU has a national reputation steeped in a culture of innovation. The school offers almost 200 undergraduate, masters, professional and doctoral degrees to a diverse student body of nearly 20,000.

WSU worked with NEC to successfully complete the world's first UNIVERGE® SV8500 Ultra Module Group (UMG) deployment.

Challenges

WSU has been a NEC customer for more than two decades. The school's NEC NEAX® 2400 IPX-UMG solution had been rock solid for several years, serving the entire main campus for much of that time. "WSU has complex communications requirements, with 8000+ stations on our main campus," says Steve Nickell, telecommunications manager, Wright State University. "We also have several remote sites, four of which are linked back to the voice infrastructure here on the main campus." NEC's UMG configuration allows companies to easily expand their UNIVERGE communications platforms to accommodate extremely large capacities.

NEC announced the retirement of the IPX-UMG solution after 25 years of production. Migration to the NEC UNIVERGE SV8500 UMG was the most seamless, cost-effective way for WSU to evolve its communications platform. "We'd already upgraded our remote sites to the SV8500," says Nickell. "But the SV8500 UMG configuration was not yet available when we cutover the remote sites, so the switch on the main campus was the last one to be converted over."

Now that the SV8500 UMG was available, the university faced another challenge. "NEC had just released the SV8500 UMG, so WSU would be the very first to deploy the solution," says Larry Fox, Associate Director of Technical Services, Wright State University. "Ideally, we wanted the solution to have been installed at least a few times already, just so we avoid any initial kinks and avoid unnecessary downtime."

Nickell concurred. "With a complex solution of this scope, we were understandably concerned about undergoing the very first cutover," he adds. "We wanted to complete a seamless migration that didn't exceed the usual four hours we'd set aside for downtime."

Solution

WSU decided to move forward with its migration to the UNIVERGE SV8500 UMG to support the school's immediate needs. "The SV8500 UMG offers new and improved capabilities over WSU's legacy platform," says Nickell. "It supports the latest voice, unified communications and mobility solutions as well as open-standard interfaces to simply integration." The SV8500 UMG delivers advanced failover and redundancy as well as more powerful processing power. The solution is also more energy efficient.

Nickell worked with NEC to ensure a successful migration. The team launched an initial beta program to reduce the university's concerns about the cutover. "NEC engineers conducted extensive preliminary lab work, met with Black Box and came out to evaluate our site requirements before we ever made the final decision to migrate," says Nickell. "So they did their homework to ensure that our site would be receptive to the initial beta."

After a successful beta, Nickell prepared for a campus-wide deployment. The SV8500 UMG offers a seamless migration path for IPX UMG customers like WSU. As with the legacy solution, the SV8500 UMG has multiprocessors that are all connected over the internal LAN. This enables IPX-UMG customers to install the new SV8500 UMG within its current configuration, reusing existing cable and power connections. What's more, both systems use the same switch modules, simplifying the data-conversion process. It also allows the SV8500 UMG to reuse the IPX-UMG's interface information as much as possible to reduce the risk of resetting networked/remote systems.

The SV8500 UMG also allows WSU to re-use most of its existing equipment. "We're able to use our same PIMs, circuit cards and terminals," he adds. "This not only saves us money to deploy our new SV8500, it also allows us to continue extracting value from the hardware and software investments we made with the IPX."

The cutover for WSU's more than 8,000-station system required a mere 65 minutes, a significant difference when compared to the standard four-hour downtime. "The bulk of the migration is really logistics coordination, says Nickell. "The actual swap out consisted of us just installing the termination cable points of our phone plants."

NEC conducted a week of post-deployment testing and monitoring. "It's running like a champ," says Nickell. "And all of our essential applications, including our E911 and our automatic call distribution, were seamlessly transitioned."

Results

Wright State University successfully implemented the world's first SV8500 UMG in almost a quarter of the time usually required for a deployment of this size and complexity. "Anytime you're the first to do anything, it takes a little courage," says Fox. "Wright State was rewarded with a historic result that far exceeded our expectations."

Nickell attributes the deployment's success to the NEC Professional Services team. "Participating in the beta program was a huge benefit from a cost and support perspective," says Nickell. "But in reality, the coordination from NEC technicians and engineers is the reason why this deployment went over as well as it did and within such a short timeframe."

Nickell is also pleased with how NEC's overall migration process. "WSU had not considered migration until we attended the annual NEC Customer Technology Expo last May," says Nickell. "We started negotiations with NEC soon after. We finalized the contract in June. The beta was two weeks later. Then we completed the cutover in July. It literally took weeks."

The SV8500 UMG provides WSU access to advanced features and applications like unified communications, presence and mobility solutions. The solution also equips the university to quickly respond to immediate and future requirements. "If we get a requirement on short notice, we have the capability of expanding the switch as needed. That was our main reason for moving forward with this upgrade," the IT Manager concludes.

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