

Coming Together

Two Merged Board of Cooperative Education Service Organizations Find Common Ground With Unified Communications

Overview

When two (BOCES) — Steuben/Allegany and Schuyler-Chemung-Tioga — merged at the end of 2006, it created a powerhouse of educational resources in southern New York State.

The new entity, called the Greater Southern Tier (GST) BOCES, was now responsible for serving approximately 35,000 K-12 students at 21 different school districts, in a region that spans more than 2,100 square miles.

One of 37 such entities around the state, the GST BOCES operates as an extension of the local school districts — helping them save money by sharing high-quality educational programs and resources, as well as costs.

Not surprisingly, a merger of this size created a huge logistical challenge. The newly formed GST BOCES had to integrate the workings of three different campuses — the Bush campus in Elmira, the Coopers campus in Painted Post and the Wildwood campus in Hornell — which were located some 65 miles apart.

“We knew that finding a way to put these two groups together would be a very interesting endeavor,” said Brian Bentley, CDF superintendent of buildings and grounds. “Basically, east didn’t know west; and yet we needed to find a way to converge three separate campuses — each of which did things completely differently.”

Time for Change

When examining the organization’s telecommunications platforms, the GST BOCES decided it was time for an upgrade — and used the merger as the catalyst for change.

At the time of the merger, the campuses’ existing PBX voice infrastructures were already aging and their 1960s PA systems were no longer reliable. Furthermore, switching phone calls between campuses could get complicated, not to mention expensive.

Business Success

Cost savings completely eliminated two PRI lines, and all toll charges with the switch to WAN connections.

Mission Success

The resulting VoIP system provides a unified communications platform that delivers enhanced functionality, quality, responsiveness, cost-savings and the potential for video capabilities.

Project Success

Completed on time, on budget, as planned.

Technical Success

GST BOCES now leverages the latest in communications technology to improve the districts’ entire communication system, operating seamlessly as a single entity across all facilities with a unified dial plan, fully sharing all inbound and outbound dial-tone access resources across all campuses and buildings.



The GST BOCES needed a way to replace its two disparate phone and voicemail systems with a common platform. It also needed to provide integrated paging across all three campuses.

After thorough research of possible alternatives, the organization turned to local Cisco technology integrator, Annese & Associates, Inc., to help them converge their sprawling communications system into a single, converged Unified Communications System. This system, based on Voice over Internet Protocol (VoIP) technology, would support their 21 constituent school districts.

Once they outlined their requirements, however, only one provider could offer GST BOCES a complete solution: Cisco. By using today's communications technology, GST BOCES could achieve all its goals, while saving money, improving performance, and positioning itself for the future.

Specifically, the GST BOCES hoped to realize:

- Lower long-distance calling costs
- Better 911 coverage
- Call detail reporting/call accounting
- Centralized management
- Enhanced paging capabilities
- Easier intra-campus directory dialing
- More effective communications through e-mail-to-voicemail capabilities
- Possibilities for future video collaboration
- The ability to use web-based applications over the phone

A Call to Action

To support the Unified Communications implementation, the Annese & Associates team upgraded the campus switching technology to enable power over Ethernet (PoE), quality of service (QoS), and backup power.

"Implementing the dial plan was another challenge because we were starting with three different dial plans, which meant we needed to identify and configure all three into one common plan," said Jason Boyers, design lead for Annese & Associates. "This configuration included the work groups and workflow for three different organizations. We were also tasked with building a dial plan that would scale to support the individual schools, as well."

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Next, Annese was asked to integrate a common paging system across all campuses, which previously used three different systems — all requiring different integration strategies. This step required properly configured Multicast over WAN technology. Annese recommended, configured, and installed Berbee InformaCast for multicast capabilities to provide IP phone and overhead paging into one network.

Thanks to the Annese team's understanding of the goal — combined with its exceptional technology expertise — the entire \$300,000 project was completed by mid-March 2007, just five months after the project onset. Deployment went smoothly, and GST BOCES employees were now ready to take advantage of the new-found benefits.

Far-Reaching Results

Today, when the phone rings at the main office, the caller can be immediately transferred to any campus in the GST BOCES region — regardless of where it's located — without incurring any long-distance charges. This expands the local-calling area for all three campuses, which is a huge cost-saving feature for all the school districts in the region.

Currently telephone costs have been reduced, plus, maintenance charges, licensing fees, and support costs associated with the old PBX systems have been completely eliminated.

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There are also significant savings associated with telephone moves, adds, and changes. Before the Cisco Unified Communications solution was deployed, skilled telephony personnel required several hours to move a telephone. Today, even a user can move his phone and simply plug it in to a new location — and adding new phones requires less than 30 minutes by a technician.

GST BOCES has also improved its backup and restore, redundancy and business continuity capabilities. Troubleshooting the voice network can be done from virtually anywhere.

There were also benefits in store for users. "User adoption was very fast and easy — even after years of using other systems that were as many as nine years old," said Dan Wallenbeck, GST BOCES telecommunications services manager. "Today, users can work from anywhere without impacting other users. Plus, user administration is so easy, it's exceeded our expectations."

"Despite the distance between campuses — and distinct way that each campus runs — the new phone system actually played a big role in helping bring everyone together," said Lydia Eldridge, administrator of computer services for GST BOCES. "Four-digit dialing across all three campuses helps us all feel like we're part of the larger organization."

With careful attention to planning and design, the Annese team was able to keep their eye on the goal of lower costs and enhanced communication. The outcome was complete satisfaction by GST BOCES, which was now well poised for a new future of innovation and education.

Technology and Applications

Cisco Unified Communications Manager

A high-availability solution that brings voice, video, data, and mobile applications together to help users communicate effectively, no matter where they are located or what devices they use

Cisco Unity Unified Messaging/Voicemail

Enables users to listen to e-mail over the telephone, check voice messages from the internet and (when integrated with a supported fax server) forward faxes to any local fax machine, thus increasing productivity

Three Voice Gateways and Programmed Call Routing

Helps use all gateways to minimize long-distance charges

Cisco Emergency Responder

Sends emergency calls to the appropriate Public Safety/Answering Point (PSAP), based on the caller's location, and enables the PSAP to identify the caller's location and return the call, if necessary

Third-Party Call Accounting Package

Uses Forced Authorization Codes for bill-back purposes

Berbee InformaCast

Allows users to simultaneously push and audio stream and/or text message to multiple IP phones, speakers, and overhead paging systems

Cisco Switching Solutions

Uses state-of-the-art Cisco technology and best practices





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“The Cisco network’s ability to meet our goal was obvious,” added Wallenbeck, “and Annese & Associates did a tremendous job of tying the project together and [ensuring the voice network] works effectively. It’s how Cisco designed it to be.”

“The Annese team’s effective lifecycle-service approach was another key to our success,” said Steve Manning, manager of computer services for GST BOCES. “I would strongly recommend Annese for any project involving Unified Communications.”

Project Partners



Annese & Associates, Inc.

Today’s communications networks are the foundation for connecting your people and their ideas to one another. At Annese, our mission is to provide an excellent customer experience while meeting your business objectives through comprehensive industry-leading solutions delivered with a personal approach.

It is our vision to consistently increase the capability, capacity, and consistency of our people, processes, and systems—See the difference with Annese. For more information please call 800-723-2213, or visit annese.com/gstboces.



GST BOCES

The GST BOCES is an innovative educational service organization driven by customer needs and a commitment to excellence, whose mission is to ensure the success of our diverse learners, parents, community members, schools and businesses by providing collaboratively inspired, cost-effective, quality programs in an atmosphere that is safe and supportive.

Our priority is to be the BEST at providing quality, cost effective programs and services that meet the needs of the students, schools, and businesses in our GST regional community.