



## ▶ Emtec® Scores an A+

*Emtec, Inc., makes the grade during South Plainfield school district IP telephony project.*

Educators know the value of homework — the extra study, research and practice are essential to mastering any subject matter. Those qualities are also indispensable in a qualified technology integrator, as the South Plainfield, NJ school district learned recently.

The school district earmarked funds for upgrading or replacing its aging telephone system as part of a recent capital improvements project, which included the construction of a new elementary school and the renovation of the old school for administrative offices. South Plainfield had preliminary discussions with a handful of technology vendors about the possibility of implementing an IP telephony solution to serve the borough's seven public schools and the administration building.

Emtec, Inc., quickly jumped to the head of the class.

Emtec was selected for a number of reasons, including a strong track record with both voice and data projects, a string of successful telephony implementations for other school districts and an impressive list of staff certifications. But the fact that Emtec obviously did its homework was perhaps the deciding factor.

*"They spent a lot of time with us up front, interviewing me and all of our key players about what we needed and what we wanted in a phone system," said Russ Mattoon, Director of Technology for South Plainfield School District. "Other vendors had not done that. The Emtec people were very thorough."*

### Multiple Choice:

Early on, it was determined that the existing Avaya phone system could not be expanded without huge expense. The school district wanted to explore both Avaya and Cisco solutions, and Emtec was the only vendor that had experience in multiple IP telephony platforms.

*"They already had a Cisco data network and connectivity between all the buildings, so Cisco was the best solution based on the current infrastructure and where they were looking to go," said Dave Pfister, Emtec solutions engineer.*

Emtec was also able to demonstrate significant cost savings with the Cisco voice implementation. With its existing setup, the district had an Avaya Definity PBX that serviced the high school, middle school and intermediate school, but the four elementary schools were connected via off-premise extension (OPX) lines. OPX lines can be pricey, with per-circuit and per-mile fees above and beyond the standard lease charges.

*"It turned out there would be significant savings with the Cisco telephony solution," said Pfister. "They would obviously not have to support the Definity anymore, and they would be able to service all the remote locations across the WAN connections at a cheaper rate than the OPX lines."*

**Further Review:**

But Emtec wasn't finished doing its homework just yet. The company then began a methodical assessment of the data network to make certain it would support voice traffic and to ensure South Plainfield schools wouldn't be hit with any surprises.

Emtec engineers visited each building, examined all the network routers and switches, determined the most efficient call flow and conducted a needs analysis that described what was required to ensure power availability, network redundancy and survivability. Emtec also outlined how the district would need to connect from its main distribution frame (MDF) to its phone demarc (the location where the local exchange carrier terminates their phone lines).

*"The Emtec engineers recognized that while we could run a Voice over IP phone system on our network, it wouldn't be very efficient,"* said Mattoon. *"We had a mixture of some out dated 3Com and Nortel equipment in place alongside our new Cisco gear, and we needed to take that out and make the entire network Cisco. Emtec also went through and tweaked a lot of the routers and switches to make the Voice over IP more efficient to run."*

**Extra Credit:**

Another critical element of the project involved the conversion of an old elementary school into the administration building. In addition to phone service, the renovated building would need equipment for its own LAN. However, construction delays made the move-in date a bit of a moving target.

*"One of the key things about Emtec is that they worked very closely with us to set up a temporary system — at very little extra cost — that allowed us to utilize existing equipment while we were moving,"* said Mattoon. *"When we were finally able to move into the administration building, everybody had phones and we all had the exact same numbers we'd been using before. There was no interruption in service, and we were able to move over without any problems whatsoever. It worked out very nicely."*

Even with the construction delays, Emtec was able to complete what became three separate projects — the administration building move, the network upgrade and the IP telephony implementation — by the end of February, just three months after being awarded the contract. Upon completion, Emtec also conducted multiple training sessions for the South Plainfield School District staff.

*"It was a great experience,"* said Mattoon. *"Throughout the installation, their project manager met with us weekly, providing us with status reports regarding where we were, what we had to do, my responsibilities, their responsibilities ... We always knew exactly where we stood."*

The efficiency with which Emtec completed the project is at least partially due to its experience with similar implementations for other school districts.

**Further Review:**

*"Our due diligence, our methodology and our documentation are what set us apart from other vendors,"* said Pfiester. *"And because we do our homework, we're usually cheaper. We don't overly quote the hardware or put in more than is needed. With South Plainfield, we visited with them six or seven times before we ever submitted a quote, where other vendors were coming back with quotes after their first visit."*

*"We understand how important it is for school districts to get it right the first time and not miss anything. When they get approval from the Board of Education for a project like this, they can't go back to the well and say we need more money. We put in the time up front to make sure there are no surprises afterward."*

Emtec's attention to detail impressed Mattoon. After dealing with a variety of vendors on different projects during his three years on the job, he now plans to use Emtec exclusively.

*"For once, I now have just one point of contact for almost the whole network situation,"* he said. *"We've already called on them to do some additional cabling for us and to fix some problems we've had with some fax lines. After this experience, I feel completely comfortable with them."*

**About Emtec:** Established in 1964, Emtec, Inc. is a systems integrator that provides IT services and products to the federal, state, local, education and commercial markets. Our market leading value-based management methods, coupled with best-in-class IT technology, consulting and development services, address a wide range of specific client needs, as well as support broader IT transformation initiatives. Emtec's service capabilities span the United States, Canada and countries around the globe.