



CASE STUDY

Improving Safety and Increasing Efficiency with a Fortinet VoIP Solution



Located in the northeastern suburbs of Charlotte, North Carolina, the Cabarrus County Schools (CCS) serve more than 32,000 students at 40 different schools, employing 2,200 teachers. The region is growing rapidly, and the district opens new schools every few years. As the number of faculty and staff members increases, the need for seamless voice communication becomes even more important.

Legacy Telephony System Failing

The district's previous telephony solution consisted of 20-year-old Mitel hardware with phone service provided by Windstream. This system was showing its age and not scaling well with the growth of the district. Specifically, failures would frequently occur that required the district to send a faulty card back to the manufacturer for repair—a process that could result in phone service for an entire campus being down for days. This posed significant risk for students and teachers, as even emergency calls were not possible during these outages.

As the legacy system neared the end of support, CCS was offered a hosted solution at a very high price point—well beyond the school's budget. The CFO found that this cost was not justified, and everyone agreed that a replacement system was needed. Unfortunately, the district had only a few months to find the right solution. The IT team realized it needed a centralized system that allowed easy-to-use call control, scalability for future growth, and redundancy to avoid downtime.

Choosing a Replacement Solution

As it turned out, a team from Fortinet was in the process of preparing a quote for FortiGate next-generation firewalls (NGFWs) to support CCS's network infrastructure when they learned of the district's dilemma with its voice product. At CCS's request, Fortinet and the two other vendors involved in the NGFW bidding process added voice services to their proposals.

Fortinet ultimately was awarded the contract because it offered a full, integrated solution—including voice—at a much more competitive price point. The virtual machine (VM)-based FortiFone 10000 phone system and call center license gave CCS the features it needed without the numerous add-ons and additional licenses required in the other vendors' proposals.

The survivable gateway solution in FortiVoice provides failover lines at each school to be used in the event of an emergency call or network connection outage to the central site. This ensures that all calls go through, regardless of the situation. A single interface enables the IT team to configure and manage all devices centrally, making changes on the fly as needed.

“Fortinet has really stepped up in helping provide a scalable, easy-to-use solution when other vendors were unable to—at a price we can justify.”

– Adam Harkey, Systems Engineer,
Cabarrus County Schools

Details

Customer: Cabarrus County Schools

Industry: Education

Location: Concord, North Carolina,
USA

Deploying a Robust Solution

The district elected to engage Fortinet Professional Services to assist with the deployment. Local sales engineers were also on call to help with the rollout and provide training on the product and phones.

During this process, an issue was detected with some of the schools' overhead paging systems. Fortinet was able to work with the IT team and provide a solution quickly and have it integrated into production shortly afterwards. "If there has been a concern, they have been quick to get those required involved to help out," says Adam Harkey, systems engineer for CCS.

Realizing Tangible Benefits

The FortiVoice system has now been in place for six months, and things are running very smoothly. Thus far, the team has had only a few hiccups as they fine-tuned the system for everyone's needs. In addition to the design and implementation support from Professional Services, CCS's IT team has worked with the FortiCare support team to answer questions and provide advice on changes that should be made.

In the short time that FortiVoice has been in place, CCS has seen significant benefits. For example, routing the district's 5,000 daily external calls through a centralized system is projected to reduce the number of phone lines required for each school—resulting in significant cost savings. Internal calls between schools or with the school board are now managed over the internal network and do not incur phone charges for the district.

In addition, the robust features in FortiVoice have made life easier for all employees. Users can now call any district phone by using a five-digit extension rather than having to dial a full phone number plus an extension number. Adding to this convenience, employees now have access to eFax services, email notification of voicemail messages, and caller ID—features that were unavailable with the legacy system. And an intuitive user console enables teachers and staff members to view their voicemails, send faxes, and access the district directory.

Finally, Harkey has found that the new system makes his own team's job more efficient. "We love the system," he says enthusiastically. "It is allowing us to turn around internal tickets faster."

Looking to the Future

CCS's success with FortiGate, FortiVoice, and FortiFone has prompted the team to evaluate the FortiClient endpoint security solution and the FortiAnalyzer security analysis tool, among others. "Fortinet has really stepped up in helping provide a scalable, easy-to-use solution when other vendors were unable to—at a price we can justify," Harkey concludes.

Business Impact

- Reduced licensing costs with integrated solution and avoidance of add-ons
- Significant cost savings from reduction in the number of phone lines needed for each school
- Improved staff efficiency with central user interface, email notification of voicemails, eFax, and caller ID
- IT staff efficiencies through managing internal tickets more efficiently

Solutions

- FortiVoice
- FortiFone
- FortiGate
- Fortinet Professional Services
- FortiCare