

ShoreTel and Morristown Utility Systems



ShoreTel
communications
powers up
Morristown Utility
Systems for
new markets



CHALLENGE

- *New business ventures and the need for a highly available communications system meant replacing the aging analog phones with modern, feature-rich and resilient IP-based communications.*

SOLUTION

- *A ShoreTel Unified Communications (UC) system across three sites, using two ShoreGear® T1 Switches, four ShoreGear® 60 Voice Switches, one ShoreGear 40 Voice Switch, and ShorePhone 230 and 560 IP telephones. The system also uses ShoreWare® Enterprise Contact Center and ShoreWare Call Manager applications.*

BENEFITS

- *The sophisticated ShoreWare Enterprise Contact Center enables the utility to dramatically improve customer service and quickly scale to handle increased volumes to help MUS pursue new markets.*
- *ShoreTel ease of management has cut the time spent on phone system management down from hours each week to minutes, leaving more time for revenue-generating projects.*
- *The redundancy of the ShoreTel distributed architecture means that in the event of an emergency, the phones automatically switch over to an alternate site without disrupting communications.*

Morristown Utility Systems provides water, power and FiberNet broadband cable services to approximately 13,000 customers within the municipal boundaries of the City of Morristown, Tennessee.

Over the past few years, deregulation in the utility industry has led to an increasing need for business agility among utility companies. For Morristown Utility Systems (MUS), a local government commission that operates as an enterprise fund of the city of Morristown in Tennessee, this means responding to market demands rapidly and cost efficiently, and the recent business decision to diversify its offerings and enter the fiber to the home market with innovative entertainment, Internet and communication products and services made perfect sense. However, it soon became obvious that the utility's aging Avaya phone system could not keep up with the increased call volume resulting from this successful venture.

Formed by a private act of the State Legislature in 1901, MUS is technically a government unit, but funds its expenditures exclusively through rates and charges, and receives no income from taxes. Therefore, choosing a reliable system and a fiscally sound investment were key criteria.

"The volume of calls tripled, plus the length of calls went from an average of two minutes to more than 20 minutes, due to the complexity of the fiber to the home business," explained Mike Fawbush, Information Systems Manager for MUS. "The old system only offered automated call distribution, and agents had to notice the light on the phone to know that someone was on the line waiting. We were getting at least four or five complaints a day from frustrated residents unable to get through to a live person."

MUS must keep the lines open in an emergency

In addition, the old system had three independent PBXs in three separate sites; but calls could not be transferred to any one site in emergency situations. Since the city depends on the utility company for power and water, and especially to provide city services during any type of emergency or outage; MUS needs a communications system that is highly resilient and reliable. For instance, in the event that trees or thunderstorms take out power lines, MUS must be able to make repairs quickly, and that means maintaining emergency communications for staff, work crews and customers.

With just two people on his IT team to support the three divisions of power, water and FiberNet, Mr Fawbush also needs a



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Information Systems Manager
Morristown Utility Systems

communications system that is easy to maintain and manage, and does not require special certifications or programming skills. After convincing upper management that an IP telephony system would provide the utility with enterprise-class communications features and functionality without tying phone services and personnel to a specific site, he issued an RFP. At the recommendation of local reseller, Terry Fishburn of Advanced Communications, he invited ShoreTel to respond, along with three other major vendors.

“Straightaway we saw in demonstrations that the management of the other systems would be a nightmare compared to the ShoreTel UC system,” Mr Fawbush said. “Plus, ShoreTel met all of our requirements: management ease, reliability, functionality and flexibility, at a much lower price point.”

ShoreWare Enterprise Contact Center supports business agility

In addition to the redundancy and fail-over capabilities provided by the distributed architecture of the ShoreTel UC system, Mr Fawbush and his team were particularly impressed with the features in the ShoreWare® Enterprise Contact Center application (ECC). As business continued to grow, Mr Fawbush recognized the need to improve customer service by establishing a call center that could respond quickly and effectively to customer calls, and scale when needed. The rich functionality in the ShoreWare ECC application provides multiple levels of insight and features that enable organizations to respond quickly to changing customer needs.

“The previous call center wasn’t really a call center but simply a group of about seven people responsible for answering the phones,” Mr Fawbush said. “We had no advanced call features, and no way of knowing why people were calling, simply that they were calling and we were not always answering in time.”

MUS upper management approved the decision to purchase a ShoreTel UC system, and four ShoreGear® 60 Voice Switches and one ShoreGear 40 were installed across three sites—the main office which houses customer service, administration, payroll, accounting, and the general manager; the water filtration plant; and the telecom and power site. With three digit dialing, calls between sites are simple and quickly transferred.

Advanced Communications also helped MUS transition from copper to PRI lines, which were already tested and good to go at deployment. The cutover from the old system to the new ShoreTel UC system took less than three hours, including bringing the new phones up and running. MUS is using 95 ShorePhone™ IP 230 telephones, with about ten ShorePhone IP 560 telephones for staff who have to monitor more lines. The utility just needs one server for voicemail, and another that runs the ECC application.

Flexibility of ECC provides customizable customer experience

Two of the three sites use the ECC application, with a total of 25 agents, including two administrative supervisors who perform reporting and call center management, and five regular supervisors to perform operational functions, such as putting the agent in work mode or non work mode. The flexibility of the ECC application on the ShoreTel UC system means MUS can easily accommodate agents at two sites, each with full functionality such as the ability to transfer calls and combine reports. This arrangement enables MUS to balance call volume and help improve customer service with minimal wait times.

“The flexibility of the ECC application has enabled us to write a script that sends an e-mail to a supervisor when customers have been on hold for three minutes,” Mr Fawbush said. “The ability to interact with Enterprise Contact Center and write scripts to an external database means we can customize the system to meet our needs and ensure optimum customer service.”

In addition, the reporting functionality in ECC has enabled MUS to make important changes to improve customer service. Now the system reports on what people are calling about, so Mr Fawbush was able to establish separate groups to answer customer service and technical support calls. This connects callers to the right person to answer their questions, resolve issues on the first call and improves MUS agents productivity.

“The real-time statistics produced by ECC provide important insight that means we can easily and quickly ramp up agents in the event of an emergency or other spike in traffic, such as the introduction of a new entertainment feature that might produce a lot of calls,” Mr Fawbush said.

In addition, the wall board functionality in ECC provides everyone in the call center with a quick glance at how well the center is



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performing with current call statistics posted on a large screen. Agents can now see the number of calls waiting the queue and manage call volume as a team, instead of relying on a solitary blinking light on the phone.

No call goes unanswered—no matter what!

MUS uses ShoreTel's Workgroup capabilities to handle increased call volumes during power outages, all phones in a workgroup ring to help ensure that as many calls as possible are answered. The hunt groups functionality rings all of the phones in the water facility at night when there is only one operator and that person could be anywhere in the facility – not necessarily near his desk.

"ShoreTel enables us to design the exact steps each customer flows through when they call, and tailor the communications experience to meet their needs," Mr Fawbush said. "At the same time, the ShoreTel UC system provides our staff with valuable information about who's called from the very detailed CDR Data."

The utility now receives fewer than five complaints every six months, and Mr Fawbush can easily query the call data recording (CDR) information to investigate each case. "The CDR enables me to reproduce the routing slip—where the call went, how much time it took and how many times the phone rang—so I can fully understand and address each customer's issue. The majority of the complaints we receive now are from people who simply want to bypass the system."

In addition to the ECC application, staff at MUS is also using ShoreWare Personal Call Manager, integrated with Microsoft Outlook®, which means that directory updates are available to everyone on the system immediately, and the utility no longer needs to maintain and publish a paper phone book.

Receptionists at MUS are also using ShoreWare Operator Call Manger; which enables them to quickly and easily drag a call and drop it on somebody from a computer desktop, and provides presence information, so if someone is not available they can transfer the call to another person, or directly to voicemail. These productivity tools mean that callers are connected to the right person quickly, improving customer service and business efficiency.

Ease of management saves big time for small team

For Mr Fawbush, the ShoreTel UC system's ease of management has been a huge advantage to his small IT team. Not only are no special technical skills required to manage the system, but the time savings are enormous.

"It used to take us at least 35 minutes to move a phone," he said. "Now it takes no more than two minutes, and I don't need a programmer or telecommunications expert on staff. I used to spend 25 percent of my time on the phones, and now that's down to less than 5 percent. That translates to more time to spend on revenue generating projects."

Furthermore, because the ShoreTel UC system management is Web-based, IT can manage the system from any Web browser, anywhere from a VPN connection. Event triggers keep them informed by e-mail 24/7 about system health and in the event of an out-of-hours emergency, they can quickly transfer calls to one of the other sites.

"Having no previous PBX experience, the simplicity of the ShoreTel UC system allows me to manage it with ease and confidence," explains Chelsey Holt, Information Systems Specialist for MUS.

The reliability of the ShoreTel UC system and its ability to operate with both PRI and analog lines are key benefits for MUS. When a PRI card failed at the phone company's central office at 4 a.m. recently, Mr Fawbush was able to implement a backup strategy before the opening of business, and switch the ShoreTel UC system over to analog copper lines. This situation persisted for two days before the phone company was able to effectively address the problem, but thanks to ShoreTel, no one missed a single call.

"The ShoreTel UC system is a real power house," Mr Fawbush said. "In addition to exceptional reliability, we've seen huge time savings and are paying about the same amount as our old system for far greater functionality. We're now looking at ways we can further improve productivity, including integrating our billing system to make it quicker and easier for customers to pay. This level of flexibility has improved our business agility and means we're well-positioned for future market changes."