

# ZETRON<sup>®</sup> ADVANTAGE

MISSION-CRITICAL COMMUNICATION SYSTEMS

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Choctaw County 9-1-1 director Glinda Whitmire demonstrates the PSAP's new MAX Dispatch system.

## Mississippi PSAP Goes 'State-of-the-Art' with MAX Dispatch

*With its new MAX Dispatch console, Choctaw 9-1-1 is equipped with a state-of-the-art, IP-based system that supports remote functionality, offers cost-effective expansion, and is easy to learn and use.*

Until recently, Choctaw County Mississippi's public safety answering point (PSAP) and communication center was using a button-based system for their dispatching. The system had performed well for many of years, but it was aging and had reached the limits of its capacity.

This year, because of a need to expand and a desire to dispatch from mobile and other off-site locations, the agency went live with Zetron's IP-based MAX Dispatch system. It was a strategic decision that is already reaping benefits for the PSAP.

### Choctaw County, Mississippi

Choctaw County occupies about 420 square miles in the Appalachian hills of north-central Mississippi. Its name derives from the Native American people who originally inhabited the area. In the early 1830's, most were forced to leave for resettlement in Oklahoma. In fact, the Choctaw were the first Native American group to embark on the journey that later came to be known as the "Trail of Tears."

These days, Choctaw County has a diverse population of roughly 8,500. Its main industries are construction, agriculture and manufacturing. People who live there describe Choctaw County as a place of small farms and businesses, where the pace of life is "relaxed." But even a quiet, rural county has its share of medical and public-safety emergencies and has to be equipped to respond to them.



*"[T]he MAX Dispatch system... will not only let us access other locations over the network, but will allow us to expand easily... as the need arises."*

*Steve Montgomery,  
Chancery Clerk, Comptroller and Purchasing Agent  
Choctaw County, MS*

### Choctaw County 9-1-1

The Choctaw County 9-1-1 center handles the area's public-safety and law-enforcement communications. "We answer the county's 9-1-1 calls and provide dispatching for our contracted emergency medical services agency and for the police departments of Ackerman, Weir and French Camp," says 9-1-1 director, Glinda Whitmire. "We also dispatch for all of Choctaw County's fire agencies."

### Why a new system?

Mark Clark owns and operates Central Mississippi Communications, Choctaw County's long-time equipment and service provider. He says Choctaw County began looking for new dispatch equipment for a number of reasons.

"They'd been using Zetron button-based consoles that worked well for them for years. But a lightning strike obliterated one console and left the other one limping along. Even before that, their consoles were being used to capacity. They needed a new system that would allow them to grow and would also allow them to dispatch from remote and backup locations so they'd have options if they had problems at their main center."

As a result of these factors and a desire to obtain the most up-to-date equipment possible, the 9-1-1 center's board of directors decided to obtain a new, IP-based dispatch system.



MAX Dispatch gives you the solid reliability and performance you expect from Zetron in a breakthrough, IP-based dispatch console system.

- **Intelligent UI:** Highlights information pertinent to the task at hand; reduces information overload.
- **Built-in Network Health Monitor:** Provides constant feedback about network status.
- **Advanced tools:** Streamline installation and minimize field time.
- **Dual connections:** Ensure end-to-end network redundancy.

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Dispatcher Randy Pitts takes a call at the Lake County 9-1-1 Center.

# MAX Call-Taking Prepares PSAP for Next-Generation 9-1-1

***With its new installation of Zetron's IP-based MAX Call-Taking system, Lake County, Tennessee's 9-1-1 center is ahead of most of the country in its readiness to handle Next-Generation 9-1-1 communications.***

Although the nation's 9-1-1 system has functioned successfully for more than 40 years, it's now on the verge of a major change. The system is designed around older, analog telephone technology and is simply not built to handle the rich and varied wireless communications—text messages, email, photos, videos and social-media posts—that are becoming increasingly common in personal and business communications.

The National Emergency Number Association (NENA) is spearheading an initiative to rectify this situation. Dubbed Next-Generation (Next-Gen or NG) 9-1-1, its goal is to develop a nationwide, IP-based 9-1-1 infrastructure that will support existing and emerging wireless forms of communication.

Public-safety answering points (PSAPs) throughout the country are preparing to adopt equipment capable of utilizing this new infrastructure once it's in place. And a small 9-1-1 center in Tennessee has just become an unlikely poster child for this effort. With their new installation of Zetron's IP-based MAX Call-Taking System, Lake County 9-1-1 is poised to move into the brave new world of next-generation communications.

## **Lake County, Tennessee**

Tucked into the far-northwestern corner of Tennessee, Lake County covers roughly 194 square miles and has a population of about 7,200. Its main industries are agriculture and tourism.

## **Lake County 9-1-1**

Lake County 9-1-1 answers the area's 9-1-1 calls, provides dispatching for the sheriff's office and other county public-safety agencies, and answers administrative calls for the fire department.

Lake County has not historically been an early adopter of new communications technologies. "Lake is a small, rural county with a small tax base," says Lake County Emergency Communications District director, Doug Robertson. "So we haven't had much of an opportunity to modernize our equipment. I think we were one of the last counties in Tennessee to adopt 9-1-1."

This is changing.

## **Tennessee leads the way**

The state of Tennessee is one of the most advanced in the nation when it comes to preparing for NG9-1-1. It is deep into the development of a statewide NG9-1-1 i3 network known as NetTN. Tennessee's PSAPs are being encouraged to upgrade to equipment that will be able to connect to this network, and the state has made

***"With our new MAX system, we've got some of the very best equipment on the market. Now we're on the cutting edge."***

*Doug Robertson, Director  
Lake Co. Emergency Communications District*

funds available to help them do so. Because of the momentum of this effort, availability of funding, and a need for updated equipment, Lake County decided that the time was right for them to get on board with NG9-1-1 equipment. They also had considerable support and involvement from Lake County Sheriff, Bryan Avery. The project got underway to find a new, IP-based 9-1-1 call-taking solution that would help them prepare for NG9-1-1.

## **Selecting a new system**

Soon after Lake County issued a request for proposals, a solution submitted by one of their existing vendors, GeoConex, became one of several top contenders. It featured Zetron's MAX Call-Taking system and GeoConex's computer-aided dispatch (CAD) system.

"We invited everyone from jailers and dispatchers to administrators to help choose the equipment," says Doug Robertson. "We encouraged them to pick the very best equipment possible because it might be the last equipment we purchase for a while. When they saw the GeoConex solution with Zetron's MAX system, it became everyone's first choice. Not only is it very user friendly, but it will be easy for us to upgrade and adapt in the future."

The MAX Call-Taking solution they chose includes:

- Two Windows-based workstations and console software.
- Two CAMA gateways.
- One analog VoIP gateway for answering non-9-1-1 calls for the fire department.
- Session Initiation Protocol (SIP) telephones and related devices.
- GeoConex's computer aided dispatch (CAD) system.

## **Implementation**

The implementation began with pre-staging and programming the MAX Call-Taking system in GeoConex's facility. The goal was to do as much preparatory work as possible to minimize any disruption the final installation might cause at the customer's site. They then moved the system to the PSAP and installed it, running it in parallel with the existing system until the new system's fine-tuning was complete.

## **On-site and remote support**

Josh Rosen, lead engineer for GeoConex, says Zetron provided critical support throughout this process.

"Someone from Zetron was connected to the system remotely during the entire install," says Rosen. "This was very helpful because software configurations could be applied quickly over the remote connection."

## **Easing the transition**

One goal of implementation was to set up the new system's user interface (UI) so dispatchers would be able to interact with it much as they had their previous system.

"We analyzed their procedures then translated them to the MAX UI," says Rosen. "As a result, the only difference between the old and new system is that instead of picking up a phone, they click a mouse. The steps to complete a task are also very much like they were on the old system."

GeoConex's CFO, Ken Murphy, says they took advantage of the MAX Call-Taking system's ability to bridge the gap between old and new technology.

"The MAX system will use Lake County's existing CAMA trunks until Tennessee rolls out its NetTN i3 network in the near future," he says. "The state's plan is to start by handling cell calls over the new network. We'll provide Lake County with additional, dedicated wireless lines when the network is ready, and they'll be able to start taking wireless calls over the new network."

## **'On the cutting edge'**

Lake County's MAX Call-Taking system has been up and running since mid-May of 2012. And Doug Robertson is very proud of the project. "Our new equipment makes everyone's jobs easier, from the dispatchers to the sheriff," he says. "It's a good investment for the county. With our new MAX system, we've got some of the very best equipment on the market. Now we're on the cutting edge." ■



Zetron's new MAX Call-Taking gives you the solid reliability and performance you expect from Zetron in a breakthrough, Next Generation 9-1-1 system. MAX Call-Taking is SIP-standards-based, ready to meet i3 industry standards and is scalable for multiple PSAPs.

- Next Generation 9-1-1 Ready
- Intelligent UI
- Automatic Call Recovery
- Advanced Call Handling
- 99.999% Availability
- Individual or "Hosted" Designs

# MAX Dispatch Positions Ohio PSAP to Serve as Regional Center

*The Lyndhurst Emergency Communications Center's recent upgrade to Zetron's MAX Dispatch system has improved operations and put the agency in position to serve as a regional communication center.*

In September of 2011, lightning struck the public safety answering point (PSAP) for the town of Lyndhurst, Ohio. The center's two Zetron dispatch consoles were rendered inoperable for several hours. And even after they were repaired, some important functionality was never completely restored.

This was a problem. A PSAP must be able to rely on its communications systems to dispatch first responders to the scene of an emergency as quickly as possible. Anything less could have serious—even life-threatening—consequences.

The good news for Lyndhurst, however, is that the situation provided the impetus to not only replace their aging, damaged dispatch equipment, but to refurbish and expand their entire 9-1-1 center. This has made Lyndhurst a key candidate to serve as a consolidated center if nearby agencies decide to participate with them in such an effort.

## Lyndhurst, Ohio

Lyndhurst is located in northeastern Ohio, just outside of Cleveland. Those living in less-densely populated areas might find it hard to imagine how Lyndhurst's population of roughly 14,000 could fit into its area of only 4.4 square miles— which equates to about 3,480 people per square mile. But Lyndhurst Police Chief Rick Porrello is unimpressed by these numbers. He says they're typical for a Cleveland suburb.

## The Lyndhurst Emergency Communication Center

The Lyndhurst Emergency Communication Center is the city's hub for delivering police, fire and emergency medical services (EMS).

Prior to its recent remodel and upgrade, the center was running Zetron's Series 4000 button-based dispatch system. Although the system was based on older, analog technology and growing a bit "long in the tooth," it had performed well until the lightning strike. As a result, an updated Zetron system seemed a logical choice to replace the damaged one. What's more, Zetron's MAX Dispatch system offered the state-of-the-art technology Lyndhurst wanted in its new equipment.

"Looking to the future," says Porrello, "we thought we should go with an IP-based system, and Zetron's MAX Dispatch system filled the bill. With the MAX system, if we ever have a catastrophic event, we won't be dead in the water. We'll be able to run our system from a remote location over IP. And because the MAX system is almost plug-and-play, it will be easy to update over time."

Lyndhurst chose their longtime service provider, B & C Communications, to obtain and install the new equipment.

## Extensive remodel

The project for Lyndhurst involved an almost complete gutting of their old center, the installation of new wiring and new furniture, expanded closed-circuit TV capabilities, and new jail controls. Their number of dispatch positions grew from two to three and included preliminary preparations for a fourth position.

## Kudos for B & C Communications

Because of the project's considerable scope, it was several months before the new communications equipment could be implemented. Once it got underway, however, the process went smoothly. This was in part due to B & C Communications' mastery of the installation process.

"B & C's systems technologist, Mike Czoher, learned the system on the fly, programmed it, and deployed it with very little assistance from us," says Zetron technical support specialist, Mike Mott. "It was a very smooth install."

## Operations continue

Lead dispatcher, Angela Ricci, says that the PSAP's operations were kept up and running during the installation and remodel.

"After the lightning strike," she says, "B & C set up a temporary solution for us to use. This setup was moved to the back of the room while B & C did their work at the front of the room. We just continued to use it until the remodel and installation were completed."



Lyndhurst dispatcher Michael Uhase reviews notes from a recent event.

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***"With the MAX system, if we ever have a catastrophic event...we won't be dead in the water. We'll be able to run our system from a remote location over IP."***

*Police Chief Rick Porrello  
Lyndhurst Police Department*

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## Maximizing MAX

The MAX Dispatch system offered several benefits B & C was able to maximize for Lyndhurst. "We integrated many resources and functions onto the MAX screen," says Mike Czoher. "The flexibility of the MAX user interface also allowed us to set up the new screens to resemble the old ones. This made it easier for the dispatcher to transition to the new equipment."

## No need for leased lines

Czoher explains some of the MAX Dispatch system's most significant benefits. "Before, our customers had to use expensive leased lines to connect to and control resources," says Czoher. "With the MAX system, we can add a gateway and use an IP-based or cloud-based connection or a microwave link with IP services for them to control things. This eliminates the need for expensive leased lines and will save PSAPs like Lyndhurst money in the long run. It will also give Lyndhurst the capability to remotely control other PSAPs' channels and resources, so it enhances possibilities for the regional coordination and consolidation of dispatch centers."

## Interest in consolidation

Porrello says that discussions are underway to determine whether and to what extent nearby PSAPs might want to employ Lyndhurst's services. "There does seem to be some interest," he says. "Most of the small communities in the area are running their own centers that have to be staffed with at least one dispatcher at all times. If they consolidate into our center, it will take fewer dispatchers to manage a larger area, and we'll be able to share resources and reduce duplication. If this happens," he adds with some pride, "we'll no longer be the Lyndhurst Emergency Communications Center; we'll be the Lyndhurst Regional Emergency Communication Center."

## If lightning strikes twice

Lyndhurst's remodeled communication center went live in June of 2012. It has updated the center's operations and equipped it to become a cost-saving consolidated center if nearby agencies decide to use it in this way.

But perhaps even more important is the fact that Lyndhurst now has a state-of-the-art dispatch system that is designed to keep their operations up and running—even if lightning defies the odds and does strike in the same place twice. ■

## Mississippi PSAP Goes 'State-of-the-Art' with MAX Dispatch

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The Choctaw County courthouse in Ackerman, MS.

### Sticking with what works

Steve Montgomery, Choctaw County's current chancery clerk, comptroller and purchasing agent, was the 9-1-1 director when the new equipment was selected and remained involved throughout its implementation. He says that, from the start, Zetron was the preferred provider for Choctaw County's new dispatch equipment.

"Zetron has served us well, and we tend to stick with what works," he says. "Also, moving to IP-based technology was going to be a big change. We wanted to make sure it was the right change, and we felt that the MAX Dispatch system would be a good fit."

One of Choctaw's top requirements was that the system be obtained, installed and supported by Central Mississippi Communications. "That was important to us," says Montgomery. "We can call Central Mississippi Communications at two in the morning, and they're at the PSAP within 45 minutes. That kind of service means more to us than money can buy."

Montgomery says that the MAX Dispatch system's redundancy was also a key factor. "We need a system we can rely on," he says. "If our system's down, we're down."

### The solution

Choctaw County decided to move forward with Zetron's MAX Dispatch solution. It would include: two Windows-based workstations; radio gateways that interface with mobile radios, base stations and auxiliary controls; and a central platform that serves as the host for system-management software and provides the interface point for third-party devices.

Because the system could be purchased off of Mississippi's Express Product List, it did not require a lengthy bidding process.

### 'Everyone is excellent'

As soon as the new equipment arrived at Central Mississippi Communications, Clark and his technicians went to work staging it at their office with assistance from Zetron's technical support staff.

"Zetron's technical support team provided critical help with the system programming and configuration," says Clark. "And this is typical of them. I've been working with Zetron for 30 years, and I can't say enough good things about them. From their customer-care call-takers to their technicians, everyone is excellent."

**"From their customer-care call-takers to their technicians, everyone [at Zetron] is excellent."**

Mark Clark, Owner  
Central Mississippi Communications

### One-day install and training

Once the staging had been completed, the equipment was delivered to the customer's site for its final installation. Much to Clark's surprise, the system install and training were both completed in a single day. "We offered several days of training," he says, "but the MAX system is so user friendly that dispatchers had it down after the first day. The switch to the new technology was really easy. It was as smooth a transition as I've ever seen."

### 'Money well spent'

Choctaw County's new MAX Dispatch system went live in April of 2012, and so far, it is doing an excellent job of meeting the needs of administrators and dispatchers alike.

"The resources and controls fit onto one screen and are extremely easy for us to find and use," says Glinda Whitmire. "The system itself is so easy to learn that even dispatchers who are new to computers have taken to it quickly."

Steve Montgomery says that he, too, is impressed with the system's user friendliness. He also thinks it's a good investment.

"We're a small county with a limited budget, so we have to be strategic about our expenditures," he says. "I'm confident that the purchase of the MAX Dispatch system was money well spent. It will not only let us access other locations over the network, but it will allow us to expand easily and inexpensively as the need arises." ■



#### APCO International

August 19 - 22, 2012 | Minneapolis, MN

#### North Carolina APCO/NENA

August 26 - 29, 2012 | Wilmington, NC

#### Georgia ECC

September 10 - 14, 2012 | Athens, GA

#### Tennessee NENA

September 23 - 26, 2012 | Kingsport, TN

### ZETRON FACTORY TRAINING

MAX Call-Taking	August 20 - 24, 2012
MAX Dispatch	September 11 - 13, 2012
Series 4000	August 21 - 23, 2012
Series 3200	August 27 - 29, 2012
Series 3300	August 30 - 31, 2012

Please contact Zetron before scheduling factory training as dates are subject to change.

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