



Cable Company Provides Emergency Services Following Hurricane Katrina

Executive Summary

Customer Name

Cox Communications, Inc.

- Broadband Cable—third-largest cable communications company in the United States
- Headquarters: Atlanta, Georgia, United States

Business Challenge

- Support emergency efforts, providing immediate voice and data communications for relocated employees at Cox Baton Rouge
- Deliver secure remote access to employees working from hotels and other off-site locations
- Accommodate frequent, unpredictable employee moves, adds, and changes

Network Solution

- Cisco Business Communications Solution provides continuity of operations and reliable voice and data connectivity over converged IP infrastructure.
- Cisco VPN solution enables secure connectivity for employees working outside the office.

Business Results

- Scalable Cisco network architecture rapidly accommodates 500 relocated employees with minimal disruption.
- Converged IP infrastructure and robust management tools help maintain voice and data connectivity for constantly moving workforce.

Cisco solutions enabled Cox Communications to deliver voice and data access to hundreds of displaced employees, while restoring day-to-day operations.

Business Challenge

For Cox Communications, Inc., disaster recovery planning is a basic part of doing business, particularly along the Gulf Coast. Cox Communications contends with hurricanes and tropical storms every year. Its communications must be designed to sustain operations in the event of a disaster, then quickly return the company to normal operations.

With approximately 6.7 million total customers, Cox Communications is the third-largest cable operator in the United States. Cox offers an array of services, including cable television services, local and long-distance telephone services, high-speed Internet access, and commercial voice and data services.

Before Hurricane Katrina hit, Cox had initiated its emergency plans, setting up a command post in Baton Rouge for Cox Southern Louisiana. Cox's corporate plan emphasized taking care of employees first, so they could focus on servicing customers later.

To help ensure that its core services would not be interrupted, Cox needed to protect its most important information with network and application resilience. The company needed flexible, interoperable communications to enable employees to maintain contact with customers and one another. And Cox needed alternate facilities to support employees who might be displaced by storms.

The disaster recovery capabilities of the Cox Communications infrastructure were put to the ultimate test when Hurricane Katrina struck in August 2005. The Category 5 hurricane displaced more than 900 employees from the company's New Orleans and Lafayette offices, 500 of whom relocated to Baton Rouge.

"We faced a sudden flood of evacuated employees who arrived at our offices," says Ramin Rastin, vice president of information technology for Cox Communications, Baton Rouge. "Every single one of them needed access to our network, their phones, the Internet, and e-mail – all of the resources that employees use every day."

Cox Communications needed to provide secure communications services, not just for employees at its Baton Rouge offices, but for staffers outside its office as well.

“The ease of use of Cisco equipment originally sold me on the solution, and it proved itself by performing during this crisis.”

– Ramin Rastin, vice president of information technology for Cox Communications, Baton Rouge

“We had a huge influx of people here, and we also had New Orleans employees working from hotels,” says Rastin. “We needed the ability to give these remote workers secure access to our network and applications.”

Network Solution

As part of its continuity of operations planning, Cox Communications had already invested in a comprehensive Cisco® network that provided connectivity from its headquarters in Atlanta to local offices. Its Baton Rouge facilities in particular had been built from the ground up with networking in mind, with extensive input from the Cox IT staff.

“We had a 140,000-square-foot building, and our management encouraged IT to play a very active role in design,” says Rastin. “Cisco engineers helped us design the building’s network architecture. The entire building is redundant, all the way from our routers and switches out to our phones.”

At the heart of the network is the Cisco Business Communications Solution, which provides support for wired and wireless voice, video, and data communications. The solution operates on an open, extensible IP platform, enabling Cox Communications to consolidate its phone and data systems as part of a single network. Cisco is the primary vendor for the entire company, and spare parts were readily available when the displaced employees arrived in Baton Rouge.

“Cox Communications has completely standardized on Cisco network equipment, so we were quickly able to get additional network devices and parts from our other offices,” says Rastin.

“If we had not standardized on Cisco, there would have been no way to accommodate all of these people with phone connections or even network ports,” says Eddie Gonzalez, IT manager at Cox Baton Rouge.

Two days after the hurricane, a plane arrived loaded with Cisco phones, switches, and blades. Rastin and his team set to work, providing phone and network access for new users. As more and more employees arrived in Baton Rouge, the organization and seating arrangements changed on a daily basis.

“Because voice and data are both running on the IP network, we can quickly set up users and easily move people around if necessary,” says Rastin. “We had to move users around and ask them to exchange places in a way that was unbelievable.”

Local phone service in Baton Rouge was out, so Rastin and his team worked with their counterparts at Cox headquarters to route phone traffic through the company’s Atlanta offices. Employees arrived from many different divisions of Cox Communications, and each group had specific needs and applications. Rastin and his team configured virtual LANs (VLANs) to give each organization secure access to the resources it needed.

“We moved many of the employees to several large conference rooms,” says Gonzalez. “We were able to create separate voice and data VLANs that they used throughout their stay here.”

Employees with laptops were able to access the company’s Cisco Unified Wireless Network. For displaced employees working from hotels nearby, Cox used its Cisco VPN Series Concentrator to provide secure encrypted network access for remote users. The Cisco architecture scaled rapidly to enable all of these new users to stay connected and remain productive.

“The Cisco solution let us set up a wireless campus very quickly, and accommodate all of our new VPN users with minimal changes,” says Rastin.

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– Ramin Rastin, vice president of information technology for Cox Communications, Baton Rouge

Business Results

Rapid response is vital to maintaining continuity of operations, and the standardized Cisco network enabled Cox to support evacuated employees within hours, instead of weeks.

“We ran out of our own spare phones, computers, and ports within the first two hours on Monday when the hurricane struck,” says Gonzalez. “Once the equipment arrived on Wednesday afternoon, we were able to get everything set up within about four hours.”

Cox Baton Rouge offices remained in a state of flux long after the hurricane, so easy moves, adds, and changes were a major advantage that the Cisco Business Communications Solution provided.

“Every day someone would come to me and say, ‘My entire group needs to move,’” says Rastin. “With the Cisco solution, they could just pick up their phone and relocate, without losing all of their name and extension information. It was extremely simple.”

“Once an employee had been set up, the beauty of the solution was that wherever they moved, there was nothing we had to do on the back end,” says Gonzalez.

Now that the hurricane has passed, the Cox Baton Rouge IT staff have had time to reflect on their response. Hurricane Katrina validated the company’s careful planning strategy, and revealed some new lessons as well.

“The need to maintain communications was number one in terms of lessons learned from this event,” says Rastin. “Our ability to reroute calls through the Atlanta office was key to keeping our organization running. Backing up and placing data outside the region would have made our lives easier, so we might consider implementing a storage area network solution.”

The Cisco Business Communications Solution was designed for growing organizations, and its scalable design can easily support new applications. Cox Baton Rouge is already adding Cisco Unified Contact Center Express to its network to provide intelligent call handling for its help desk. If needed, the system could also function as a command center in the event of another natural event. Rastin is confident that the Cox Communications network can evolve to meet new challenges as they arise.

“We utilized all aspects of our Cisco network infrastructure to recover from this event, from metropolitan and wide-area networks to local-area networks,” says Rastin. “The ease of use of Cisco equipment originally convinced me of the validity of the solution, and it proved itself by performing during this crisis.”

“If we had not standardized on Cisco, there would have been no way to accommodate all of these people with phone connections or even network ports.”

– Eddie Gonzalez, IT manager for Cox Communications, Baton Rouge

Next Steps

In the aftermath of Hurricane Katrina, Baton Rouge's population doubled. Many of those who took refuge in the city remain today, increasing demand for Cox services. Despite damages from Katrina, Cox posted generally strong third-quarter results, with revenue and cash flow rising. Much of that increase was credited to growth in advanced service subscriptions. Cox did not release any new subscriber information in voice, video, or data for the quarter, but did report that it now has more than 1 million cable subscribers taking its "triple-play bundle" of voice, video, and data services. Cox also noted that more than 3 million of its 6.7 million cable customers now subscribe to at least two of the three services.

Cox is working to repair the cable system to get service to all serviceable homes in the Hurricane Katrina- and Rita-affected areas as soon as possible. Not only is Cox repairing the network, it is also implementing upgrades to bring new and better services. The new network will keep New Orleans competitive with other cities by offering greater capacity and flexibility to provide new products for homes and businesses.

For More Information

For Cable Operator Solutions, visit:

http://www.cisco.com/en/US/netso/ns522/networking_solutions_market_segment_solution.html

This customer story is based on information provided by Cox Communications, Inc. and describes how that particular organization benefits from the deployment of Cisco products. Many factors may have contributed to the results and benefits described; Cisco does not guarantee comparable results elsewhere.

Product List

Routing and Switching

- Cisco Catalyst® 6509 Switch
- Cisco Catalyst 4506 Switch
- Cisco 3745 Multiservice Access Router

Security and VPN

- Cisco VPN 3000 Series Concentrator
- Cisco PIX® Security Appliances

Voice and IP Communications

- Cisco BTS 10200 Softswitch
- Cisco Unified CallManager
- Cisco Unified Contact Center Express
- Cisco Unity®
- Cisco Unified IP Phones 7960

Wireless

- Cisco Wireless Access Points

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