VoIP: Proving to Be Effective In Katrina Emergency

IP based voice communications are playing a critical role in the aftermath of Hurricane Katrina. The unique mobility and decentralized aspects of VoIP are being utilized by FEMA, the Red Cross, the army, hospitals, emergency responders, for telethon call centers, and utility workers who are restoring service.

VoIP Delivers Free Calling for FEMA, 1,000 VoIP Lines in the AstroDome, and Phone Service For Refugees. AT&T is establishing IP-based calling centers where directed by the Federal Emergency Management Agency (FEMA) to give evacuees and emergency workers access to free calling. The first of these centers is expected to be operational within a week. In Houston, AT&T is working with Avaya, Cisco Systems and SBC to establish a communications network for refugees moved to the Astrodome. The coalition of VoIP companies will deliver local, long distance and Internet service to refugees. More than 1,000 phone lines, as well as a data infra-structure, will be available near the Astrodome. AT&T's IP infrastructure will make Houston the hub for a VoIP network to support refugee camps throughout the region. (INFOWORLD, September 02, 2005)

New Orleans City Leaders Relied Upon VoIP Almost Entirely – Providing Critical Link In Organizing Response and Communicating With President Bush. New Orleans city leaders relied virtually entirely on VoIP services for five days after the failure of basic landline phone service, and mobile and satellite phones, which eventually lost battery power and could not be recharged. The Wall Street Journal carried a story describing how Mayor Ray Nagin and his inner circle, holed up in the Hyatt Regency Hotel a few blocks from City Hall, couldn't communicate with the outside world for 2 days after the storm. Then a member of the mayor's technical staff remembered he had recently signed up for a Vonage account. He and other staff set out in a military Humvee to find an Office Depot, where they requisitioned VoIP phones. Staffers got 8 VoIP lines up and running from the mayor's emergency headquarters. When President Bush called Mayor Nagin on August 31 from Air Force One, they spoke on a Vonage line. The city was making use of the capability of VoIP phones to be used anywhere with a high speed Internet connection. (Source: Wall Street Journal, 9/9/05, Communications Business Daily)

Red Cross Turns to VoIP Over Satellite For Volunteers, Managers And Refugees. Because of its critical communications needs, the Red Cross has turned to VOIP to serve the needs of volunteers, managers and thousands of survivors. They use a global network of satellites and VSATs (very small aperture terminals) which then provide a TCP/IP link to the outside world. The Red Cross chose VOIP because it allowed phones to be set up in advance with a PBX located at the headquarters. It enables easy set up for people without much experience, and can be managed from anywhere. The deployment of the VSAT systems and the IP phones to Red Cross communications centers in the region impacted by Hurricane Katrina began on Sept. 7. Hundreds more IP phones are expected to be deployed in the following days. (Source e-week 9/9/05)

VoIP Being Deployed By Mobile Command Center For Fire, Rescue and Law Enforcement Agencies. In an area of vast devastation in Mississippi with no traditional phone lines, cell phone or public safety radio services, F4W has established a VoIP network to provide critical communications for relief agencies and a lifeline from the disaster area to the outside world. The Tactical Wireless Emergency Broadband (TWEB™) network set up by F4W will provide secure wireless Internet and VoIP service over several miles to Mobile Command Centers and vehicles from fire, rescue, and law enforcement agencies. The network utilizes Motorola, Tachyon, and Panasonic equipment as well as F4W control software and network devices. (Source: VoIP Magazine, Thursday, 01 September 2005)

Internet Telephony Keeps Baton Rouge Hospital In Touch. Baton Rouge General Hospital, who still had a broadband connection after the hurricane but no long distance, called up Vonage and asked for help. Vonage helped them get set up with VoIP so the hospital can dial out of Baton Rouge. The hospital ultimately used nine voice-over IP converters and wireless-enabled laptops with VoIP software installed for long distance communications and to set up a public branch exchange for communications within the hospital and sharing patient data. (Government Technology, Aug 31, 2005, *By Corey McKenna***,** http://www.govtech.net/magazine/channel_story.php/96493)

Satellite Based VoIP Helping Put Utility Repair Crews In Touch To Restore Service. Siemens Enterprise Networks is working with a power utility in Mississippi that has been sending repair crews into the field with voice-over-Internet Protocol (VoIP) phones to make wireless calls via a satellite network. The VoIP system has been the main means of voice communications for utility crew supervisors in the field. In this case, Siemens acted as integrator to arrange for satellite network bandwidth, allowing the users to connect to a Siemens IP-based voice switch in Atlanta. With the Siemens VoIP phones, the workers can make five-digit calls over a familiar device to co-workers without needing special codes for the satellite links.(Source: ComputerWorld, "Telecoms face 'one big mess' in US Gulf Coast region", Matt Hamblen, Sept, 2 2005)

Rapid VoIP Deployments Help Get Emergency Phone Services Up and Running. The Louisiana Department of Health and Hospitals (DHH) is the first organization to deploy a pre-configured VoIP kits to gain phone service and Internet access in the wake of Katrina. 3Com Corporation is donating the VoIP equipment to emergency and government organizations to support their communications needs in the aftermath of Hurricane Katrina. Each kit includes a VoIP phone system with voice mail and auto attendant, which will enable DHH to provide all callers with recorded information on recovery efforts and to the ability to route calls to the appropriate emergency personnel. The phone systems can also be networked so that calls can be transferred between multiple locations. Wireless routers and other networking equipment will further enable reliable communication until the state's infrastructure is repaired. (Source: 3Com Release 9/1/05)

VoIP Used To Rapidly Set Up Red Cross NBC Telethon For Relief. When NBC hosted a Red Cross telethon, Teletech used its VoIP call center technology to answer an anticipated half a million calls from donors making pledges during the telethon. (September 02, 2005, Katrina Red Cross Concert By RICH TEHRANI, TMCnet)

VoIP Service Proves Critical For Cajundome Refugees. Although only 70 miles from New Orleans, Lafayette was spared the worst of the storm and now is caring for refugees. Volunteers at the Cajundome refuge center in Lafayette in less than 8 hours help set up a 100 meg connection and a wireless access point...by the next afternoon a VOIP system had been put in place. The VOIP phones have proven invaluable. ...To actually hear the voices of friends or to contact the world which mostly still exists offline is crucial." (Lafayette Coming Together)

"Web Phones for Shelters" Project Launched. Volunteers in Lafayette Louisiana have come together to help the refugees from Katrina communicate with family and friends. Web Phones for Shelters is a Project of the Lafayette Technology Community and the LCT Digital Divide Committee. LCT members have put together contacts with concerned folks at Cisco and IConverge to make available internet-based phones which will allow refugees to make free phone calls anywhere in the country to friends and family. Cisco is providing the internet phones which will backhaul to IConverge softswitches which will connect the phones to phone network. (Source: http://www.lafayettecomingtogether.org/webphones.htm)

Red Cross Equips a Fleet of SUV's with VoIP For Mobile Voice Services. the Red Cross has equipped a fleet of SUVs with IP communications equipment and VSAT (very small aperture

terminal) antennas for satellite communications. Each vehicle in the fleet includes Wi-Fi equipment, VoIP phones and wireless laptops to set up a communications center. In some areas these vehicles provide the only voice communication available. (Source: New Telephony, VoIP Demonstrates Strengths in Katrina Aftermath, 09/06/2005)

Army uses VoIP to Communicate. The Army has used satellite as the Internet link for a VoIP network that transmits terrestrially on National Guard Internet bandwidth. (Source: New Telephony, VoIP Demonstrates Strengths in Katrina Aftermath, 09/06/2005)

VoIP Helps Reconnect Families and Relatives. Mac Dearman, owner of Maximum Access, a Louisiana-based WISP organizing the WISP relief effort, reports: "All the shelters had to offer was food and shelter, but no communications of any kind. We brought in PCs, voice-over-IP phones, and the wireless broadband links to make them useful. You wouldn't believe how many hugs we got." How were they used? Mostly for people to connect with relatives. At one shelter that Dearman personally helped set up, more than a dozen families were connected. The image he remembers is a lady hugging him and nearly crying: "God bless you; we've been worried about my brother; and we found him." (Source: New America Foundation, media backgrounder)

VoIP Supporting FEMA Emergency Mobile Communications in New Orleans. On 8/30 MCI began deploying its "Big Blue" Emergency Mobile Communications Facilities, under a contract with FEMA, to support various rescue and relief efforts in the New Orleans area. These self-contained mobile facilities provide all communications services – voice, date, Internet – via a satellite solution that uses VoIP technology to deliver those communications. In addition, MCI "flyaway kits" (essentially a hard case that holds a satellite terminal and VoIP-enabled equipment) are being used by a naval air station in Belle Chasse, LA (installed on 9/4); Plaquemines Parish (installed on 9/7); and near a National Guard site in New Orleans (installed 9/7). (Source: MCI)

VoIP: Allowing Refugees To Reach The Outside World, Look For Loved Ones. The network at Mangham Baptist Church was the brainchild of Mac Dearman, a wireless Internet service provider who was driving past the church last week when he saw a group of parked cars, realized they were people who had fled the hurricane and set about providing relief, including food, clothing and online access. Dearman hooked up a radio transmitter near the church and linked that to a voice over Internet protocol (VoIP) telephone and a computer, and suddenly the dozens of people taking refuge at the church had the ability to reach out to the outside world. Mostly, they are searching for loved ones and filling out Federal Emergency Management Agency forms to get disaster aid. "They just call from shelter to shelter to shelter looking for their kids or for their daddies or their brothers because they got separated, and they are just finding each other in the last few days," Dearman said, adding that people were often overwhelmed when they connected. "They cried big tears, hugged my neck, shook my hand and patted me on the back. You'd have thought I was really giving them something that cost a lot of money," he added. "It's been a godsend," said the Rev. Rick Aultman, pastor of Mangham Baptist Church. (Source: Washington Post 9/9/05)