



Customer Profile

Bernalillo County Metropolitan Court (Metro Court) is the only Metropolitan Court in the state of New Mexico. It is the busiest court in the state, and hosts sixteen judges; thirteen hear criminal complaints, while three hear civil complaints. The courthouse itself is a brand new, 10-story, state-of-the-art building that features leading edge technology.

Bernalillo County Metropolitan Court Improves Security and Productivity with Siemens HiPath Wireless

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The courthouse itself is a brand new, 10-story, state-of-the-art building that features leading edge technology. For example, to cut down on transportation costs, and increase security, defendants that are housed in the jail no longer have to come to the courthouse to attend their hearings.

Instead they join the courtroom via video on-demand from a room at the jail. This was just the beginning of the county's innovative use of technology. Metro Court decided to install HiPath Wireless, a wireless LAN solution from Siemens Enterprise Systems, to solve several other challenges that have traditionally plagued courthouse staff, lawyers, jurors and visitors.

The Customer's Objectives

- Return "lost productivity" to prospective jurors, by enabling them to work while they wait for jury selection.
- Beef up secure access by providing security personnel and visitors with highly available 802.11 phones to make up for the "no cellular phones" policy inside the courthouse.
- Increase the effectiveness of judges and lawyers by providing "anywhere" Web and Voice over WiFi access from inside the courthouse.
- Leverage existing network infrastructure investments and policies when adding wireless capabilities.

HiPath Wireless Customer Benefits:

- **Easy to deploy and manage for both data and voice access over wireless LAN**
- **Secure, seamless and continuous connectivity with fast roaming**
- **Non-disruptive integration with existing wired LAN environment**
- **Support of multiple 'virtual' networks over one centrally managed WLAN**

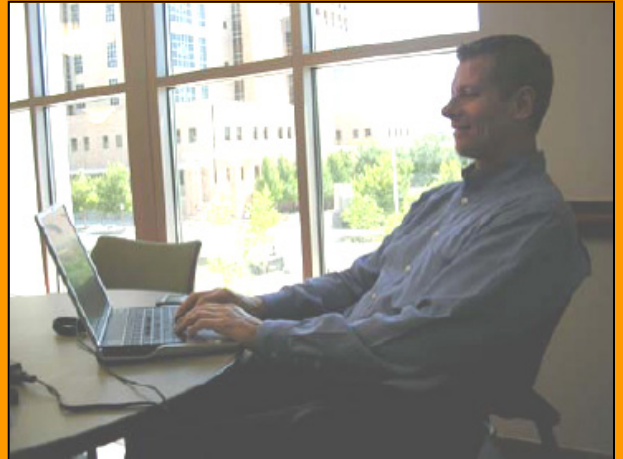
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The Challenge

The first challenge was to find an answer for the tremendous loss of productivity suffered by prospective jurors. Throughout the history of the United States, "jury duty" has required prospective jurors to sequester themselves from their jobs while they sit in the assembly room awaiting their fate as either selected jurors or "free to go home" without serving. Although this is justified as each person's "civic duty," prospective jurors had consistently complained to the court that their lost productivity was a difficult sacrifice to make. Outside access is permitted in the assembly room, but strictly prohibited during deliberation – once a juror has been chosen to serve a case.

The second challenge the court wanted to address was a formidable security risk. Like all courthouses, the use of cellular phones is banned inside. This not only applies to courthouse visitors, but also to courthouse staff including security personnel, forcing them to use alternative technologies to communicate. In this case, security personnel were using a proprietary 900 megahertz wireless voice system. In addition, the tremendous volume of concrete used in the building often disrupted communications causing dropped calls. For a building that commonly hosts dangerous criminals and highly emotional events, dropped calls were not just an inconvenience – they were a potential danger.



Instead of losing productive time, hundreds of prospective jurors can telecommute from the waiting room while they wait to be selected or rejected for duty.

Finally, although the building is huge, it is comprised largely of public space rather than offices. In addition to the judges, a large number of district attorneys, public defenders and private attorneys use the space every day.

The growth of the Internet and online communications has made Web connectivity important to these lawyers' abilities to serve the needs of their clients, but without dedicated offices, Web connectivity is traditionally unavailable inside of courthouses. Juror, lawyer and judge access and traffic must be strictly segregated, with flexible authentication and encryption schemes for each if needed.

The Solution

The innovative planners at the Court facility determined that the implementation of a standards-based wireless LAN could make Metro Court among the nation's first to address all of these challenges.

Although Metro Court's network infrastructure included Cisco routers, the IT staff didn't want a thick access point (AP) solution that would require decentralized administration, distributed throughout the building. Instead, they wanted a cost effective solution that enabled centralized management, where all APs could be managed and configured centrally.

Siemens HiPath Wireless' architecture aggregates the management of all distributed access points into a single, centrally-located Wireless Controller. Not only does it fully meet the Court's requirement for centralized management, it also leverages its existing network infrastructure investments.

A second major requirement for Metro Court's wireless LAN was tight security, especially given the diversity of users that would be accessing the system.

HiPath Wireless' Captive Portal feature is a browser-based authentication mechanism that directs unauthenticated users to a web page so they can provide log-in information, enabling the Court to capture information to authenticate everyone using the system, regardless of their operating system.

Also, SSIDs would be created for each user community – simply by creating a virtual user segment (known as VNS) for each network.

Finally, Metro Court needed a way to prioritize traffic, so that the voice traffic of security personnel, for example, would receive higher priority than the Internet traffic of prospective jurors.

HiPath Wireless enabled multiple SSIDs, allowing for different kinds of traffic to receive its own subnet and prioritization over other types of traffic. And, HiPath Wireless enables seamless Layer 3 roaming for Voice over WiFi calls with virtually zero latency when mobile.



"We took a close look at the different leading WLAN solutions on the market and we decided that only [Siemens] could best meet each of our technical requirements, and integrate with [our] prior investment in Cisco networking technology."

***Paul Roybal, Chief Information Officer
State of New Mexico Bernalillo County
Metropolitan Court***

The Benefits

Metro Court began its HiPath Wireless initiative by wirelessly enabling the waiting room for prospective jurors. Now, instead of losing productive time, hundreds of prospective jurors working on laptops can be authenticated to Metro Court's network, and can telecommute from the waiting room while they wait to be selected or rejected for duty.

According to the customer's CIO, feedback from the citizens of the County has been extremely positive. "A year ago prospective jurors with heavy work requirements could never have imagined being as productive when called for jury duty, as they could be in their own office," he said.

Instead of losing productive time, hundreds of prospective jurors can telecommute from the waiting room while they wait to be selected or rejected for duty.

Next, Metro Court looks to wirelessly enable the entire building to meet the needs of judges and attorneys, both of which argued that Internet connectivity would empower them to be more effective at their jobs. Metro Court is adding an additional 60 HiPath Wireless Access Points throughout its 10 floors. This will provide judges and attorneys with Internet access anywhere in or around Metro Court, expediting judicial research and the justice process.

Finally, the customer's CIO looked for a way to address the inconvenience and security risks that accompanied the use of 900 megahertz phones by security personnel, and the dropped calls that resulted (particularly for those personnel located in its 4 story foyer or basement).

Siemens introduced Metro Court to its partner SpectraLink, a provider of wireless telephone systems for the workplace. SpectraLink's NetLink Wireless Telephones are capable of running voice directly over wireless Internet Protocol (IP). Metro Court realized that by using SpectraLink phones, it could take advantage of its wireless infrastructure and have phones that worked everywhere inside the building, and throughout its surrounding grounds, without the risk of dropped calls.

Not only can these phones be used by the court's security personnel, they can also be handed to visitors (like sheriffs, for example) that play an important role in the overall security of the community.

The CIO and Metro Court made a decision to purchase 36 SpectraLink phones and add a second Wireless Controller to the 65 Access Points already deployed throughout the building. This ensures redundancy and complete, seamless coverage, eliminating the risk of dropped calls.

"Our [Siemens HiPath Wireless] implementation has helped make Metro Court a shining example of what the future will look like for courthouses around the country," said the customer's CIO. "Not only have we found a way to strongly mitigate America's frustration with jury duty, we've also enhanced the building's security and increased the effectiveness of judges and lawyers inside the building. Most remarkable is that by using [Siemens], we've achieved these benefits with a system that fully leverages our existing network infrastructure, and can be managed and configured centrally, ensuring low maintenance costs and efforts."

About the HiPath Wireless Portfolio

The HiPath Wireless Portfolio provides a complete solution allowing companies to realize the benefits of true enterprise mobility. The Portfolio offers wireless handsets, access points and controllers, along with best of breed management software and professional services for planning and implementation.

Siemens' new generation of wireless networking solutions for the enterprise deliver more than just data connectivity without wires. Wireless 'untethers' your users, offering innovative new ways of doing business:

- integrated vertical solutions providing 'always on' access to corporate data and true user mobility across the enterprise through seamless roaming
- presence and location-aware real-time applications such as HiPath OpenScape and HiPath ProCenter Agile
- converged voice and data networks providing Voice over Wireless LAN, offering productivity with a lower cost of ownership compared to proprietary wireless voice solutions
- a wireless LAN architecture designed from the ground up for flexibility, scalability, manageability and enhanced user services.

HiPath Wireless Portfolio V3.0

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