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NLE Technology Solution Case History

Project **Wireless Networks in Libraries**



Sonoma County Library *Sonoma, California, USA*

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A vision

Although many people already know Sonoma County for its award winning wineries, this county also includes a regional library system that's a leader in using library automation to deliver top-quality public service. In early 1994, Sonoma County Library became the first public library in California to provide Internet service to its patrons.

In early 2003, a coalition of representatives from local business, county government and technical experts met to see what could be done to provide better broadband Internet access throughout the county. One of the initiatives the group agreed to pursue was creating wireless Internet access in the Sonoma County public libraries.

The Sonoma County Library was very interested in this initiative because they were already faced with the problem of not having enough computers for use by the public. By providing wireless access to the Internet, patrons could come to the library and use their own computers for high speed access. This would free up library computers for users who do not have their own computer.

“Our vision was to make wireless Internet access available in all of our regional branches in the county. It would be available free of charge, and it would permit research and information dissemination that would be consistent with library reference services that we make available in all of our libraries,” says Jim Rosaschi, Manager, Technical Services for the library.

According to Rosaschi, the following concerns had to be met before rolling out any wireless service:

It shouldn't create a public nuisance. The library wanted to make sure a patron couldn't become a public nuisance by using the wireless network to send spam e-mail or to eavesdrop on the library's network.

Equal access to all users. The library wanted to prevent the possibility that one person engaged in a high bandwidth activity (such as downloading MP3 files) could create noticeably slower response time for other users.

Robust security was a must. The security of the wireless network had to be as robust as possible without breaking the budget.

Easy, intuitive wireless access. Make wireless access as simple as possible for employees and the public alike. “We wanted a system that would let users use their library card to authenticate themselves to access the wireless service,” says Rosaschi.



A NLE and Bluesocket Customer Profile

“The problem with a number of solutions we looked at was that they required a periodic copy of the patron library card number file be made on an intermediary server. This meant a new patron wouldn't be able to access the wireless network right away. We couldn't come up with a good way to authenticate that wasn't kludgy or home-made. We wanted a solution that used automation to make it work, not a lot of labor to make the automation work.”

“Like most public libraries we don't have a large technical staff. We needed an 'out-of-the-box' solution that wouldn't require a lot of technical programming or piecing together. We learned that Bluesocket was working with Dynix, our library automation system provider, to integrate their Wireless Gateway with our Remote Patron Authentication server. I'm president of the Dynix user group, so I ran the Bluesocket idea past some of my contacts in the user group, and got good reports.”

NLE and Bluesocket, together, have effectively addresses all of the library's original concerns:

Access Control. Bluesocket's easy-to-manage “roles” enables Sonoma County Library to limit access to servers and services to only those who should have them. With Bluesocket the library knows patrons can't easily use the wireless network to be a public nuisance.

Bandwidth Management. Bluesocket's “Traffic Engineering,” stops bandwidth hogs in their tracks, allowing library administrators to assign a maximum bandwidth to each role or to each individual patron for incoming and outgoing traffic. Administrators don't have to worry that a patron downloading MP3 files will adversely affect network performance.

Airlink Security. With the Bluesocket Wireless Gateway, the Sonoma County Library can bring the highest level of security directly to its patron's mobile device—without requiring them to install software on their device. The Bluesocket Wireless Gateway support IPsec (Internet Protocol Security), typically used in high-end VPN and firewall products. Because of security concerns, the library originally thought it would have to have a separate ISP connection for its wireless services. Because of Bluesocket's robust security the library can use their existing ISP connection, which means this solution is delivering significant cost savings over its original plan.

Seamless Authentication. Through NLE's integration with Dynix's Remote Patron Authentication server, library patrons can log-in with their library card number and instantly authenticate to the library's wireless network.

“We are excited about rolling out a socially responsible and secure wireless service for our patrons,” adds Rosaschi. “Bluesocket lets us implement a public service we can maintain with reasonable effort and that satisfies our need to equalize service to our users and securing our network. Overall, we are very pleased with the Bluesocket solution.”