



# Case Study

Springfield Neurological and Spine Institute  
Springfield, Missouri



## Application

Broadband wireless solution for Ethernet extension

## Challenge

Find a cost-effective and reliable solution for extending Ethernet services from medical headquarters to an off-site branch

## Solution

RAD's Airmux-400 high-capacity wireless multiplexer

## Benefits

- Significantly less expensive than other alternatives, including fiber and other broadband radios
- Positive ROI within a year
- Operates on a broad range of frequencies
- High reliability
- Simple installation and operation

## Springfield Neurological and Spine Institute

Springfield Neurological and Spine Institute (SNSI) is the largest neurosurgical private practice in the State of Missouri. With the combined expertise of more than a dozen physicians and subspecialists, the institute serves the surrounding community with a multi-disciplinary approach to treating brain, spinal, and peripheral nerve disorders.

Having experienced steady growth since its inception in 2001, SNSI recently made the decision to expand the clinical space in its Springfield, Missouri headquarters. In order to make room for the expansion, the 15-member billing department was relocated to an off-site office approximately one mile away.

Robert Latta, SNSI's IT coordinator, was tasked to find a solution that would cost-effectively and reliably connect the now off-site billing team to SNSI's headquarters. Apprehensive about interference and the potential for dropped traffic that is often associated with wireless links, he initially preferred the physical presence of a fiber optic connection. He also knew that the area's heavy foliage would make line of sight an issue in trying to deploy a straight building-to-building broadband wireless solution. Despite these concerns, he decided to take a closer look at a few broadband wireless radio solutions after learning the cost for fiber connectivity would be in the range of \$1500 per month.

Latta tapped into his contacts at CoxHealth (a nearby hospital with which SNSI is affiliated) for recommendations, and learned that they were using RAD Data Communications' Airmux wireless multiplexers for their own purposes, and with excellent results. CoxHealth was also willing to help Latta solve the line of sight problem by allowing SNSI to place its own Airmux units on the hospital's roof as an intermediary location.

“The process of getting up and running was amazingly smooth. Once the equipment was installed, I was able to have the connection up and running within about 30 minutes. The interface is fantastic to work with.”

Robert Latta, SNSI's IT Coordinator



data communications

"The hospital's strong Airmux recommendation certainly held a lot of weight for me," explained Latta. "But when I added other elements of comparison to the equation – like price and breadth of frequency options – the Airmux stood out even more against competing broadband wireless solutions."

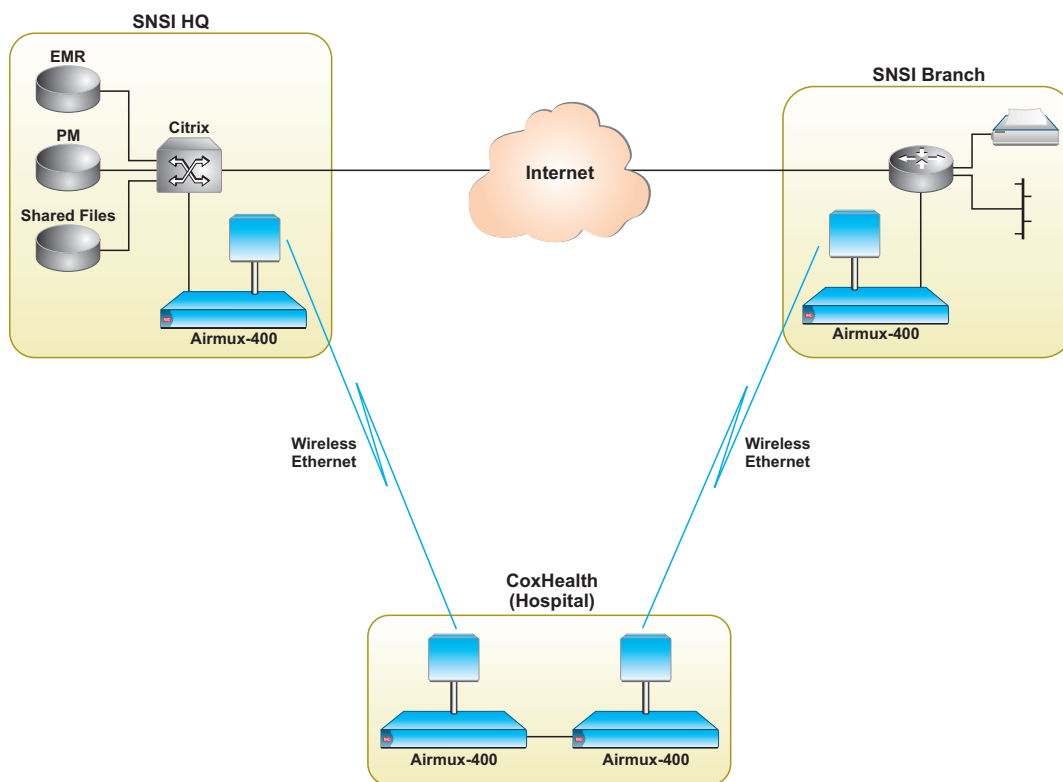
With the help of TESSCO, a leading wireless reseller and RAD partner, Latta and his team installed a quartet of Airmux-400 wireless multiplexers to extend wireless Ethernet. One link was established between SNSI's headquarters and the hospital, and a second link between the hospital and the Billing Department's branch office, with a cable connecting the two.

Says Latta, "The process of getting up and running was amazingly smooth. Once the equipment was installed, I was able to have the connection up and running within about 30 minutes. The interface is fantastic to work with."

Cost-wise, Latta now considers the choice of wireless over fiber optics a no-brainer. "Compared to what the monthly recurring costs would have been for a fiber optic connection, the Airmux-400 units will pay for themselves within the first year." He also notes that the Airmux-400 units have proved incredibly reliable, and he no longer worries about interference and choppy connections. In summary, he says, "I would absolutely use the Airmux again."

"Compared to what the monthly recurring costs would have been for a fiber optic connection, the Airmux-400 units will pay for themselves within the first year."

Robert Latta, SNSI's IT Coordinator



#### Corporate Headquarters

RAD Data Communications Ltd.  
24 Raoul Wallenberg Street  
Tel Aviv 69719, Israel  
Tel: 972-3-6458181  
Fax: 972-3-6498250  
email: market@rad.com  
www.rad.com

#### US Headquarters

RAD Data Communications Inc.  
900 Corporate Drive  
Mahwah, NJ 07430, USA  
Tel: (201) 529-1100  
Toll free: (800) 444-7234  
Fax: (201) 529-5777  
email: market@radusa.com

[www.rad.com](http://www.rad.com)



data communications