

## Small Bank Reaps Big Dividends with Network Consolidation

McHenry Savings' Bank Converged Routed Network from Cisco Delivers Advanced Disaster Recovery and Customer Services.

### EXECUTIVE SUMMARY

#### MCHENRY SAVINGS BANK

- Financial services
- McHenry County, Illinois
- 110 employees, \$275 million in assets

#### BUSINESS CHALLENGE

- Consolidate voice, data, and video networks to simplify network management
- Replace expensive ISDN lines with a reliable, secure backup communications network for disaster recovery
- Strengthen system redundancy and security to comply with industry regulations

#### SOLUTION

- Cisco 2821 Series Integrated Services Routers at branch offices and remote facilities
- Dual Cisco 3845 Series Integrated Services Routers in the main data center
- Cisco Unified CallManager
- Cisco Unity® Messaging System
- Cisco Unified 7960 and 7936 IP Phones

#### BUSINESS RESULTS

- Brings immediate line cost savings: over \$10,000 a year in basic telephone service toll charges, \$9000 a year in ISDN fees, plus an additional \$36,000 per year with network integration of ATMs
- Keeps IT staffing low while enabling the bank to rapidly deploy competitive new services
- Increases employee productivity and ability to quickly respond to customer calls.

### Business Challenge

McHenry Savings is a small community bank with five branches located throughout McHenry County, Illinois, 50 miles northwest of Chicago. The privately held, locally owned bank provides commercial lending, private banking, and investment services to retail customers and small business owners, competing head-to-head with 29 other banks in the suburban area.

McHenry must think and act creatively to stand out against its competitors, many of whom are large national and international financial institutions. According to Bryan Nash, senior VP, information technology at McHenry, "Technology has always been our driving factor that enables us to offer services and innovations ahead of everybody else."

McHenry established an early online presence to better serve customers, creating a Web portal in 2002, and was the first bank in the nation to offer 18 months of online statements with actual check images. McHenry also relies on advanced technology to create a comfortable, welcoming branch visitor environment with innovations

such as mobile customer service representatives, free Internet access, interactive kiosks, and real-time financial news broadcasts on large flat-panel displays.

McHenry also uses technology to help control operations costs in the face of increasing industry regulations and business demands. Five years ago, Nash and his Network Support Supervisor, Derek Niedermayer reduced their telecommunications costs and IT support load by consolidating their voice and data networks with a Cisco® IP network. The network enables them to provide differentiated services to their business applications—lobby kiosks, automated teller machines (ATMs), public Web servers, and back-office operations. Then two years ago, they decided to replace their expensive, little-used backup ISDN lines between main and branch offices with a less costly alternative. To make the change, they needed to increase redundancy and security throughout the network to stay ahead of Federal Financial Institutions Examination Council (FFIEC) disaster recovery mandates.

## Network Solution

A few years earlier, McHenry Bank had invested in a Cisco IP foundation network to provide differentiated services to its business applications—lobby kiosks, automated teller machines (ATMs), public Web servers, and back-office operations—and was pleased with the exceptional service it received. Says Nash, “We found that Cisco is a big company with a small business philosophy; it’s not always about the numbers, it’s what you do to service your customers that counts.” Nash recalled when Cisco technical support immediately responded to an urgent middle-of-the-night support call, escalated their case and got them back up and running within two hours.

To create a highly reliable consolidated network with robust disaster recovery capabilities, McHenry installed Cisco 2821 Integrated Services Routers (ISRs) in branch offices and remote facilities. The routers’ integrated services approach allows the IT staff to deploy a range of LAN and WAN interfaces, security, IP telephony, and on the same routing platform, all managed through a common interface.

The routers run McHenry’s primary converged voice and data network over T-1 interconnections as well as a secondary network over the Internet using Generic Routing Encapsulation (GRE), a Cisco tunneling protocol that creates virtual point-to-point links between the routed sites. “Running voice, video, and data traffic through these tunnels lets us use the Internet as our disaster recovery backup network, eliminating the need for ISDN lines,” says Niedermayer.

McHenry’s added another new ATM. It has no phone lines, security video and alarm systems as well as data transactions are delivered securely over the Internet for a significant cost savings. Nated VPN tunnels also securely connect authorized database consultants, equipment vendors, and even the Federal Reserve Bank into the network to streamline outsourcing work and regulatory operations. “By connecting these third parties in this way, we avoid the costs of dedicated circuits and onsite support,” says Nash. McHenry has shown the FDIC that its strong layered security protection protects customer identity and data over the unsecured Internet.

McHenry relies upon Cisco Unified CallManager embedded in ISR software to operate their telephony network. The Survivable Remote Site Telephony (SRST) functionality of the routers provides backup call processing at the branch offices so incoming calls are always answered regardless of location. The routers’ rich voice gateway features supply connectivity from CallManager to the public switched telephone network (PSTN).

To strengthen security and system resilience in the network core, McHenry installed redundant Cisco 3845 Series routers with dual power supplies. Months later, a power supply did fail while both Nash and Niedermayer were out of town. The network instantly redirected traffic to the standby router; customers and employees detected no service disruption.

Responding to FFIEC system backup guidelines, McHenry recently rolled out Continuous Data Protection (CDP), an application that performs constant, real-time incremental system backups across the network. Says Nash, “CDP generates a continuous flow of traffic and requires an advanced WAN infrastructure with wire-speed throughput and built-in traffic management capabilities. Our Cisco routed network gives us the ability to deploy sophisticated disaster recovery applications like CDP.”

**“With our Cisco network, we can operate with half the IT staff of banks of comparable size and can offer more services than they do.”**

—Bryan Nash, Senior Vice President, Information Technology, McHenry Savings Bank

## Business Results

McHenry values the Cisco 2821 Integrated Services Router platform because it simplifies network management, reduces capital and operational expenses, and protects the company's equipment investment by allowing the IT staff to easily deploy new services, a key advantage in a fast-moving, competitive environment.

**Immediate line cost savings**—By installing a Cisco IP Communications system, McHenry recouped over \$10,000 per year in PSTN line charges. Deploying the Cisco 2821 routers enabled the bank to switch its ATM operations over to its IP network, saving another \$36,000 per year in toll charges, while eliminating the backup ISDN lines has saved the bank an additional \$9000 a year.

**Ease of use**—Converged network operations are centrally managed through a common interface, so as Niedermayer says, “Adds, moves, and changes are second nature to us, the way it should be.” And implementing a new routing service merely requires a switch in software because the capability is built into the Cisco IOS software; no need to rewire or replace equipment. Upgrading the software typically requires just a flash or memory upgrade, not a new supervisor module. Says Nash, “With our Cisco network, we can operate with half the IT staff of banks of comparable size and can offer more services than they do.”

**Better productivity and customer service**—The Cisco IP Communications solution has changed the way that McHenry operates. A single, unified phone system helps ensure that customers no longer encounter a busy signal or wait on hold because calls are quickly routed to an open line or to voicemail. IP Communications has also made the voice network more reliable and fault tolerant. If a branch phone line goes down, calls are instantly rerouted with no connection disruption.

**Faster deployment of customer service applications**—McHenry will soon be introducing a “merchant capture” service that allows businesses to deposit checks remotely using a small scanner attached to their personal computer. Check images will be automatically encrypted and sent to the bank through a Secure Socket Layer (SSL) tunnel over the Internet. The bank believes that customers will appreciate the safety and convenience benefits—no more hurrying to the bank before closing to physically deposit the day's receipts. The IT staff uses the flexibility of Cisco's IOS software to plan and stage deployments before actually initiating them. With their “enterprise-class” capability, they can implement new services quickly and successfully.

## PRODUCT LIST

### Routing and Switching

- Cisco 2821 Series Integrated Services Routers
- Cisco 3845 Routers Integrated Service Routers
- Cisco 3640 Multiservice Platform
- Cisco Catalyst 3524XL Switches
- Cisco Catalyst 4000 Series Switch
- Cisco 2500 Series Router Broadband Cable

### Voice and IP Communications

- Cisco Unified CallManager
- Cisco Unity Messaging System
- Cisco Unified IP Phones 7960 and 7936

## Next Steps

McHenry has mastered the art of customer service by using technology to make it easier and more convenient for its customers to bank. Says Nash, "Customers today have many banking options, and our success depends on our ability to reach customers by whatever means they choose. Technology is not just a competitive advantage here, it is the lifeblood of this industry: innovate or perish, and Cisco helps us innovate."

## FOR MORE INFORMATION

To find out more about Cisco 2800 Integrated Services Routers, visit <http://www.cisco.com/en/US/products/ps5854/index.html>

This customer story is based on information provided by the McHenry Savings and describes how the bank 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.

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