

CONNECTIONS

The Newsletter of Electronic Engineering

www.connectingyou.com

Fall 2008

Speed, Security, Reliability, Increased Bandwidth – Delivered

Iowa State Bank, headquartered in Orange City, was struggling with a reliable data connection between their main bank and six branches located in several communities in northwest Iowa.

They were on their second wireless system, which connected the various offices, yet the current system continued to have throughput and capacity issues. Limited alarm notification and outdated serial connections – posed an additional problem as data networks continue to move toward IP based connectivity.

Current conditions also occasionally prevented some of the branches from always having on-line real time access to account information located at the main office in Orange City. Our Sioux City Manager, Joe Durham, made a sales call about alternatives and new technology options for the bank. Site visits were undertaken, frequency path studies were conducted, terrain and elevation was studied, and a proposal to replace their current system was delivered.

Part of the system that was implemented included a highly reliable Motorola Canopy point-to-point wireless data solution, which provided up to 42MB aggregate data bandwidth (a standard telco T1 connection is 3 MB of aggregate data bandwidth). Wireless links ranged in distance up to a mile from each office or branch to local water tower or coop elevator, to links of 8 – 16 miles between the cities. Each link was optimized with custom environmentally controlled enclosures, containing transmitters, backup battery systems, battery chargers, and surge protection. This system delivered a four times faster increase in throughput. This will allow the bank to do more in the way of document and image processing over this network to more efficiently manage their operation and provide greater service to their customers.

The installation was done in phases, in which the new system was installed next to the old system, each new link was then tested, optimized and placed into operation. After which the old equipment was removed. Remaining links were installed in a similar manner, so Iowa State Bank would have connectivity during this network conversion and upgrade.

“At Iowa State Bank, as you would imagine, we rely heavily on our network to serve our customers,” Bill Saeger, Director of IT, said. “While we’ve only had the new system from Electronic Engineering for a few months, it is much, much better than our previous system – it’s reliable and stable.”

This enhanced data network also has automatic alarm



Motorola fixed point-to-point wireless Ethernet bridges bring together the speed and reliability of licensed wireless with the flexibility of the unlicensed space.

management software which provides notification of issues, problems, data usage, historical usage and throughput. With e-mail alerts at custom designed levels and conditions it allows both Iowa State Bank and Electronic Engineering to keep the system in top operating condition, increasing reliability and minimizing downtime. Each link employs a complete encryption mechanism that offers a high degree of security for over the air transmission. In addition, an FIPS 107 compliant, 128-bit encryption is available.

We are proud to be able to meet, and even exceed Iowa State Banks expectations for a quality, reliable, robust wireless data solution. If your company is looking for a wireless solution, or would like to see the ROI on replacing your current leased line (telco) data network, please contact any one of our Electronic Engineering offices.

3

Don't Delay
– Sign up
Today!! You
Could Save
a Life

3

Thank You
for Your
Invaluable
Insight!

4

Employee
Profile

Product Spotlight

Memory Cards

Want more room for photographs, music and games? We suggest adding a memory card, not only do they enhance the experience of your phone, PDA or camera, but they add invaluable memory to your PDA or BlackBerry.

Features:

- Stores digital images, videos, music and data
- Data recovery software ensures that you won't accidentally lose important images
- Includes a travel case for storage and organization

Pick one up next time you visit Electronic Engineering.



A Letter From The President



It seems like 2008 was a crazy summer, rain, devastating floods that effected so many friends, customers, and even us, yet we were very fortunate. As fall begins we find the gulf-states in hurricane after hurricane. Does it seam to anyone else – that our “swings in weather” appear more extreme than usual?

And of course, if it is not the weather, it is the economy. Wild swings in gas prices, up 25¢ today, down 10¢ tomorrow. The stock market used to move 25-40 points a day, and now is either up 200 or down 350 points. What has changed, why the large changes and swings?

From my side of the tree, it is just as simple as we are now in an age of instant information and communication. Years ago, we waited for the newspaper to tell us about an event, tragedy, or even the auto industry’s profit report. Information delivery sped up with radio and television. We could now see images almost instantly, but it was still somewhat slow as we only had three major networks. Now there are dozens of news shows, channels and “entertainment” news programs – to make sure that we even know which actress was at the bar last night.

It has not stopped there, the Internet brings almost instantaneous information to us, from the weather radar pinpointing the rain and tornadoes, or who just hit a home run, to the price of a barrel of oil, purchased 12 minutes ago. We (with the help of products I sell) can even drive that information right to your handheld cellular phone, marketingly called a “Smart Phone”. Now, no need to read the paper, wait until six or ten o’clock to watch the news. It is 24/7, 365 days a year.

All this technology and information are great, yet it does have its consequences – we feel we must instantly respond, act, and adjust. I think that this mindset has caused prices to swing as everyone is making

instantaneous changes and when multiplied – add up to very large changes quickly. “That changed, we need to act too – and Now!”

Maybe it is appropriate to enjoy this extra information, but take a step back, and see if that adjustment is really warranted, or will the situation change again tomorrow, and the adjustment will no longer be needed. It reminds me of a phrase I learned when I was a young, “remember to think twice, before speaking once.” I think we would all enjoy a few less “swings”.

Thanks for your business, and we’ll talk to you next quarter.

Mark Clark

Exploding Growth with Text Messaging

More than half of Americans now use the text messaging feature on their cell phones. It’s been a frequent source of friction in households with teenagers, easily increasing the monthly cost of owning a cell phone. Teens and young adults have been the quickest to adopt “texting.” But business executives also consider it the most valuable communication tool for time-critical and very sensitive communications. Research shows that 92,000 text messages are sent every second of every day, or a 50 percent growth over the past 12 months.

Electronic Engineering Locations

Des Moines (515) 283-1100	1100 Keo Way (800) 343-3998	Marshalltown (641) 752-0778	913 Iowa Avenue E. (800) 345-2540
Ames (515) 232-5385	2220 E. Lincoln Way (800) 343-7718	Mason City (641) 423-6818	608 S. Delaware (800) 343-2688
Cedar Rapids (319) 364-1900	1900 6th Street S.W. (800) 762-0795	Mt. Pleasant (319) 385-7650	126 N. Main Street (800) 458-2355
Davenport (563) 322-0981	1354 W. 4th Street (800) 322-0981	Omaha (402) 346-5123	13704 P Street (800) 315-3579
Fort Dodge (515) 576-2411	2411 5th Avenue S. (800) 343-3405	Sioux City (712) 258-5234	500 W. 20th Street (800) 243-3756
Fremont (402) 727-5115	339 N. Broad Street (800) 427-2185	Waterloo (319) 235-5556	750 Ansborough (800) 365-9702

Don't Delay – Sign up Today !! You Could Save a Life

Saving and Transforming Lives through Organ and Tissue Donation, Transplantation and Education is the mission of the Iowa Donor Registry. Electronic Engineering is proud to begin another year as the corporate sponsor for the Iowa Donor Network. Providing free pagers to all patients waiting for transplants, monetary contributions, and promoting the adding of names to the donor registry at every EE office, we are excited to see a strong increase



DONOR NETWORK

in the number of people signing up to be potential donors.

Not only can organs be used to save lives, but also skin, bone, tendons, heart valves, vein and arteries now all add to the opportunity to save and enhance the lives of people in need.

Iowa remains one of the most donation friendly states in the US. In addition in 2007, Iowa passed the Anatomical Gift Act which is adding an average of 30,000 Iowans to the Donor Registry each month. In addition, each driver's education course now has a session on organ and tissue donations.

Help us support the Iowa Donor Network – Register Today to be an organ donor. Stop at any one of our locations for a form, use the link on our website, or you can go to the Iowa Donor Website – at www.iowadonorregistry.org.

Appeal of Mobile Data Cards Grows Rapidly

In today's world, it's important to stay connected. For some, that includes around the clock access to the Internet via mobile data cards.

In fact, in a recent study done by researcher Nielsen Mobile, there were more than 13 million wireless data card users nationwide in the second quarter of this year alone. Of those users, it is estimated that more than 50 percent of the mobile data cards were bought in the past 12 months.

Of those surveyed in the study,

- 43% use their data card at home
- 15% use it at work
- 21% use it outdoors
- 9% use it while commuting

The average mobile data card contract is for one year and costs around \$65 per month.

To learn more about which mobile data card would best meet your lifestyle, visit the Electronic Engineering location nearest you today.



Thank You for Your Invaluable Insight!

At Electronic Engineering, we recognize that we would not be successful if it weren't for people like you. Your input and candid responses to our 2008 customer survey gave us tremendous insight into the continued confidence you have in Electronic Engineering and the communication services we provide. Naturally, you helped us uncover areas in which we're exceeding your expectations. Some of those areas are our:

- Knowledgeable staff and repair center
- Customer service

Naturally, you also shared with us some areas you'd like us to enhance, and in the year ahead

you can expect us to add:

- E-mail notifications of promotions or service repairs
- Online shopping at our Web site

Thank you again for your willingness to participate in helping us better serve you. The winners of the four iPod touches are:

- *Mike Coop, Chariton, IA*
- *Erica Clementz, West Des Moines, IA*
- *Samatha Taylor, Tipton, IA*
- *Matt Bennett, Sioux City, IA*

We look forward to providing you with connections you can count on in the years ahead.

Electronic Engineering Employee Profile



Name: Adam Petty

EE location: Sioux City

Job title: Installation Technician

Job history: I have worked for EE for seven years in the install department. Previously I worked for a security company here in Sioux City.

My first "real" job: In high school I delivered household appliances. After about six months they started training me on basic repairs, and then I started helping out

with service as well.

Recent accomplishments: The completion of several large CCTV and Motorola Point-to-Point microwave projects. On a personal accomplishment, I recently finished my basement at our house.

The toughest part of my job: Balancing time between all the different jobs I perform here at EE. I am responsible for assisting in designing large CCTV, access control and alarm systems. I'm also responsible for installing these systems as well as service, installing and servicing EMS equipment and installing radios in basically anything that rolls. Lately, I have also been assisting in the Motorola Point-to-Point microwave system installs.

Someone I admire: My father, Reggie Petty. He taught me that hard work and education are two things very important to bettering your future. As a kid I watched my dad work long hours to provide for our family, but yet he still had time to spend with us kids doing family things.

About my family: My wife of almost 11 years, Tressa, is a school bus driver for River Valley CSD; Tyler is in 5th grade; Elise is in 3rd grade; and Kaylee is in 1st grade. They keep me very busy when I'm not at work.

4

Something else I'd like to accomplish: I'm currently running for school board – I'd like to be elected to this position so I can be more involved at school on some major educational issues. Plus I would like to bring some communication and security insight to the school district.

Something about me not everyone knows: I am still a big kid at heart. I have a large collection of LEGO town sets; this collection began when I was 10 or 11. My first town set was a police station and fire station. It's always been a joke in my family that I started out building police cars out of LEGOs, and now look at me, I'm building real police cars.

Outside interests: Camping, biking, hiking, woodworking and house renovation projects.

Favorite vacation spot: Anywhere outdoors as long as it involves my family, a tent and our bikes.

Can You Guess the Year?

- A new index called the NASDAQ debuts.
- The Ed Sullivan Show goes off the air.
- Walt Disney World opens in Orlando, FL.

Think you know the year? E-mail your answer to contest@connectingyou.com. Every correct entry received by October 31 will be placed in a drawing for a chance to win a \$100 gift certificate from Electronic Engineering.

Last quarter's winner:

Sharon Hymer, Des Moines, Iowa

Sharon correctly guessed the year – 1958.



Save \$1,000 on MOTOTRBO™ when you purchase and trade in 10 units!*

Shift productivity into overdrive with MOTOTRBO™ today and start enjoying the improved audio clarity, 40% longer battery life and integrated data applications. This versatility makes MOTOTRBO™ the ideal two-way radio for organizations looking for customizable two-way radio communication.

Features:

- Uses the IMPRES™ Smart Energy System
- Operates in digital and analog mode
- Lower licensing and equipment cost
- Expanded digital voice, data and control capabilities

*Offer valid only with a trade-in of 10 two-way radios or push-to-talk cellular products between Aug. 1, 2008, and Dec. 15, 2008.

Electronic Engineering

Connections you can count on.™

www.connectingyou.com

10/08

Electronic Engineering. Home of The Beeper People, The Cellular Store and Two-Way Connect.