



The Communicator

A Monthly Telecom Update from RAM Communications

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Internet Performance or Lack Thereof

During a recent customer install, I was reminded of all the factors that affect internet performance. There are many important items to keep in mind if you feel you're not getting the most of your internet service.

The most important factor to keep in mind is understanding the relationship between the ISP or internet service provider and your computer network. The ISP is responsible for delivering internet access to your office premise. The ISP is also responsible for making sure the subscribed bandwidth is delivered to the customer's router. The router is a hardware device designed to send and receive 'traffic' from the customer's network server to the ISP network and eventually to the World Wide Web. *Delivery to the router is the whole responsibility of the ISP. Every other item is left up to the customer and/or their network administrator.*

Since every business is unique, every business usually has a unique computer environment which will affect the actual internet speed its employees' can utilize.

Firewalls, which protect computer networks from viruses and unwanted traffic, will always slow down performance. Firewalls are necessary for protection but inevitably slow down speed.

Network cabling will also affect internet performance. Many of you are probably familiar with the term 'ethernet'. Ethernet, simply put, is a popular connection medium for passing data on local networks. A 100 MB ethernet connection can pass data from server to computer faster than an older 10 MB connection.

Depending upon the number of 'clients' or users on a network and its 'topology', or design, traffic will flow efficiently or slowly. Devices such as printer/scanners and IP-based PDA's also take up local network memory and therefore, take precious speed from every user. Like a highway system has a certain 'capacity', computer networks suffer similar limitations. The more cars (devices), stop signs (firewalls) and intersections (cabling) the slower the speed or efficiency users will be able to enjoy.

There are a few items your business can review periodically to make sure your internet service and network perform as efficiently as possible. First, check the internet service as close to the router as possible. Check the speed at the server computer. There are many web-based services such as broadbandplace.com which allow users to run a service test and retrieve performance data in real time. Larger businesses have full time IT personnel monitoring their computer networks. If your business doesn't have a dedicated IT professional, it's a good idea to call in an outside service periodically for a check up. Have your vendor look at the cabling, connections, servers and software currently on the network. You will be surprised how many outdated devices and programs are suffocating your network's performance.

If you discover that the ISP is not delivering speeds within at least 80% of your subscribed rate, call RAM. We can have the ISP open tickets and dispatch technicians for potential problems.

Featured Partner Corner

Advocate Consulting Group

Advocate Consulting Group is located in Glen Ellyn, Illinois. Advocate specializes in computer hardware, software and networking solutions for small and medium-size businesses. RAM recommends Advocate to any business looking for additional IT support or complete networking solutions. Because all of RAM's client's depend upon their internet service for their business, we feel it's important to pay attention to internet security. Advocate Consulting asks the following questions

Is your network protected?

Do you have...

- An Internet connection that is always on?
- A local area network or a peer-to-peer network?

If so you need a Firewall!!!

What is a Firewall?

Firewalls are a great way to protect your business or home network against attacks from intruders. They're designed to defend against attack by implementing a series of rules that permit, or deny, traffic to pass between your network and the Internet. Based on the way these rules are set, the inbound and outbound flow of information maybe extremely tight or very relaxed. The goal is to maintain a balance for you company.

For more information visit

www.advoconsult.com/security

ACRONYM CORNER

What do all those crazy terms stand for?

What do they mean? Here are a few more worth memorizing:

- ISP Internet Service Provider - provides internet access to the outside world
- WWW World Wide Web - public network system for the internet; origin dates back to the U.S. military in the 1960's; modern application developed in Sweden and University of Illinois
- Firewall - defense mechanism designed to protect computer networks from internet intruders; firewalls can be software or hardware-based depending on client needs

Saving Clients Time, Money and Aggravation



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CORRECTIONS!! from the editor

We offer our apologies for a mistake made in the last Communicator. I want to thank our sharp readers for bringing this error to our attention:

In the article, Cellular LNP: The Adventure Continues, the web address for the Citizens Utility Board was wrong. The correct address is www.citizensutilityboard.com. The site changes often, so, if you need to address specific telecom issues, you may want to call their Chicago office at 1-800-669-5556. Please let us know if you need any more information.

Cellular Update: Trying T Mobile

Like our clients, RAM Communications has to watch its expenses carefully. Everyone needs to get the most service or product possible for their investment. While we make no bones about the quality of the land-line industry, the cellular industry has been even more disappointing in terms of performance and customer service. We hear complaints from clients and vendors all the time.

RAM is careful to practice what we preach, so we look at our contracts and vendors carefully. Our cellular contract with Cingular Wireless comes up this month. We've asked several of our peers to rate different carriers for customer service, price and performance. Surprisingly, there was a consensus. Four of the five vendors we spoke with subscribe to T Mobile for their cellular service. To me, marketing guides and balance sheets are important; however, what is equally critical is getting feedback from everyday customers. After all, if the product hinders more than it serves why use it? The big question we've asked was, "would you renew your service with T Mobile?" The answer was, 'yes'.

Technically speaking, T Mobile has an advantage over its U.S. competitors. T Mobile is a German-based company under Deutsche Telecom. Deutsche Telecom is one of the largest telecommunication companies in the entire world.

(continued on next column.)

More importantly, T Mobile uses GSM over its cellular network. In laymen's terms, GSM is being widely adapted as an international transmission standard for wireless technology. So, for any business travelers over seas, T Mobile's service can be used. For the rest of us here in the Midwest, T Mobile's GSM standard eliminates roaming charges throughout the country. According to users we've spoken with, their T Mobile service works during commutes to Indianapolis or Lake Geneva.

If your business requires constant travel throughout the country and reliable cellular service, our advise is simply to speak with others in similar circumstances. What cellular service are they using? What has their experience been? Ask pointed questions. After all, what may be important to you may not be to another subscriber.

The last two items, price and contract, are near and dear to us at RAM. We don't want to pay more than we have to but we also know we need to be available for our clients. On our current Cingular package, which includes 2,000 anytime minutes and long distance, RAM pays \$179.00 per month including taxes and fees. (Unlimited weekend packages are useless unless you have to talk on the weekends.) As of April 2003, T Mobile is offering 3,000 anytime minutes and long distance for \$59.00 per month plus tax. The potential savings are obvious. The kicker is the contract. Finally, there's a cellular company offering a one-year term. The consumer finally has some leverage. Given the competitive cellular arena, we don't even want to sign a two-year agreement. It's always good to know your contract term is months away instead of years away if you ever want to leave or need a resolution to a problem.

Equipment and number portability are still sticking points. As RAM has written in past issues, the cellular industry will have to offer local number portability before the year is over. If you don't have to change services now, it may be worth waiting for the new law to go into affect assuming you want to keep your cellular number. Given our contract timing and potential savings, we'll sacrifice our phone number. The pro's out way the con's. New phone equipment is a very personal decision; however, like the service, it's nice if you can get feedback from a current user about the phone their using. A simple phone is also a safe phone. A good headset is a must if you are calling in your car. We'll keep you posted on our satisfaction with T Mobile in our next issue.

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