![FNGi First Network Group Inc]

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Located in historic downtown Wapakoneta, Ohio, FNGi has been instrumental in developing and supporting Internet Networks across the U.S. since 1993. The FNGi team can assist you with all phases of your Internet Network from initial planning through long-term support.

www.network1.net
800.578.6381

ASSOCIATION SPOTLIGHT:
Indiana Telecommunications Association

"The Indiana Telecommunications Association (ITA) is a non-profit trade association representing Indiana's telecom industry. Their members include 40 local competitive wireline and wireless companies and over 125 companies that supply goods and services to telecommunications companies.

As a Level 3 member and service provider for several networks in Indiana, we are proud members of this trade group. They represent the interests of the local exchange telephone industry in Indiana and are made up of 40 member telephone companies. Indiana's telephone industry provides service to approximately 93% of the households in the state and over 3.1 million access lines.

Organized in 1919, the Association was established to maintain high standards of operation, promote good customer and public relations with telephone consumers, promote the industry itself, preserve information valuable to the members, and coordinate legal and technical efforts of the members."

More information on the ITA can be found at http://www.itainfo.org/

1995 to 2014 and BEYOND

In This Issue

Since our inception in 1995, one of the ways that First Network Group has shown support for our clients is through our associate membership in several state telecommunications associations. We understand that for many of you, your state association is a valuable resource for keeping abreast of industry trends in both technology and regulation. I would like to offer special thanks and recognition to our Indiana clients by featuring a sidebar on the Indiana Telecommunications Association (ITA) in this issue of FNGi FOCUS. I encourage our readers to take a moment and review the impressive history of the ITA. We appreciate the continued business of all of our valuable clients and will honor them with similar features in the future.

As much as we appreciate the client referrals that help keep First Network Group growing and viable, I would be remiss if I did not also take this opportunity to thank our resellers. Although our reseller program is only a few years old, we owe great thanks to Goldfield Telecom and Subsentio. Together we bring a robust combination of specialized products and services to the telecommunications industry that allow our clients – both large and small – to access a full suite of tools needed to meet the technological and regulatory demands necessary to compete in today's demanding market.

As President and founder of First Network Group, I marvel at the growth of our industry and the change in the technology since 1995. The bylines that you see in this quarter's publication represent unparalleled leadership and dedication – both to you as our clients and to our company that serves you. Randy Carpenter, Executive VP, will celebrate 18 years with us in July. Darren Ankney, VP of Product Development – 17 years in July, and Cory Lykins, VP of Tech Services – 16 years in July. It has been and remains our pleasure to serve you.

Wishing you all the best for your continued success and a fruitful 2014 - and an early Spring!

--Stephen C. Walter, President/CEO, First Network Group, Inc.

![FNGi First Network Group Inc]

Instrumental in developing and supporting Internet networks across the U.S. since 1993.

Best Practices: Email

In the "Best Practices" series we will be taking a look at some important points and great tips for various topics culled from our 20 years of experience!

This month we are looking at email from the perspective of our Technical Support desk. These are issues and insights that we see from end-users on a daily basis.

Customers Love IMAP

They may not realize how it works or how it differs from POP3, but once they realize their mail is synced between all of their devices, they LOVE it. Make sure you have a strong IMAP implementation and mass data storage solutions to provide this valuable feature.

Everyone Wants Their Email Setup

Even though a customer may not regularly check their mail or send much, one of the top 3 things to do on a new device is setup or gain access to their email. Make this process easy on them. Use standard port and encryption setups. Use standard server name constructs as well such as mail.xyz.com for both servers - keep things simple.

WebMail Allows you to Compete

Hotmail, Yahoo, Gmail, they are all strong contenders with great features, but their key is that they are universally accessible via the web and are untethered from the ISP. Making sure your users have this same unfettered access to their email with your service is very important. And while your budget may not be as large as Google's for webmail access, make sure your product offering is quick, strong and reliable. Having a user choose one of the big web-based providers means one less reason they have to stick with your service if they want to change.

Everyone Forgets Passwords

Make sure your users receive clear records of their password when they sign up for their account. Also, make sure you have an easy way for users to retrieve their lost password or to reset it. This can be via a 24/7 customer service line or an online form.

— Cory Lykins, coryl@network1.net or 1-800-578-6381 x6

Share this newsletter and properly recycle it.
If you'd like to receive our email based newsletter instead visit our website at **www.network1.net** and sign-up.

dot Donuts?

Beginning in February, the way we browse the web will begin to change in a very interesting way. Donuts, Inc., the "go to" place for registering new generic Top-Level Domains (TLD's), will begin offering access to seven of the internet's latest domains.

Domains being offered for the first time this year are .BIKE, .GURU, .CLOTHING, .PLUMBING, .SINGLES, .VENTURES and .HOLDINGS. Once these domains are live, they will be available for purchase through all accredited registrars.

After the initial launch, each week in 2014 Donuts will be adding more generic TLDs to the World Wide Web. Domains such as .GRAPHICS, .CAMERA, .GALLERY and more are lined up to be the next out of the gate.

A recent change in ICANN's policies on domain name registration has now made it possible to assign nearly any word as a generic TLD, that is if you have $185,000 for the application and are willing to spend $25,000 a year in fees. Donuts and their deep pockets have been able to reserve a large number of words that soon could be hitting your web browser's address bar.

If this will be enough to dethrone the classics, .COM, or .NET, will be anyone's guess. This approach has been tried before, when ICANN approved new TLD's such as .INFO, .BIZ and more recently .XXX and they haven't exactly taken off like gangbusters. Most of the time, companies simply register alternate domains to maintain their brand identity online. Smaller companies rely on alternatives when the more acceptable .COM version of the web address they want is taken.

More than likely these new domains will simply be a novelty, but a few of them may stick around. We will soon live in a world where *weather.com* may be usurped by a competitor using the address *us.weather* or *winter.weather*, or thousands of other possible combinations. Certain brands will have a lot of work on their hands making sure they register and protect as many of the new generic Top-Level Domains as possible.

Grab a coffee and visit *Donuts.co* for more information and dozens of domain 'creations' to come in 2014.

— Cory Lykins, coryl@network1.net or 1-800-578-6381 x6

"View Authenticated Users should be the only tool that your Tech Support and Customer Service staff need to gather user information."

Protect your network from attacks and vulnerabilities

Denial-of-service and other similar network attacks are becoming more common than ever. All it takes is for one of your users to make themselves a target by upsetting a malicious user online. That malicious user could employ a botnet to launch a distributed denial-of-service (DDoS) attack against your user, which could flood your incoming internet connections and overload your routers.

Recently, there has also been an outbreak of attacks against a newly discovered vulnerability in the Network Time Protocol (NTP). This vulnerability allows an attacker to send very small packets to affected servers and routers, which reply with much larger packets. The destination of those reply packets is spoofed, so that a huge flood of traffic ends up coming from your network in response to a fairly small attack that is sometimes hard to identify and trace.

Those are just a couple examples of attacks that can be difficult to deal with. Some attacks can be prevented outright by proper configuration of your equipment. Others are difficult without dedicated hardware to prevent, detect, and respond to more complicated attacks. It is extremely important to keep your equipment up to date and well managed on an ongoing basis to protect against vulnerabilities, which is very difficult without proper software updates and hardened configurations.

First Network Group can assist you in assessing your preparedness, and building a good defense against network attackers. We can help you build proper configurations on your existing gear, or suggest new or additional gear to protect your network. We also provide ongoing maintenance plans as well as 24/7/365 network monitoring and response to help your network perform at its best, and protect against the aforementioned attacks.

— Randy Carpenter,
rcarpen@network1.net or 1-800-578-6381 x1

Gather User Data Fast
with the View Authenticated Users Report

"View Authenticated Users" is a powerful tool on the DHCPatriot for finding customer information for use in troubleshooting.

With this report, located under "Auth DHCP Reports" in the DHCPatriot's web-management interface you can quickly gather a great deal of customer information with a simple search.

If you are troubleshooting a specific connected device, such as a newly installed router you can quickly confirm what is and what has been registered by searching with the customer's username.

The results will show each time this customer has authenticated and has had a valid session. Simply click on the most recent MAC address for that session to view their client-side MAC address and the DHCPatriot will display the manufacturer of the device. You can quickly confirm that the new device registered is a router or is still the user's computer or some other device.

The reverse is also true; maybe you have the MAC address and not the username. You can run this report by searching just for a specific MAC address as well.

View Authenticated Users should be the only tool that your Tech Support and Customer Service staff need to gather user information. The customer should be able to provide either their username or their MAC address. The support technician can then use this information to find the missing bits of information, as well as determine what equipment the customer actually has connected to the service via the MAC address for each session. Finally, the session history for the user, shown by clicking the username, should provide the technician with an accurate record of when the customer was last online and with what equipment, as well as whether the customer is currently online.

— Darren Ankney, dankney@network1.net 1-800-578-6381 option 3