This Issue:

Computing Giants Microsoft and Apple Still Fighting in New Mobile Frontier

Microsoft and Apple have been at the forefront of personal computing since the 1970s. The competition has caused partnerships and strain between the two companies and in the interim, created hardware and software that would change the world. Although the two companies will be forever linked, they both are betting on mobile, and for good reason.

Read the Rest Online!
http://bit.ly/1sNtz4M

About Directive

We are a technology consulting firm specializing in technology implementation and management for businesses. We're known for providing big-business, Enterprise-Level IT services to small and medium-sized businesses.

Visit us **online** at:
newsletter.directive.com

When it Rains, it Pours – Keep Your Cloud-Based Data Safe

Do you see those black clouds culminating on the horizon? They represent the possibility that hackers will gain access to your cloud storage. Though it is protected a number of ways, it will not stop an experienced hacker. To them, your defenses are as transparent as those thin, wispy, cirrus clouds that are so welcome on a boiling hot summer day.

When it comes to cloud storage security, there are a number of things that you should keep in mind:

Use Obscure Words or Phrases for Your Password
Cloud storage starts with a password, but sometimes, hackers can find ways around them. This doesn't mean that passwords are not safe, but it does mean that the possibility is there, and cannot be ignored. Hackers commonly use brute force tactics, where they attempt to crack the code by randomly inputting passwords. Though this process could take a long time, some hackers are likely more tenacious than you think, and won't give up so

Be the Life of the Party: Server Hosting
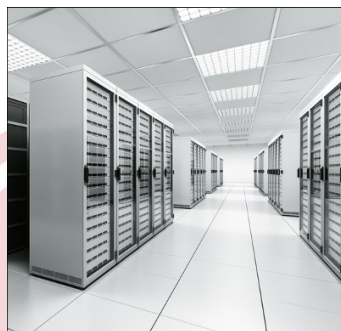
When it comes to hosting a party, it can be exhausting – it's a matter of space, cost, and responsibility, among other things. If you're too busy trying to organize everything, nobody will get to see the best side of you. Wouldn't it be so much easier to just hire someone to take care of the details? You would actually be able to enjoy your party!

Directive's managed server hosting allows just that. We'll take care of all the little details so you can concentrate on what is really important – your business, and your clients. With managed server hosting from Directive, not only will you never need to worry about your server again, but you'll discover that is it ideal for your business needs.
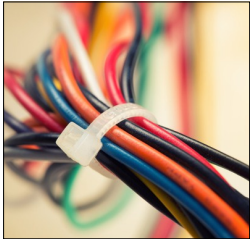
Remain Flexible
When arranging a party, you'll never know how many people will show up. It will start as a group of close friends coming over to play Cranium, but your best friend brought his girlfriend, and his girlfriend brought her besties with her, and your cousin brought his best friend's uncle's daughter with him, and so on. Before you know it, your house has no food, your brain hurts, and you have a mess to clean up.

Bandwidth is the same way; you might think you can control it, but there are too many variables to take into account. Things like your local Internet Service Provider (ISP) and consumer variables can make your bandwidth fluctuate greatly. Instead of worrying about something you can't control, let Directive deal with it for you. We'll assess your Internet connection before we host your data to see if it has what it takes to support your company's data

directive

"The answer is not to try to slow down technology. Instead of racing against the machine, we need to learn to race with the machine." -Erik Brynjolfsson

Page 2

Troubleshoot Performance Issues with These 3 Network Cabling Tips

When you experience an error or a performance issue with your company's computer system, you will troubleshoot the problem in hopes of resolving it quickly. Before you open the case of your hardware and start messing with components, check your cables. Even a small cabling issue can cause big problems with your entire network.

Setting up your network and installing cables properly is a surprisingly-delicate procedure that requires a plan called "cable mapping." It's vital that your cables are properly handled. If a cable is defective due to a lack of planning, then it can hinder productivity and even cause downtime. The next time you encounter a networking issue, try out these three cabling tips.

Clean Your Connectors
Remember the old video game cartridges from Nintendo? If you inserted it into the game console and it didn't work, what did you do? You would remove it and blow on it like it was some kind of ocarina (of time). Why did you do this? Gamers implemented this best practice because they thought blowing on the game would remove the dust from the cartridge's connectors and provide a working signal. Often times, this troubleshooting practice would work like a charm and you'd be saving the Mushroom Kingdom again in no time!

In the same way, a dirty cable connector end face can be the cause of performance issues across your system. In fact, this is the surprising top cause of network issues. Resolving an issue can be as easy as blowing on your cable ends. However, for maximum cable cleaning, Processor magazine recommends digging deeper:

> Use a simple handheld microscope to inspect the end face. If you detect contamination, there are several good fiber optic cleaning products that can quickly remove the contamination and return the connector to a clean/usable state.

Check for Microbends
When cables are improperly handled and installed, they bunch up, become twisted, and get pinched. You may be thinking, "No big deal," but the reality of cable management is that even a small bend, what's known as a cable microbend, can disrupt the flow of data and cause performance issues. The best way to avoid such twists and bends is to plan out your network's cable layout so that all of your wires are as straight as possible.

Measure the Power Levels
Your networking cables are able to move data with the assistance of electricity. If the power levels are abnormal, then the flow of data will be hindered. Therefore, being aware of your cable's power levels will be of great assistance in helping you identify which cables are underperform-

Use a Firewall Before You Get Burned

Too many people think that their systems are safe from the corruption of hackers and viruses. They're wrong. In order to keep your business safe from all of the common threats found on the Internet, you should think about installing some protective software.

One of the most useful types of protection is a firewall. The term originally referred to a wall built to confine a fire within a building, but in this case, a firewall is a type of software that keeps your company safe from the dangers found on the Internet. Believe us when we say that a little protection can go a long way.

What Does a Firewall Do?
When data flows in and out of a network, the firewall is the software that analyzes it. It acts like a bouncer, in a sense. It keeps anything that could dam-

> *It's important to understand what you're vulnerable to, even with a firewall, so you know what to avoid and how to deal with threats. Viruses, spyware, adware, and phishing scams...*

age your computer out of it. Basically, it's a barrier between your network and data that is deemed unsafe and inse-

cure. These threats will most likely be found while surfing the Internet.

Like any barrier, there are many different types of firewalls that vary in strength. These barriers can investigate network traffic, validate connection and data packets, check for legitimate application data, and perform cavity searches on all messages going to and from your network. They are updated regularly to battle against the latest threats, but they're certainly not immortal.

What Doesn't a Firewall Do?
The firewall is definitely a good bet to stop some dangerous activity, but it doesn't solve all of your Internet problems. It's important to understand what you're vulnerable to, even with a firewall, so you know what to avoid and

When it Rains, it Pours – Keep Your Cloud-Based Data Safe

(Continued from page 1)
easily if they truly want your data. Make sure that your password utilizes lower-case and upper-case letters, as well as numbers and symbols.

Another way to protect your data is to use less-common words for your password, or make up your own, rather than use a common word. Doing so puts you at risk of a dictionary attack, which involves a hacker inputting common passwords. Think about the amount of people who use the word "password" to keep their data safe. Their data isn't so safe if the hacker assumes that they chose an obvious word for their password. Instead, opt for strange or obscure phrases. For example, "D3epSeaRh1n0F1shing#$9" will have hackers guessing for ages.

The Road Less Traveled Sure Has a Lot of Data!
Contrary to what some may think, data can be captured while it's on its way to your cloud storage. While many storage clouds will encrypt the data while it is traveling, you still want to be wary and avoid web applications that do not have "https" in front of the URL. The "s" informs the user that the text's data is a secure, encrypted protocol, and therefore, safe.

Hackers are Lazy
They might work pretty hard to get to your data, but in reality, hackers will likely utilize the easiest means possible

> *They might work pretty hard to get to your data, but in reality, hackers will likely utilize the easiest means possible to retrieve said data. This generally involves attacking the cloud storage itself rather than your personal data.*

to retrieve said data. This generally involves attacking the cloud storage itself rather than your personal data. This can mean that the hacker may not even care about your data and leave it alone, but do you want to take that risk? It's best to use a cloud storage well known for having superior security.

Lock Your Password Away and Swallow the Key
Figuratively, not literally. Keep your password to yourself, and never tell it to anyone. Some hackers will try to get you to fork over your valuable information themselves by claiming to be a service provider, but don't be fooled.

If you aren't sure if you want to trust an unknown cloud source with your precious data, give Directive a call at 607.433.2200. We can provide your business with a secure cloud storage solution to fit your company's needs, and we'll do our utmost to ensure that you don't muddle through the oncoming storm alone.

**Share this Article!
http://bit.ly/1sNtIFk**

Be the Life of the Party: Server Hosting

(Continued from page 1)
needs. You might need to upgrade your networking equipment, such as your wireless router, or we can help you find a new ISP that will be better suited to your needs. There's no reason to hire a new staff member just to solve your bandwidth problems.

No Need to Buy New Equipment
Having the latest technology means regularly upgrading the equipment and hardware, and if you're the one hosting your server, these can leave your wallet hanging up high and dry. Rather than upgrading all the time, let the server host take care of this. We at Directive can use our resources to update your server, which is far more cost efficient for you. New gear is extraordinarily expensive in the end, and your budget will crumble because of it. By using Directive's services, you are labeling these upgrading expenses as an operating expense rather than a capital expense, making your budget much more flexible in the end.

We'll Monitor Your Server for You
When we host your data, we will be the ones to resolve any problems that come up. You don't need to worry yourself with them. You can depend on Directive always being there for you. We'll monitor the servers, fix hardware failures, or problems in the network. Nothing will happen to your data on our watch!

Your Data is Safe with Us
Directive also looks after your data and ensures that it is properly backed up and securely protected. We use enterprise-level firewalls, remote monitoring software, and our team of professional IT technicians to keep your data from malicious hackers and software. We'll do whatever we need to do to keep hackers away from your data.

The benefits of Directive hosting your server far outweigh the costs. At Directive, we'll be the host so you can enjoy your party. Call us today at 607.433.2200 and we'll take care of your data needs.

**Share this Article!
http://bit.ly/1sNtOg1**

![directive logo]

Use a Firewall Before You Get Burned

how to deal with threats. Viruses, spyware, adware, and phishing scams are examples of malicious software that bypass the protection offered by firewalls. In addition, firewalls also fail to protect you from infected email attachments or block spam, which can be counterproductive and annoying.

What are my Options?
One of the best security options we can provide your company with is called a Unified Threat Manager (UTM) from Directive. The UTM is a combination of a strong firewall and other powerful security tools designed to provide protection for your entire network. Most firewalls that initially come with a PC offer so little protection that it might as well be unprotected, but the UTM is a whole different monster.

UTMs vary in shape and size depending on your company's needs, network size, and network traffic. Directive can outfit your system with the perfect UTM for your business. We can even provide your company with a free network security audit to patch up the holes in your current firewall. Directive can be your own personal firefighter, putting a stop to the catastrophic digital fires that threaten your company.

Share this Article!
http://bit.ly/1sNtUnZ

We partner with many types of businesses in the area, and strive to eliminate IT issues before they cause expensive downtime, so you can continue to drive your business forward. Our dedicated staff loves seeing our clients succeed. Your success is our success, and as you grow, we grow.

Chris Chase
Solutions Integrator

Troubleshoot Performance Issues with These 3 Network Cabling Tips

ing and should be replaced. To check the power levels of your cables, you will need a simple power meter. Use the meter to measure the power levels at your different connection points, and make a note of the weaker connections. Try replacing the weaker cables with new ones and see if there's a performance boost.

A good IT technician, such as those here at Directive, are familiar with other tools that can judge the quality of your Cat5 cables. Your traditional cables contain multiple wires, and if just one is broken, the cable would need to be replaced.

If these simple cable troubleshooting tips don't fix your system's problem, then the issue may be with a hardware component. There are several other troubleshooting measures you can take to try to remedy a networking problem before you do something drastic, like replace a switch. Directive can walk you through tips like these when you call us at 607.433.2200 about IT issues that you may be having. We think the best way to troubleshoot is to first try to do as much as we can remotely with our remote monitoring and maintenance tool. This way, we can save you money by not sending a technician to visit your office unless it's absolutely necessary.
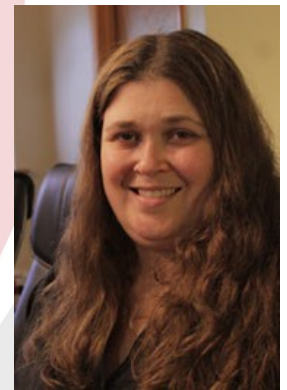
Call us today to save money with your IT expenses. You will be surprised by how easy it is!

Share this Article!
http://bit.ly/1sNuwKa
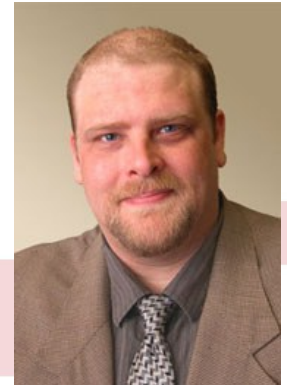
Charlotte Chase
Solutions Integrator

Directive

330 Pony Farm Road
Suite #3
Oneonta, NY 13820
Toll-Free 888-546-4384
Voice: 607-433-2200

Visit us **online** at:
newsletter.directive.com

✉ newsletter@directive.com

f **facebook.directive.com**

in **linkedin.directive.com**

t **twitter.directive.com**

🔊 **blog.directive.com**

OUR MAIL SERVER ISN'T GETTING BACKED UP IN HOUSE?

I'VE OUTSOURCED IT ALL TO THE NSA. THEY'VE GOT COPIES OF *EVERYTHING.*