



This Issue:

Total Networks is on the Move

WiFi Protected Setup - How Does it Work?

Happy 4th of July!

4 Easy Ways Cloud Computing is Changing IT for the Better!

How to Prevent Server Problems Like Memory Failure from Hurting Productivity

Does Your IT Department Wanna Go Fast?

Total Networks is on the Move



We have outgrown our space and effective July 1 have moved to a larger and improved space. We are centrally located at the State Bar Building at 24th Street and Indian School. This location provides convenient access to our clients and an added bonus of sharing space with our friends at the AZ Bar! Stay tuned for details on an open house later this summer.

Our new address (no change to phone):
4201 North 24th St.
Suite 230
Phoenix, AZ 85016

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WiFi Protected Setup - How Does it Work?



If your wireless router is an archaic piece of machinery from the turn of the century, you owe it to yourself to upgrade to something a little less dusty. Depending on your Internet connection, increasing your bandwidth is a tricky matter, and the easiest way to do so is by upgrading your wireless router. These next-gen routers are simple to use and don't require passwords; something that both increases network security and ease of use.

WiFi Passwords Are Overrated

By far the most common method of connecting a device to a wireless network is by entering that network's password. Hackers have been able to take advantage of this by developing sophisticated methods and technologies to decipher the handful of characters standing between them and your personal information. Using Graphic Processing Units (GPUs) and brute force attack methods, a hacker can rapidly input up to 8.2 billion password combinations per second. There's a pretty good chance that they'll be able to get it if they try long enough.

Happy 4th of July!



While Total Networks' office will be closed on July 4, as always we will have an on-

call engineer available 24x7 to take your support calls if needed at (602) 412-5000.

Sincerely,

Stephanie & Dave Kinsey Owners,
Total Networks

About Total Networks

Building on the tradition of providing industry best solutions, the Kinseys continue to invest in tools, training, recruiting, and procedures, continuing to extend our reputation as the premier IT service provider in Arizona.

Visit us **online** at:
totalnetworks.com

Tap-to-Connect

Let's face it; WiFi passwords are less secure than they used to be. The good news is that tech developers are coming up with better ways to secure your network. Tap-to-connect routers are examples of this new technology. These routers have a button that can instantaneously connect a user to their WiFi network. The button triggers a signal that is then sent to your wireless device. All you need to do is authenticate the device and you're all set. The great thing about these routers is that a hacker can't access your network unless he breaks into the building and presses the button himself.

With tap-to-connect, connecting to the Internet is made far more convenient. You'll never have to dig your Internet password out of your files for visitors wanting to use your WiFi ever again. All you need to do is push the button on the router, and ta-da; you're connected to the network.

Near Field Communication (NFC)

If pushing a button is still too much to ask of you, you can use NFC to connect your device to your WiFi network. A router equipped with Near Field Communication technology will detect

(Continued on page 2)

4 Easy Ways Cloud Computing is Changing IT for the Better!



Cloud computing is making everything easier for businesses. Companies utilizing IT infrastructures before cloud computing exist-

know exactly what we're talking about here. A quick analysis of organizations before and after the cloud perfectly exemplifies how cloud computing is making revolutionary changes to the way we do business.

Just thinking about email, the most basic office intercommunication app, shows just how far business technology has come. Fifteen years ago, setting up an email application for your company would have entailed purchasing a server dedicated to hosting your email, setting it up, configuring the mail server, installing an email client on every workstation, configuring those email clients, testing incoming and outgoing mail, and hoping it all still works on Monday morning.

A server isn't a hands-off piece of machinery. It requires dedicated maintenance from time to time, which means you would need an in-house technician or regular visits from a computer company. Either way, this is costly and ineffective compared to cloud computing.

Easy to Install

Compared to the old days, businesses have it a lot easier. They can simply call a company that offers business-class cloud solutions and it can be activated right away. Say goodbye to extra on-site hardware, expensive setup fees, and extremely long installation processes! Using a hosted business application over the cloud functions just as well as if the business had purchased a new server and hosted the app internally. Of course, you don't want to simply call ANY cloud solution provider and pull the trigger, despite how easy it may be. Make sure you are working with someone who is willing to understand your business and your computing needs so you don't pay for a solution that's overpriced or underutilized.

Someone like Total Networks.

Easy on the Maintenance

With Total Networks, you won't have to worry about any server maintenance. Taking care of your hosted server would be a snap for us, since we would be the ones hosting it. This means regularly scheduled maintenance, hardware refreshes, software updates, and security; basically, we cover all of the things you would normally have to pay for on your own. Paying an IT technician no longer needs to hold back your company's expenses. Outsourcing your IT needs will free up more payroll to hire staff that

make your company money, such as marketing or sales team members, instead of leeching your finances to take care of your systems.

Easy on the Budget

Sure, cloud computing makes operations easier, but one of its biggest perks has nothing to do with the computer at all. In fact, these changes occur in the budget. With cloud computing, your company won't have to delve into the coffers for server units and networking hardware. Because it is a contracted service, payments are made from the operating expenses, which frees up tons of coin for other purposes. An unforeseen server crash could cripple your budget, but not with cloud computing in effect.

It's Just... Easy

If your business isn't taking advantage of cloud computing, you're missing out on a valuable resource that could save your company countless dollars. There are other ways that cloud computing can benefit your company, such as improved mobility, stronger network security, and business continuity. If any of these perks sound good to you, call Total Networks at (602)412-5025 to make business easier by taking it the cloud!



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WiFi Protected Setup - How Does it Work?

(Continued from page 1)

your device when it is nearby, and voila - your device is automatically connected and logged on to the Internet. ZDNet explains how this works:

Through the new NFC-enabled method, the router's configuration is wirelessly handed to the device and will be connected via WPA2 security, either through a traditional wireless network or an ad-hoc direct network.

More than 10,000 wireless devices have been certified for WiFi protected setup since 2007, and a significant number of them are utilizing NFC technology.

PIN Entry

A unique PIN is assigned to each device that joins a protected WiFi network, and is required in order to access the network. These PINs are used to ensure that the device trying to connect to the net-

work is allowed to do so. This helps to avoid "accidental", or rather, malicious, attempts to access the system.

So, what's the difference between a PIN and a password? The PIN is assigned by a registrar device (in this case, the wireless router), and it will detect when...



Read the Rest Online!
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How to Prevent Server Problems Like Memory Failure from Hurting Productivity



When your server experiences an issue, you have to act fast and take care of it before the issue turns into a problem. If a server problem is left unresolved, it can spread across your network and negatively affect operations. This is why it's best to take care of a server issue as soon as it's discovered.

A common server problem is... what was it again? Oh, right. Memory failure!

Causes of Memory (RAM) Failure

Sometimes, memory failure derives from not having enough RAM available to support all the applications that your staff is attempting to run at the same time. Not having an adequate amount of RAM may be due to using older hardware not designed for the demands of new applications. Also, if your business is growing, then you have to take into consideration that your increased workforce may be trying to squeeze extra work out of a server unit designed for a smaller operation. In a situation like this, fixing a

memory failure problem is as easy as installing new sticks of RAM with increased memory capacity (as long as your server supports an upgrade).

If a server memory failure stems from a lack of RAM, then you're lucky. It's a fairly easy fix. If you're experiencing other performance problems due to corrupted hard drives, bad drivers, or other hardware issues, then you've got a bigger situation on your hands that will require extensive repair.

"Memory failures are server-related problems that could have a negative effect on networking speeds, application performance, and much more."

When a hard drive becomes corrupted, it has essentially gone bad or it's on its last leg. A corrupted drive must be replaced as soon as possible. A procedure like replacing a corrupted drive is much

more involved than swapping out sticks of RAM. When replacing a hard drive, you will have to backup your data, reinstall your software onto your new drive, sync it with your system, along with a host of other steps that aren't recommended for a computer novice. You can think of hard drive repair like a major surgery for your server, kind of like a brain transplant. A job like this is best left to the professionals like the IT technicians at Total Networks with steady hands.

An Unchecked Issue with Your Server Can Turn Into a Major Problem

Whatever the cause is for your server's failure, you can't afford to sit on it and do nothing. A problem like this won't take care of itself, in fact, because everything in a computer network is connected, a problem like memory failure will only get worse and hurt the productivity of your company. Processor Magazine explains, "Memory failures are server-related problems that could have a negative effect on networking speeds, application performance, and much more. If you don't isolate an issue such as that

(Continued on page 4)

Does Your IT Department Wanna Go Fast?



In the same way that there are two sides to every issue, there are two sides to every IT department. IT departments of today

are expected to both maintain IT infrastructures and implement new money-making solutions. It's like IT is a road with two lanes - a fast lane and a slow lane.

IT in the Slow Lane

Most companies today still use IT infrastructures made up of servers and workstations running legacy software. In fact, in a recent survey of IT professionals from Avanade it was discovered that 36 percent of an IT staff's time is currently

spent managing and maintaining legacy systems. Having over one-third of your IT staff's time spent keeping your company's system operating smoothly may take up a higher portion of your organization's operating budget than what you'd prefer. In today's fast-paced business world there are solutions available that can get your business out of this IT slow lane.

One fast-paced solution is cloud services. Whenever a company migrates its business applications over to the cloud and utilizes cloud data storage, the responsibility to maintain the infrastructure in use now lies with the cloud computing company. The more data that your company moves to the cloud equates to less time that your IT staff will have to spend

in the slow lane maintaining equipment and overseeing maintenance. With help from Total Networks, it's entirely possible to migrate your entire IT infrastructure to the cloud, which is like doing business in the faster commuting lane!

IT in the Fast Lane

This is the lane that you want your IT to be in. Doing business in the fast lane is great because you get to fly by your competition trudging along in the slow lane. The IT fast lane is one of innovation. When your IT staff spends their time in the fast lane they're constantly looking for and implementing the latest solutions. These new technology solutions will save your business money and provide your company with an advantage

(Continued on page 4)

How to Prevent Server Problems Like Memory Failure from Hurting Productivity

(Continued from page 3)

right away, it could affect employee productivity, customer service, and many other business processes."

The Proactive Approach to Server Maintenance

The best way to handle a server problem is to take care of it before it becomes an issue. To catch a server issue early on, you need to have a server monitoring solution in place that provides you with alerts when an issue is detected. Total Networks can re-

motely monitor your company's servers with our RMM tools, and we can take care of any detected issues as soon as they're found. We also run regular server maintenance to keep your system running optimally.

This proactive approach to server care allows us to offer our managed IT services at a much lower cost than a break-fix IT repair company because we're able to remotely prevent expensive problems

while they're still small fixable issues. This makes the cost of doing IT significantly less, and it saves money by preventing downtime from a server problem spreading across the network and derailing your operations. Call us at (602)412-5025 to take advantage of preventative server care for your business!



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We work together with our IT Managed Services clients to jointly create and maintain an up-to-date, effective written technology plan and budget.

Regular, proactive communication and planning is a key factor that distinguishes Total Networks.

Does Your IT Department Wanna Go Fast?

(Continued from page 3)

over the competition. IT life in the fast lane is much more exciting than having to spend one's time performing maintenances and fixing the same problem over and over again.

Total Networks can help move your business to the technology fast lane. If you have an IT employee that's burdened with system maintenances and not able to spend time finding new solutions that will create opportunities for your business, then we can help by providing you with a way to outsource these slow-lane activities. Total Networks can handle many of these mundane IT maintenances for

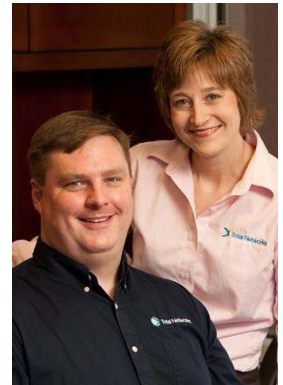
your business remotely with our managed IT services, and we can be counted on to perform physical maintenance at a flat-rate that you can budget around.

Total Networks can also be your trusted IT advisor, which is like a traffic cop directing your business into the fast lane. Once you're in the fast lane, we will then come alongside your car-of-a-company with our flashing lights and escort you to your destination of higher profits! You can reach out to us at (602)412-5025 to get the IT escort you need to succeed. We can take you to where you want to go by taking time to get to know your compa-

ny's goals and technology needs, and then recommending and implementing the latest fast-lane solutions. This transforms the age-old stereotype of technology being a "thing you need" that's always in need of fixing, to a tool that will give your company organizational advantages beyond that of your competitors. The competitive world of business is much like a race, and in this race we can help your company go fast! Because in the race of competitive business, "If you ain't first, you're last."



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Dave and Stephanie Kinsey
Owners



Bill Fox
VP, Customer Service

Total Networks

4201 North 24th Street
Suite 230
Phoenix, AZ 85016
Voice: 602-412-5025

Visit us **online** at:
totalnetworks.com

