IT Radix Resource

We make IT work for you

Nature and Technology

They're Called Event "Logs" for a Reason!

Rings reveal a lot about trees. Each spring and summer, a tree adds new layers of wood to its trunk. The spring-formed wood is made up of large cells and appears lighter. During the summer, growth is slower, thus, the cells are smaller and the wood is darker. When, sadly, a tree is cut, the alternating colors appear as layers and thus counting the dark layers indicates the age of the tree. Beyond the age of a tree, the tree rings reveal a great deal about what occurred during its life; and that is what dendrochronology is all about. This kind of study allows researchers to learn more about the local climate conditions that the tree experienced during its lifetime. Things that can be ascertained from careful dendrochronological analysis include: precipitation and temperature patterns, whether the tree was exposed to insect infestation, or scarred by a fire at one point.

In a similar way, your computer or server provides a way to track significant events in the life of the machine in Event Logs. IT professionals "tap in" (see what we did there ☺) to event logs to determine the events and happenings in the life of the computer that are unseen to the general user. In most cases, a user will never have to view an event log. However, if your PC starts to show some unhealthy signs, the Event Viewer on a Windows machine might be your first way to do some dendrochronological analysis of your PC!

...tapping in, viewing and analyzing what is happening in Event Logs can provide great value in identifying and addressing a problem early on.
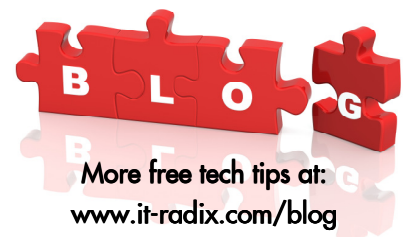

For the average PC user, generally there is no reason to check these logs if the PC is acting properly. As a best practice, IT Radix professionals peruse these Event Logs on servers as a matter of course on a regularly scheduled basis. We do so because tapping in, viewing and analyzing what is happening in those logs can provide great value in identifying and addressing a problem very early on...before it becomes a crisis.

The key categories that are typically reviewed are *Applications*, *Systems* and *Security*. Application logs record events related to Windows components such as drivers and built-in interface elements. System logs record events related generally to non-Windows programs installed on the machine. Security logs record events related to security such as logon attempts and access to system resources. Each log contains different kinds of information such as errors, warnings, audit failures, etc. Lack of knowledge of these data points can cause unneeded confusion or concern, so ideally a professional should help. However, if you do use Event Viewer to view these logs, the best advice we can give is to read all of it with a grain of salt, because some items that are usually

What's New

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Nature and Technology…Friend or Foe?

A few years ago, the BBC published an excellent article posing the question, "Nature and Technology: Friends or Enemies?" It explored the relationship between nature and technology and some of the conflicts between the two that have arisen over the years. The amount of toxic waste generated by manufacturing and consumption is tremendous. IT Radix is proud to have been recycling electronic equipment since its inception 10 years ago. While we realize it's just a drop in the bucket, every drop counts.

At the same time, the article reminds us that nature has been the inspiration for many technological advances as well as supports conservation and sustainability projects. For example, researchers are imitating viruses to deliver medication straight into cancer cells. And did you know butterfly wings were the inspiration for the super-efficient, reflective color of e-reader screens? Technology is used for tracking animals in the wild or gathering weather data to ensure the longevity of endangered species. This same technology is also used to track our business fleets, map out more efficient distribution of goods and service and much more.

"We must stop seeing tech and nature as sparring partners, and start concentrating on helping them to dance." — Molly Flatt

The benefits of technology don't stop with monitoring and information gathering. Technology has been used to connect people in times of natural disasters or to raise money and resources for crisis relief. Many non-profits are realizing that technology allows them to easily and more efficiently reach a larger donor pool enabling them to deliver more beneficial services.

Technology is also being used to design "green cities" and more. In a business environment, switching to more wireless technology requires less copper wiring and conserves one of our natural resources. Basically, technology is a great tool to have in our toolboxes to help solve the conservation problems of today.

One of the great concerns about technology is its addictive nature. Many people expect to always be connected even when they are hiking a trail or picnicking in our local parks. At IT Radix, we work and play with technology every day; and yet, many of us also enjoy being outdoors, learning about the natural world and exploring the world beyond our immediate environment.

As time marches on, the only thing that is sure is change. Technology and nature are evolving at a rapid pace. IT Radix, along with its clients, is continuously learning and improving to ensure that the technology we use, recommend, and support enables success.

Thanks for the referrals!

Referrals are the best form of compliment! We would like to thank the following for referring us to their friends and colleagues:

Angela from Bluebird Auto Rental Systems
Chris from Grey Sky Films
Don from Capstone Research
Georgeann from Christ Church
Kevin from MGT Design
Mike from Database Technologies
Rob from Mariner Wealth Advisors
Walt from Generic Brand Human

Visit us at www.it-radix.com to learn more about our Referral Rewards Program!

Event "Logs"

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meaningless and items of grave importance can look the same! We suggest you let professionals like IT Radix handle this.

The good news is that unlike real dendrochronological analysis that is used by nature scientists where study can only happen after the tree is dead, with Event Logs which track and record critical events in real time, review can occur when the PC is still alive and kicking!

THE BUZZ

OUR CLIENTS SPEAK OUT:

"We, at Mooney-General Paper Company, are a leading supplier of industrial packaging supplies/equipment, food service supplies, food package supplies, and sanitary maintenance supplies. Mooney's partnership with IT Radix has been nothing short of stupendous. IT Radix takes a proactive approach to technology ensuring that our current systems work for us while keeping us abreast of where our technology should be heading. They feel like part of the team and genuinely care about our infrastructure and our business."

Matt Baynes — Mooney-General Paper Company

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Reduce, Reuse and Recycle

Last summer, IT Radix embarked on an office remodel to enhance our workspace. Consistent with our core values of giving back, we were pleased to donate most of our old office furniture to the Park Lake School, a local not-for-profit and our partner in newsletter production.

For the new furniture, we partnered with **Milton Terry Associates** and **Andrea's Innovative Interiors** to design a space that was not only beautiful, but environmentally friendly. Milton Terry resells, donates or recycles over 40 tons of office furniture per year. Glenn Marthens, President of Milton Terry, says "very little goes to landfills, and your new furniture has a great green story." True to his word, Glenn helped us deliver the old furniture to the Park Lake School and guided us towards the Evolve furniture line—Evolve's panels are made from approximately 82% recycled and environmentally friendly materials.

Thankfully, Andrea Valle was ready to step in and help us narrow down the plethora of color, wood and metal finish choices into a beautiful design that was modern, light and full of texture. Almost one year later, we're still thrilled with the results.
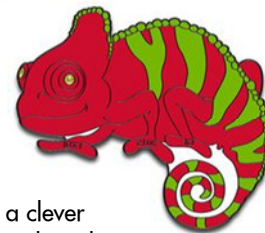
Proudly folded & stuffed by Park Lake School

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Software Patches: Proactive Protection from Intruders

In the animal kingdom, nature is always changing, by adapting to meet the needs of the environment it's faced with. Whether it's a clever defense mechanism for a herbivore to fend off potential threats or a busy beaver architecting a home for itself, wildlife has no shortage of survival tools. Technology has adopted a similar pattern, by becoming flexible enough to change its architecture and defense protocols to meet the needs of your business's digital habitat.

Developers are working around the clock to ensure your software is keeping up with digital trends. Whether it's in the form of new features, performance optimizations, or behind the scene bug fixes, technology is always growing. As a result, your computers, applications, and other devices will ask you to install updates every now and then. While these notifications may seem safe to push off, we wanted to explore the different reasons why updates matter and why it's important to keep your tech up to speed.

For instance, if your company webpage allows your clients to sign in and store personal information, your customer's data may be at risk if your technology is not up to date. Every day, new exploits and vulnerabilities are being discovered, documented, and ultimately addressed by—you guessed it—patches! Last year's Equifax breach is estimated to have affected approximately 143 million people's personal information. The harsh reality is that this breach was *entirely* avoidable. Security reports reveal that the patch to correct this security flaw was available months before the incident—meaning Equifax failed to update their systems and ultimately left the company and their customers unprotected.

We tend to think that only the mega corporations, like Equifax, are at risk for this level of cybercrime. Unfortunately, companies of all sizes are breached daily—whether it's an anonymous ear monitoring all your emails or whether it's your customers' private data being offloaded and sold on the Dark Web.

What does this mean for you? Most security risks and major data breaches are avoidable by keeping your software applications, webpages, and computers up to date with the most recent patches. Just like the diligent beaver preparing its home and maintaining it throughout the seasons and the defense mechanism of a chameleon's camouflage, sometimes the best defense is a good offense. By keeping your machines patched and up to date, not only will your systems have the latest architecture for their operating system, but known security exploits and patched vulnerabilities will no longer be something to be concerned about.

Sometimes, though, it's not always as obvious as your Windows or Mac device prompting you to update. Certain applications may be less obvious depending on your settings (especially for webpages and applications like Adobe). It's important to check for updates every so often to make sure all your bases are covered. If that sounds like a hassle or maybe you're not sure if your webpage developer is staying on top of the patches you need, it's important to *double check*. And, if you're still not convinced, give your friendly neighborhood IT Radix a call. We'd be happy to discuss managing and maintaining your patches for you.

Technology is a moving target, and it's always nice when someone has your back.

> "Over every mountain there is a path, although it may not be seen from the valley."
>
> — Theodore Roethke

"They're making great progress in biological engineering. How do you know money doesn't grow on trees?"

From the desk of: Cathy Coloff
Subject: Unplug and enjoy nature!

Many of our readers know that we have a second home in Vermont that I really enjoy. We go up regularly all year round. I believe my love of Vermont started in my childhood running around in the woods of Cary, NC. We moved to Cary just as the Research Triangle Park area was starting to develop. As a result, we literally had miles of woods behind our home. My friends and I would walk the thin paths through the woods, play in the small creeks getting muddy, swing from the tremendous vines on "Monkey's Mountain" as we dubbed it, and occasionally stumble upon a copperhead snake sunning itself. (Of course, we would turn tail and run whenever this occurred!) We had a great time just being kids. My family also occasionally visited Montana where my parents grew up. While there, my uncles and grandparents would take us to rivers and mountains that were tremendous in comparison to my experiences in North Carolina, strengthening my love of the outdoors.

Flash forward many years, now I crave my time in Vermont. In the winter, Doug and Alex ski while I hang out by the fireplace or go for a walk or cross-country ski with our dog. The rest of the year, we enjoy splashing in the river, going biking, or just sitting by the fire at night with our friends Steve and Sue. For the longest time, we had no Internet service at the house—just dial-up. Imagine! Completely unplugged. Now, we have DSL, and we're able to stream TV, check email or even work there full-time. But I still like to unplug, clear my brain and just be…in fact, most of the newsletter contributions I write are created on one of our Vermont weekends. You don't have to drive to Vermont to unplug. Now that summer is upon us, I encourage you to take advantage! Go outside, head to a local park and take a walk. You will enjoy spending a few moments in the sun, listening to the trees move in the wind, the birds singing, the critters scurrying or simply taking in nature.

Environmental Fun Facts!

- More than 25% of bottled water actually comes from municipal tap water.
- Australia is the driest populated continent of the world.
- Earth's surface is covered with 70.9% water, 29.1% land.
- Birds need gravity to swallow.
- Cats spend 66% of their life asleep.
- On average, an American residence uses about 100 gallons of water per day.
- Two gallons of water flow out of an open faucet every minute. Remember that the next time you brush your teeth!

Technologies Inspired by Nature

Nature has inspired some ingenious solutions to every-day problems. Here are just a few examples of ideas we've copied from Mother Nature:

Velcro – In 1941, Swiss electrical engineer George de Mestral went hunting in the Alps and noticed his clothes and his dog's fur were covered in burdock burrs. This mechanism of clinging to passersby is the burdock's way of spreading seeds across greater distances. It was evident that the simple hooks of the burrs allowed them to cling to loops in clothing and fur. Ten years later, after countless experiments with hooks and loops of various materials, a new fabric fastener was created—Velcro—now used for everything from sporting equipment to clothing.

Building Cooling Systems – African termites have devised some clever designs to keep their mounds at a nearly constant temperature. Termites construct their mounds with a passive cooling system using a series of vents along the top and sides. Wind blows hot air from underground chambers through the vents and out of the structure, and the termites can even control the airflow by opening or blocking tunnels. Architect, Mick Pearce, used a similar strategy when he designed the Eastgate Centre, an office complex in Harare, Zimbabwe. The building stays cool without air conditioning and uses only a 10th of the energy.

Drones – The lift generated by the circular flight of maple seeds allows them to travel much further from the tree and inspired a new drone design. Lockheed Martin adapted this design for a single-rotor drone called Samarai. Its simple design has only two moving parts and can be easily miniaturized and used in tight quarters.

They say that imitation is the sincerest form of flattery. Thank you, Mother Nature!