

Got Questions?



VERMONT COMPUTING INC.

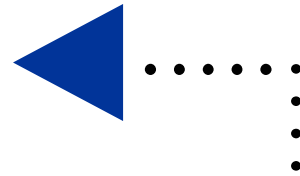
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Keep your PC running well for years with a Vermont Computing Maintenance Card

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Newsletter**



Change Windows XP's Browse Folders setting on the fly

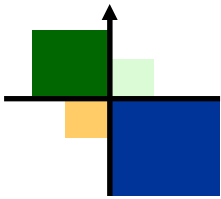
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VCI NEWS

Keep your PC running well for years with a Vermont Computing Maintenance Card

Want to keep your PC running in top shape and still pay less than our normal rates? How about a **Vermont Computing Maintenance Card**? This card does not expire and entitles you to a certain number of our maintenance packages. Here's what you get:

- 3 x Package A = \$95.10
- 2 x Package B = \$141.64
- 1 x Package C = \$130.88
- 1 x Package D = \$187.79

Total value = \$555.41—You get the card for only \$285. That's a savings of \$270.41!

What's more, if you were to pay our in-shop hourly rate for the same services, the charges would total \$1037.40!

So what's included with the packages?

Package A

- Defragmentation of Operating Hard Drive
- Thorough Check for Viruses
- Spyware/Malware Scan & Removal

Package B

- Package A plus:
- Removal of Unnecessary Data
- Cleaning of Computer and Components
- Installation of Windows Critical Updates
- Can of Air

Package C

- Packages A and B plus:
- Compressed Backup to CD-ROM

Package D*

- Compressed Backup to CD-ROM



Don't forget to check out www.buyavcpc.com or our main site www.vermontcomputing.com when you are considering the purchase of a new PC.

Also on the website, we have **VCI t-shirts and merchandise!** In association with CafePress, Vermont Computing is now offering fine Vermont Computing gear.

Proceeds will be donated to a **non-profit organization**.

Head on over to gear.vermontcomputing.com to pick up some VCI merchandise today.

- Hard Drive Format
- Reinstallation of Provided Windows & Hardware Drivers
- Installation of Provided Antivirus with Full Update
- Instillation & Restoration of E-mail Address Book, and Web Bookmarks
- Installation of Windows Critical Updates Set Up of External Hardware & Additional Programs

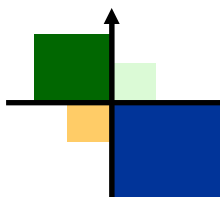
The recommended service schedule over 2-years is as follows:

- 3 months from purchase: Package A
- 6 months from purchase: Package B
- 12 months from purchase: Package A
- 15 months from purchase: Package C
- 18 months from purchase: Package A
- 21 months from purchase: Package B
- 24 months from purchase: Package D
- Buy a new card!

But remember:

- The schedule is only a suggestion, there is no expiration date!
- You can use the packages in any order.
- You can use the packages for different computers.
- Flexible times between maintenance services
- The card makes a great gift!

Get a Vermont Computing Maintenance Card for a dad or grad or anytime, to save money and keep your computer worry free.



TECH TIPS

Change Windows XP's Browse Folders setting on the fly

http://articles.techrepublic.com.com/5100-10877_11-6176806.html?tag=nl.e064

Your Windows XP system probably has the Browse Folders setting configured to Open Each Folder In The Same Window in the Folder Options dialog box. However, sometimes you may wish to open a folder in a separate window. For example, you may want to have two windows open in order to use drag and drop to copy or move files from one folder to another.

For these cases, there's a little known keyboard trick that you can use to easily open a folder in a separate window without having to change the Browse Folders setting. Simply hold down [Ctrl] as you double-click the folder. When you do, the folder will open in a separate window.

Keep in mind that this tip only works in folder windows in which the Common Tasks pane is visible. If the Folders tree is showing, this tip won't work.

Note: This tip applies to both Windows XP Home and Windows XP Professional.

Computer forensics: Finding "hidden" data

<http://blogs.techrepublic.com.com/security/?p=232&tag=nl.e138>

Fortunately for the forensics investigator, most users aren't very good at covering their tracks. Ignorance of how computers manage memory and disks results in incriminating file or memory content stored in various locations invisible to the subject of an investigation. In this post, we'll look at three potential locations for this information - deleted files and slack space, swap space, and hibernation files.

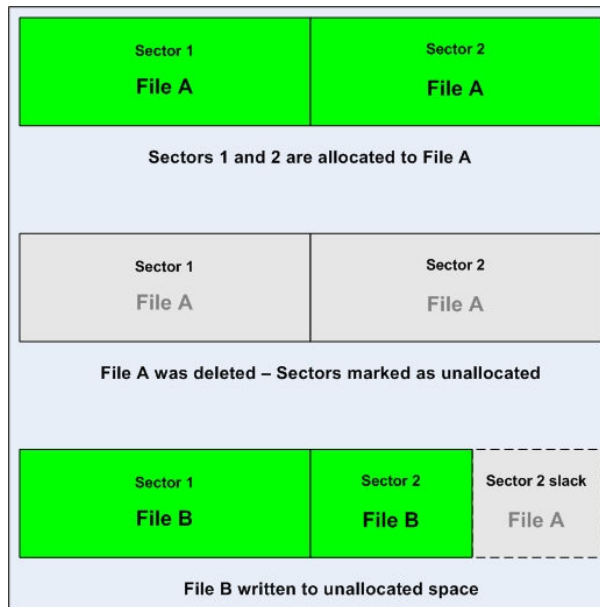
Deleted files and slack space

When an operating system writes a file to disk, it allocates a certain number of sectors. The number of sectors allocated depends on the limitations of the operating system and configuration decisions made by the system administrator. The sectors allocated and their location on the disk are recorded in a directory table for later access.

When the file is deleted, the space originally allocated to it is simply marked as unallocated. The actual data remains on the disk. Deleted files in this state are easily recoverable by many disk utilities, but what happens if a new file is written to this same space? Figure A shows what might happen to the original data.

At some point in the past, File A was written to sectors 1 and 2. The sectors were completely filled by the file's content. When the user decides to delete the file, the sectors are marked as unallocated. However, the file content remains.

Sometime after File A is deleted, the user requests the OS to save File B. The OS once again allocates sectors 1 and 2, but notice that the file content doesn't completely fill sector 2. The unwritten portion of sector 2 is known as slack space, and it still contains content from File A. Slack space data can be read and



analyzed by any of the popular forensics toolkits.

Swap space

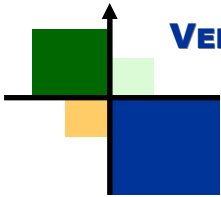
Both Linux and Microsoft Windows systems expand RAM by using disk. In this virtual memory model, the OS moves data in memory to a special location on disk in order to free RAM for additional operations. When the data on disk is needed again, it's moved back into RAM. The area on disk used for this purpose is called the swap file or swap space. In Linux environments, the swap area is an actual disk partition. On a Windows XP machine, the swap space is a file called Pagefile.sys.

Since everything in RAM is subject to being swapped to disk, some very interesting information can be found in a swap file. In addition to plain-text data that might be encrypted in a disk file, encryption keys might also be present. This is due to weaknesses in some applications that allow unencrypted keys to reside in memory. Further, information contained in e-mails or stored at remote locations might still reside in swap space. Any standard disk maintenance utility can access this information.

Hibernation files

Hibernation files are created when a system goes into sleep or hibernation mode. For example, a laptop running Windows XP writes the entire contents of RAM to a file when going into hibernation. Like swap space, hibernation files can contain a wealth of information not found anywhere else on the target system. The contents of a hibernation file can be accessed by a number of disk maintenance utilities.

A target disk is usually full of useful information. An investigator just needs to know where to look and how to employ the proper tools and techniques for extracting it.



PERIPHERALS

ARIN: It's time to migrate to IPv6

<http://arstechnica.com/news.ars/post/20070521-arin-its-time-to-migrate-to-ipv6.html>

Today, the American Registry for Internet Numbers (ARIN) published a resolution its Board of Trustees had passed on IP number availability. In short, the resolution says that since IPv4 addresses are running out, ARIN should "take any and all measures necessary to assure veracity of applications to ARIN for IPv4 numbering resources" and "encourage migration to IPv6 numbering resources where possible."...ARIN is the organization responsible for giving out IP addresses in North America...it's not unexpected for the board to attempt to further the common good by promoting IPv6.

But most people and organizations connected to the Internet, be they consumers, ISPs, or content companies, are much more interested in what's in their best interests. By and large, they're happy to stick with IPv4. Despite the best efforts of organizations like ARIN, the simple fact is that, compared to IPv4, IPv6 gives you access to very little content and very few users. So far, nobody has been able to get past this chicken-and-egg issue...

According to ARIN's statistics, 19 percent of the IPv4 address space is still available, with 13 percent unavailable and 68 percent "allocated." The group is reluctant to make predictions on when the supply of IPv4 addresses will run out, choosing instead to monitor distribution and consumption trends so that others can do the predicting. "Those forecasts have some variation, but it is clear that this could be an issue as soon as 2010," said the ARIN spokesperson...

IETF backs new cryptographic scheme to battle the effects of spam

<http://arstechnica.com/news.ars/post/20070524-ietf-backs-new-cryptographic-scheme-to-battle-the-effects-of-spam.html>

The Internet Engineering Task Force (IETF) released a new e-mail authentication specification this week in the hopes of stepping up the slowing fight against spam. The spec is dubbed DomainKeys Identified Mail (DKIM) and, if incorporated, may very well help cut down on spam and phishing attempts without requiring any user involvement...

The DKIM whitelisting process considers the IP address associated with the sender of an e-mail and takes it a step further by adding a digital signature associated with the sender's domain name via a public-key cryptography scheme. On the receiving end, servers that have incorporated DKIM will be able to validate the signature and then check it against whitelists...

According to the DKIM charter, the working group...provides "a tool for defense against [fraud and spam] by assisting receiving domains in detecting some spoofing of known domains." The group also plans to "analyze the impact on senders and

receivers who are not using DKIM, particularly any cases in which mail may be inappropriately labeled as suspicious or spoofed."

DKIM's precursor, DomainKeys, was originally developed by Yahoo. The specifications for DKIM were then extended by an informal group of IT organizations that included companies like Yahoo, Cisco, EarthLink, Microsoft, and VeriSign, among others. It was first submitted by the group to the IETF in mid-2005, but only recently published by the IETF...

Some are optimistic that DKIM will take off. "As far as we can tell, all the major [e-mail services] are very interested implementing it," director of the Domain Assurance Council Paul Hoffman told Computerworld, who first covered the new spec. "We believe from what they've said that all of them are going to include DKIM fairly high in the list of white-listing technologies."

Loose lips cause pink slips: 40% of bloggers post damaging info about jobs

<http://arstechnica.com/news.ars/post/20070525-loose-lips-cause-pink-slips-40-of-bloggers-post-damaging-info-about-jobs.html>

Employees can't seem to resist the temptation to rant about their work frustrations on their blogs, failing to recognize how public they really are. Since blogs are still relatively new, Croner reasons that employees are treating them with the same informality and rash decision-making as e-mail when it was first introduced to the masses in the 90s. "Many recipients received rude, angry or otherwise inflammatory e-mails which had been written and sent in the heat of the moment," said Croner technical consultant Gillian Dowling in a statement. "Employees were advised that the use of e-mails was the equivalent of sending or dictating a letter, and just as binding. These concepts remain in e-mail or internet policies today."

But Dowling warns that blogs could do a lot more damage than hurt someone's feelings. Security, corporate image, workplace morale, and trust are just a few of the things that could be negatively impacted by casual blog rants and may even result in the employee being fired.

...In addition to all of the above, employees could be engaging in too much self-disclosure, revealing things that their employers would not otherwise discover in their blog postings. We've all heard horror stories about people being fired for things they've exposed about themselves online, and in some cases, not even being hired in the first place because of it.

...I'll admit it: I once blogged very openly (and not-very-wisely) about my employer and coworkers....I was under the impression that no one would be able to find it, and I was wrong. So take these warnings to heart: don't be a part of that 39 percent. Be careful what you post online if you value not only the stability of your job, but your personal life, too.