

## TANG Tech Tips



### 12/1/09: Getting Discounts for AVG Anti-Virus Software

OK, first off, if you are currently using AVG Free, you will need to upgrade your AVG to 9.0. Here is the page for that: <http://free.avg.com/us-en/download-avg-anti-virus-free-edition>

It is a little hard to see where the free version is, but the download is at the bottom, on the left. There is also a how-to here: <http://free.avg.com/us-en/hot-topics>.

But you really shouldn't be using AVG Free for anti-virus control in your library -- it is only for home use. AVG does give discounts for libraries, and here is the information for getting discounts: <http://www.avg.com/ww-en/edu-charity-government-security>.

I do not know how cheap AVG is going to be with discounts, so you will want to also look at TechSoup to see the prices for Symantec, etc. For instance, a 10 user license for Symantec AntiVirus Corporate Edition 10.2 is only \$50 on TechSoup. If your library is not already set up to receive discounts on TechSoup.org, I can help you through the registration process.

#### My favorite site of the month – MakeUseOf.com

I've discovered a really fun resource for information on all things tech: <http://www.makeuseof.com>. I suggest you subscribe to this site, so you can get downloads only subscribers can access, such as the Laptop Buying Guide for 2009. With a subscription you also get regular reminders of their articles, how-to's, reviews, etc. They are big proponents of open source software (such as my favorite, OpenOffice) – but remember to check that these are OK for use in your library. Some products are only for home use (such as AVG Free.) Two goodies from MakeUseOf:

Organizing your Windows --

<http://www.makeuseof.com/tag/four-simple-and-free-tips-to-organize-your-windows-experience/>

The best sites for finding song titles by humming --

<http://www.makeuseof.com/tag/find-a-song-title-just-by-humming-the-lyrics/>

#### More Websites for Fun and Learning

Comparison of E-readers: <http://www.ebook-reader-guide.com>

Information on CIPA, including a comparison of filtering software (somewhat dated...)

<http://infopeople.org/resources/filtering>

Deepfreeze manual -- in case you don't have a copy: [http://www.faronics.com/doc/DF6Ent\\_Manual.pdf](http://www.faronics.com/doc/DF6Ent_Manual.pdf)

Fun, short videos done by teachers and librarians, that you can download freely:

<http://teacherlibrarian.ning.com/video?page=1>

### 11/1/09: Do Not Fear the Tech Plan!

CTLS has only 9 libraries receiving discounts from E-Rate! There is still time to apply for refund for 2010 contact Kam McEvoy or Holly Gordon at CTLS and we will get you started right away. You have until January 1, 2010 to get the first forms completed, so don't hesitate.

You do not need a tech plan for basic telecommunication discounts but do not fear the tech plan. We are here to help. If you have an old tech plan, send it to me (Holly Gordon) and I will get you started. We do not have to complete this before January 1, we just need to start.

For further information on Tech Plans, see these resources (from the "My Library Action Plan", produced by TSLAC, and distributed at the Opportunity Online Summit):

TechAtlas free tech planning software (requires you to set up an account, but worth it)  
<http://webjunction.techatlas.org/tools>

Preparing and submitting your Tech Plan for E-rate  
<http://tsl.state.tx.us/ld/funding/howto.html>

Universal Service Administration Company technology planning resources  
<http://www.universalservice.org/sl/applicants/step02>

TechSoup for libraries planning cookbook – this site is a fantastic source for libraries!  
<http://www.techsoupforlibraries.org/cookbooks/planning-for-success>

### **10/1/2009: Deepfreeze vs Roxio, XP vs SCT**

#### Deepfreeze and Roxio EZ-CD Creator

Some people have reported problems with workstations running DeepFreeze sometimes are not starting up properly. One possible reason for this, condensed from the Deepfreeze website (<http://www.faronics.com/faq/default.asp#18>) is that the workstation is also running Roxio EZ-CD Creator. Some versions of Roxio's EZ-CD Creator might remove entries from the PC registry that are required for the proper operation of Deep Freeze. If you encounter problems running Deep Freeze on a computer that has Roxio installed, contact Holly Gordon ([holly.gordon@ctls.net](mailto:holly.gordon@ctls.net)) and we will check the registry on your PCs.

#### Windows XP Service Pack 3 and Microsoft Shared Computer Toolkit

Theresa Strickler at Goldthwaite discovered this incompatibility. When she tried to load Windows XP Service Pack 3 the installation failed with an error message, and the following error is logged in the service pack installation log: "8007F0F4 - STATUS\_PREREQUISITE\_FAILED"

According to the Microsoft website, Service Pack 3 will not install on workstations using Microsoft Shared Computer Toolkit for Windows XP. Before you can install, you must:

- 1) Uninstall Microsoft Shared Computer Toolkit
- 2) (Optional) Install Windows SteadyState, the newer version of Microsoft Shared Computer Toolkit.

For more detailed information, go to "Steps to take before you install Windows XP Service Pack 3" on the Microsoft website: <http://support.microsoft.com/kb/950717>

For more information about Windows Steady State:

<http://www.microsoft.com/windows/products/winfamily/sharedaccess/faq.msp>

## 9/1/2009: Holly Gordon -- the new Mike

Hi, I'm Holly Gordon, the new Mike Buras at CTLS. I am very happy to be here! I have been at CTLS for less than a month, but have already had a chance to help about 1/3 of the libraries we serve. I look forward to talking with each of you soon.

Just a little background info: I first worked as a librarian in Swaziland, Africa from 1983-1986, as a member of the US Peace Corps. When I returned home I got my MLIS for UT Austin. While at UT, I worked for Austin Public Library in various jobs, including helping Pat Touhy install the first PCs in CTLS libraries! After graduation I worked mostly at the Texas State Library, first as an Automation Consultant, and then as the System Administrator of their integrated library system (CLSI, then Sirsi). Some of you may know me from the Plinkit project, which I helped start up at TSL, using CTLS libraries as willing and helpful guinea pigs.

For this article of Tech Tips I would like to share with you the top 4 tools I have used for troubleshooting these last few weeks.

**Problem:** I just made a bunch of changes in Plinkit (or some other website), but I can't see my changes.

### Good Tool to use:

While looking at your Plinkit site, press F5 to reload/refresh the page. If that doesn't work, try CTRL+F5 with forces the browser to ignore cached information and time stamps. In other words:

Reload Page	F5 or Ctrl+R
Force Reload Page (override cache)	Ctrl+F5 Ctrl+Shift+R Shift+Reload/Refresh button

**Problem:** I can't get to a website I have looked at a million times! I can get to other websites, but this one gives me "Address not found" errors, even though I know it is available! For instance, I can't get to <http://www.biblionix.com>, but I can get to <http://biblionix.com>

### Good Tool to use:

There could be other reasons for this problem, but it doesn't hurt to run DNS refresh. To do this, go to Start (in the lower left corner on your PC desktop) and do these steps:

Click "start"

Click "run" and type "cmd" the press <retn>

In the window that pops up, just type: "ipconfig/flushdns" and press <retn>

This should make the site available, but sometimes the problem is with your ISP (internet service

provider). You can call you ISP and ask that “DNS be renewed”. However, this is also one of those problems that will usually fix itself in 72 hours, which is how long it usually take DNS changes to work through the internet.

**Problem:** I’m having network problems, and I can’t find the information on how my network is set up.

**Good Tool to use:**

This is a good thing to practice right now, so you can get this information and put it someplace safe. To do this, go to Start (in the lower left corner on your PC desktop) and do these steps:

Click "start"

Click "run" and type "cmd" the press <retn>

In the window that pops up, just type: “ipconfig/all” and press <retn>

Either write down this info somewhere, or paste it into a Word document (<ctrl>+<Print Screen>, then paste) and print it out. While you are at it, sketch your network topology, showing your connection to your ISP, routers, switches, servers, PCs and printers. Include the IP addresses, model numbers for the equipment, etc. This comes in very handy when we are tracking down problems.

**Problem:** My server (or PC) is running really slow. Any idea what is wrong?

**Good Tool to use:**

This is another thing that it is good to do right now, so that you know what things look like on your computers when they are running normally. Press <alt> + <ctrl> + <del>, all at the same time. When the Windows box comes up, select Task Manager. This has 4 tabs – Applications, Processes, Performance and Networking. The other day a library had a server that had so many processes spinning around, doing nothing but uses resources, so that they were having to restart the server every day. We figured out that it was the Athena OPAC, being accessed through they Plinkit site.

## **5/18/2009: CCleaner Cleans Your Windows for Free**

As you might have noticed, Windows has a tendency to get slower over time, partly due to all the useless software debris that inevitably accumulates on computers with regular use. Everyday activities like surfing the Web, downloading files, installing and uninstalling applications, and installing necessary Windows and application updates leaves behind lots of orphaned files on your hard drive and sometimes causes inconsistencies in your system’s Registry, the central database in Windows that stores system and application settings, hardware configurations, and user preferences. All of this software detritus builds up and eventually slows down your system.

Fortunately, there are many utilities available that can help clean up your system and restore some of its lost performance. My long-time favorite is the freeware CCleaner (<http://www.ccleaner.com/>). Many system cleaners just clean out your web browser cache(s), Recycle Bin, or temporary file folders (like “C:\Windows\Temp” and “C:\Documents and Settings\Username\Local Settings\Temp” in Windows XP), but CCleaner goes a step further and also removes unused and temporary files from such popular applications as Microsoft Office, Adobe Acrobat Reader, Symantec AntiVirus, OpenOffice.org, Windows Media Player, QuickTime Player, and Google, Windows Live, and Yahoo! Toolbars. In addition, CCleaner features a Registry cleaner that removes erroneous entries and a Tools section that includes an application uninstaller and also a startup manager for configuring which applications and services start with Windows.

Please note that when I install CCleaner, I usually accept all the defaults except under **Install Options**, where I

uncheck the “Add CCleaner Yahoo! Toolbar and use CCleaner from your browser” option. I don’t need another toolbar—I already use Google Toolbar—and installing the bundled CCleaner Yahoo! Toolbar may trigger alerts from some antispyware programs, even though CCleaner’s maker, Piriform, assures us that CCleaner contains no spyware or adware. Also, adding the “Run CCleaner” option to the Recycle Bin context menu enables you to quickly clean your system without any prompts, but I recommend you don’t do this until you’ve familiarized yourself with the application and all of its many options.

CCleaner’s interface is composed of four main sections or features:

### **Cleaner**

The Cleaner is the main feature of CCleaner and the first thing you see when you launch the application. It contains two tabs, Windows and Applications, and also reports basic system information like the Windows version, type and speed of processor, amount of RAM, and the make and model of graphics chip present.

The Windows tab lists the types of Internet Explorer and Windows system files that can be cleaned. Please note that most of the options are checked by default, but the Advanced options and a few others are grayed out. When you select one of these options, CCleaner displays a warning message that explains the consequences of removing these particular files.

The Applications tab lists additional cleaning options for third-party applications that are currently installed on your system. This list will be updated automatically as you install new applications.

To run the Cleaner, simply check or uncheck the options you want to include or exclude from the cleaning process and then click either the **Analyze** or **Run Cleaner** button. If you click **Analyze**, the Cleaner will first scan your system and then display a list of items that can be cleaned. Until you become familiar with the Cleaner’s capabilities, I recommend you click **Analyze** and review the results before you click **Run Cleaner** to permanently remove the items.

### **Registry**

The Registry cleaner is a more advanced feature that analyzes your Windows Registry and fixes potential issues.

Before I go any further, I must admit that I’m not a fan of Registry cleaners in general. I think any possible performance benefits you might get from routinely “cleaning” your Registry—basically removing extraneous or orphaned entries—are outweighed by the potential damage some Registry cleaners can do to your system. I’ve seen some systems totally trashed by overly aggressive Registry cleaners.

That said, CCleaner’s Registry cleaner is quite cautious compared to some other cleaners. After you click the **Scan for Issues** button and the list of potential issues are displayed, you click the **Fix selected issues** button and by default are immediately prompted to backup changes to the Registry. Afterward, you are given an explanation and solution for each issue and can choose to either fix that particular issue or fix all selected issues. If you experience any problems after the cleaning, you simply double-click on the Registry backup file (i.e. a file with a .reg extension) and restore the original entries.

Despite these precautions, the potential to create all sorts of new problems exists, so I consider CCleaner’s Registry cleaner an optional feature and for advanced users only. Use it at your own risk.

### **Tools**

The Tools section contains two tools, Uninstall and Startup, and is also designed for advanced users.

The Uninstall tool basically allows you to manipulate all the applications currently installed on your system that are listed in the **Add or Remove Programs** in the Control Panel. For example, you can select an entry in the list and directly initiate the uninstall process for that application. You can also rename an entry, which could come in handy when an application doesn't provide a sufficiently descriptive title for itself. And for those rare occasions when an application gets uninstalled or deleted but its entry in **Add or Remove Programs** stubbornly refuses to go away, you can delete the entry with a single click of the mouse.

The Startup tool lists the applications and services that start automatically with Windows. It's basically a shortcut to the Startup tab in your system's built-in System Configuration Utility (MSConfig). The tool allows you to either disable a startup application or service or delete it, which could lead to problems if you're not absolutely sure of what you're deleting.

### **Options**

The Options section allows you to customize the way CCleaner runs. For example, there's an option to run CCleaner when Windows starts. If you're especially concerned about security and privacy, you can also choose the secure file deletion option and overwrite deleted files up to 35 times(!), but be aware that this option takes a much longer time than normal file deletion.

CCleaner is definitely a handy tool. It provides a level of discriminate system cleaning that Windows simply doesn't provide, and even though some of its capabilities are built into Windows, it still saves you time by providing a convenient launch point for a number of system housekeeping chores.

For more information about CCleaner and to download it for free, go to <http://www.ccleaner.com/>.

## **3/9/09: FREE Antivirus Software**

Whenever my friends and family ask me for recommendations on antivirus software for Windows, I usually recommend AVG Anti-Virus Free Edition (<http://free.avg.com/>) or avast! Home Edition (<http://www.avast.com/eng/download-avast-home.html>). The programs are offered free of charge for non-commercial home use, but unfortunately their use within a public library or any other organization is strictly prohibited. Nevertheless, both programs offer excellent, comprehensive virus and spyware protection, but avast! Home Edition includes additional protection against rootkits and protection for over 30 different instant messaging (IM) and peer-to-peer (P2P) programs. The only stipulation for these additional features is that one has to register the program within 60 days after installation and then re-register it after 1 year. AVG Anti-Virus Free Edition doesn't require any registration at all, though, and I also think its user interface is easier to use and navigate than avast! Home Edition. In other words, if you value ease of use and a minimum of hassle over more comprehensive protection, go with AVG Anti-Virus Free Edition.

Until recently, I was aware of only one free antivirus program that was available to public libraries: ClamWin Free Antivirus (<http://www.clamwin.com/>). This open source program offered decent virus and spyware protection, but it had some significant shortcomings that prevented me from recommending it to our member libraries. In particular, unlike most other antivirus programs, ClamWin Free Antivirus did not include a real-time scanner. In other words, you had to *manually* scan a file in order to detect a virus or spyware. You had the option to schedule scans, but between

scans your system was vulnerable to infections. In addition, the program's scanning was agonizingly slow.

Then about a month ago, while searching online for free antivirus software for my Mac at home (yes, I realize Macs rarely get infected by viruses and other malware and most Mac users don't even use antivirus software, but why take chances)\*, I stumbled across an antivirus program for Windows that was both completely free of charge—no catches, limitations or time limits whatsoever—and included a real-time scanner: PC Tools Anti-Virus Free Edition 6 (<http://www.pctools.com/free-antivirus/>).

The free version of PC Tools AntiVirus is much the same as the commercial paid one; all it lacks are high-speed priority updates and dedicated product support (a community support forum is available), neither of which are major omissions. It works with Windows Vista (32-bit), XP, and 2000 and offers "IntelliGuard" real-time virus and spyware protection, email protection, easily customizable scan settings, and the ability to schedule system scans and automatic updates. Installation is a breeze and the program is easy to use and navigate. The program also uses less memory and system resources than many of its competitors.

PC Tools AntiVirus Free Edition 6 is not without shortcomings. It doesn't offer as many features as some other antivirus programs, including AVG Anti-Virus Free Edition and avast! Home Edition. You cannot lock down its program settings, so any user can change the settings and even turn off the IntelliGuard protection. Moreover, if you decide to change the program settings yourself, you have to manually do so on each computer, whereas managed solutions like Symantec Endpoint Protection (formerly Symantec AntiVirus Corporate Edition) allow you to conveniently change the settings on all of your protected computers and lock them down from one central management console.

In short, PC Tools AntiVirus Free Edition 6 is probably not the best choice for a library with many staff or public access computers. However, it may be a good alternative to paid antivirus programs for a small library with relatively few computers that is looking to cut software costs.

*\* If you're a Mac user, PC Tools iAntiVirus Free Edition (<http://www.iantivirus.com/>) is free for home and home office use and works great.*

## **1/8/09: Protect Your Public Access Computers with Deep Freeze Enterprise**

The director of one of our smaller member libraries called me not long ago and told me that she spent a good deal of time maintaining her library's public access computers. She described in detail how she routinely scanned them for viruses and spyware, uninstalled unauthorized software (for example, the popular MySpaceIM), corrected accidental or malicious system changes made by patrons (like changing the Windows desktop background from the tranquil default "Bliss" scene to something more...um...graphic in nature), and deleted assorted music, pictures, documents, and other files left behind by patrons. In addition, one of her relatively new public access computers was down because Windows would no longer boot up, the likely victim of some malicious virus or corrupted operating system files.

I waited patiently until she was finished with her story, and then I gave her the same piece of advice I had given to many other library directors in the past, something I knew would change her life for the better: get Deep Freeze Enterprise. After I explained how the software could make her public access computers almost maintenance free, her sense of relief was palpable.

After I got off the phone with her, I realized that even though I had recommended Deep Freeze Enterprise to many member libraries and even installed it in quite a few, I had never written an article about it. Well, it's time to correct that oversight.

In a nutshell, Faronics Deep Freeze helps eliminate computer damage and downtime by "freezing" their system configurations in a pristine state. Once the software is installed on a computer and it's frozen, any changes made to the system, regardless of whether they are accidental or malicious, are completely erased when the computer restarts. The computer is protected from permanent damage even if patrons have unrestricted access to system software and settings.

In short, Deep Freeze ensures that your patrons will enjoy a more trouble-free and less restrictive computing experience, while you are freed from performing tedious computer system maintenance and repair. You no longer have to worry about your computers becoming congested with files and programs left behind by patrons—all will be wiped away when the computers restart.

Faronics offers two different editions of Deep Freeze: Standard and Enterprise. The Enterprise edition includes many more useful features than the Standard edition, and I think it is well worth the additional cost if you have several public access computers or more.

In particular, Deep Freeze Enterprise includes a central "Enterprise Console" that enables you to remotely freeze or thaw your computers individually or all at once (in case you want to install new software or make system changes), set predefined maintenance times to automatically download and install Windows and antivirus software updates, update installed Deep Freeze client software, schedule automatic restart and shutdown times, and even automatically turn on your computers (the Wake-On-LAN (WOL) feature must be enabled in each computer's BIOS). All of these tasks and more can be performed and controlled from just one computer running the Enterprise Console. Basically, once Deep Freeze Enterprise is properly installed and configured, your public access computers will become much easier to manage and practically maintenance free.

Please note that Deep Freeze Enterprise is not just for public access computers; it can be used on staff computers as well. It can be configured to allow users to retain personal data, settings, and web browser favorites while keeping the rest of the system protected.

A couple of weeks after I received the initial call from the aforementioned director, I paid a visit to her library and installed and configured Deep Freeze Enterprise on all of her public access computers. I'm happy to report, though not surprised, that everything has been running smoothly ever since.

For more information about Deep Freeze Enterprise and to download a fully functional, 30-day evaluation edition, see <http://www.faronics.com/html/deepfreeze.asp>.

## **11/6/08: Google Releases Beta Version of New Chrome Web Browser**

On September 2, 2008, Google officially released the first beta version of its new open-source Chrome web browser. As of this writing, only the version for Microsoft Windows XP and Vista has been released, but Google promised that Mac OS X and Linux versions would soon follow.

Despite all the hype surrounding Chrome's release, I didn't exactly rush to download it (which explains why you didn't

see this article in our October newsletter). To be honest, my first thought when I heard about Chrome's release was: "Oh joy, another web browser." But curiosity finally got the better of me, and so I downloaded Chrome in mid October to see what all the hoopla was about.

So does Google's new web browser have what it takes to pose a threat to its Microsoft rival (Internet Explorer is currently used by 70-80% of users)? I think the answer is up in the air, but here are my five favorite features of Chrome:

### **Minimalist Interface**

After a quick and painless installation, the first thing that struck me when Chrome launched for the first time was how simple and streamlined its user interface was. Unlike other browsers, Chrome's three toolbars are not crowded with buttons, menus, text input boxes, and so forth. The title bar at the top displays the tabs, and instead of separate web address and search boxes, Chrome's address box doubles as a search box. This so-called "Omnibox" even displays browsing history. For example, when I typed "ctls" in the address box, a drop-down menu suggested the CTLS homepage as well as other recently visited CTLS webpages. When I typed "ctls" in the address box again and hit Enter, a search page for "ctls" opened up in Google.com (or your default search engine).

I realize the minimalist look of Chrome may not appeal to everyone. Some people just like having a button for everything right there in plain sight, easy to find and click on. I personally like the way Chrome looks (I'm a minimalist at heart) and its welcome lack of clutter, which leaves more screen space for webpages.

### **Dynamic Tabs**

One of my most favorite features in Chrome is called "Dynamic Tabs," which enables you to drag and drop a tab from a window onto the desktop, where it becomes its own separate window. You can also drag and drop tabs into existing windows to combine them. This feature comes in very handy if you ever need to compare two webpages side by side.

Also, when you open a new tab in Chrome, it automatically shows thumbnails of some of your most visited websites, a list of your most recent bookmarks, and a search box that enables you to search your history.

### **Task Manager**

Chrome features its very own Task Manager. Chrome runs each tab in a separate process, so if a webpage in a tab locks up, you just press the Shift+Esc keys on your keyboard to open the Task Manager, select the errant webpage, and then click "End process." Afterward, a comical image of a sad tabbed window saying "Aw, Snap!" will appear in the tab, advising you to press the Reload button or go to another webpage. The rest of the open tabs in the browser window are unaffected.

Like Windows' Task Manager, Chrome's Task Manager also shows you how much memory and CPU usage each tab and plug-in is currently using. If you're so inclined, you can get a full breakdown of memory and CPU usage for each process by clicking on the "Stats for nerds" link in the Task Manager. (I really hope the sense of humor that pervades this beta version of Chrome doesn't disappear by the final release.)

### **Incognito Mode**

Chrome offers an Incognito browsing mode in which users can go to websites but nothing from that session—browsing and search history, form fields, cookies, or Internet cache files—will be saved after the window is closed. However, any downloads or bookmarks created during the browsing session will be preserved. Obviously, this feature can be useful on shared computers and when viewing sensitive data on the web.

## **Web Applications**

Google firmly believes in a future of web-based applications, such as their own Google Docs, Google Calendar, and Gmail. To that end, Google designed Chrome to make web applications feel more like regular desktop applications.

For instance, let's say you use Gmail. You simply go to your Gmail account start page in Chrome, click on the Control button, select "Create application shortcuts," and then select where you want to create the shortcuts—Desktop, Start Menu, and/or Quick Launch bar. Then when you launch Gmail from the application shortcut, it opens in a special dedicated browser window that's even more streamlined than Chrome's regular window—no tabs, control buttons, address bar, or bookmarks bar. In short, your Gmail looks and feels more like a regular desktop application.

And you're not just limited to Google's web applications. I created an application shortcut to my Yahoo! Mail account and it worked just fine. However, just as I suspected, Microsoft Outlook Web Access (OWA) looked terrible in Chrome (about the same as it does in Firefox). OWA uses Microsoft's proprietary ActiveX controls for many of its advanced features, which are currently only supported by Internet Explorer.

In addition, if your web applications support Google Gears, such as Google Docs and Zoho Writer, you can even use them while you're offline.

## **Conclusion**

Well, after kicking the tires on Chrome for the past couple of weeks, I concluded that maybe some of the hype surrounding its release was justified. I really liked it, especially its minimalist interface and speedy performance (Google stated that performance was a big consideration when building the web browser). In fact, I actually liked it better, in many ways, than the current version of Firefox, my default browser.

Of course, as you might expect in a beta version, Chrome still has some rough edges and it's missing some useful features as well. In particular, its bookmark management could use some work. Honestly, I also wouldn't mind seeing a *few* more buttons on its main bar, like a Print button. In addition, it lacks support for advanced features like a built-in RSS feed reader and there are not many addons, themes, and plugins available for it yet.

Overall, I think Chrome is a good first effort by Google, and I'm really looking forward to its final release. With a bit more work, Chrome could very well replace Firefox as my default web browser.

## **9/5/08: Mozy: A Cheap and User-Friendly Online Backup Service**

Not long ago, a library director asked me what I thought about online backup services, which enable you to automatically backup data on your computer through the Internet to a remote server location. To be honest, I had not paid much attention to these services ever since I tested a couple of them several years ago and found them to be slow, costly, and overly complicated. In recent years, though, the growing prevalence and rising speed of broadband Internet connections coupled with a drop in hard disk storage costs has allowed online backup providers to extend their services to a greater range of clientele. I vowed to take another look at their latest offerings and let the library director know what I thought about their services.

The advantages of using online backup over more traditional methods such as tape and optical disk are well known. In particular, it's convenient, especially for the person who travels a lot, and you don't have to worry about purchasing and maintaining backup hardware and software or constantly purchasing consumable backup media. Your valuable data is also stored securely offsite, safe in the event of theft, fire, flood, tornado (this is Texas, after all), or other

disaster.

While the advantages of online backup are well known and appreciated, there are some notable downsides to it as well. For starters, online backups can be pretty slow, certainly much slower than backing up directly to an external hard drive or USB flash drive, and since they transfer data through the Internet, the Internet connection between your computer and the remote server location should be fast, secure, and reliable. Also, online backup services are designed to backup and restore your important data files, not your entire computer. Perhaps the biggest drawback, though, is that most online backup providers offer a limited timeframe for data retention, usually less than 90 days. Some providers offer long-term data retention, but it's relatively expensive.

After reading some online reviews and testing and comparing a few different online backup services, I finally found a service that was easy to use, versatile, unobtrusive, secure, and relatively fast and cheap: Mozy.

There are four different versions of Mozy: MozyHome Free, which is for "personal, non-commercial use only," provides you with 2GB of free backup space; MozyHome Unlimited, which features unlimited storage for \$4.95 a month (if you sign up for one or two years of service, you get one month or three months free respectively); MozyPro, a business-grade version that offers 24-hour phone support and more robust features starting at \$3.95 per seat per month plus \$.50 per GB of storage; and MozyEnterprise, which is designed for very large organizations.

Getting started with Mozy is simple and easy. Just go to <http://www.mozy.com/> and sign up for your desired version of Mozy. Afterward, you'll receive an email with a link to activate your new account and download the Mozy software.

After the initial installation, Mozy's Remote Backup Configuration Wizard gives you a choice of two different methods to securely encrypt your backed-up data: you can use Mozy's own 448-bit Blowfish encryption key or you can create your own personal 256-bit AES key in MozyHome or private symmetric key in MozyPro. This personal/private key can be generated from any plain-text phrase, but if you ever lose or forget the key, you will not be able to restore your data. For this reason, I recommend you just stick with Mozy's own 448-bit Blowfish encryption. Please note that your data is also transferred to Mozy's servers via 128-bit SSL encryption, the same type used whenever you make credit card, financial, and other confidential transactions over the Internet, so there are two high levels of encryption at work at all times.

After selecting the method of encryption, Mozy scans your computer and displays a list of recommended items to backup. I noticed that a couple of essential items were missing from the list, such as my Desktop folder, but the instructions state that you can select more items later in Expert Mode.

Next, the configuration wizard states that Mozy requires a high-speed broadband connection and runs a bandwidth test to determine your upload speed. If your connection is fast enough, you are then allowed to set how fast Mozy works. A simple slider control is provided with "Faster Computer" at one end and "Quicker Backups" at the other. The default  $\frac{3}{4}$  speed is recommended so that backups run quickly but won't slow down your computer too much. If you find this speed setting doesn't work well in your case, you can always change it later.

Once you complete these steps, you can choose to either start your initial backup immediately, start the initial backup automatically when your computer is idle, or continue configuring your backup in Expert Mode. As I mentioned earlier, some essential folders were missing from my list of recommended items to backup, so I chose Expert Mode.

Expert Mode enables you to further define the files to be backed up via "backup sets." In addition to the default backup sets, which include Firefox Favorites, IE Favorites, My Documents, and Photos and Images, you can easily create other

sets and edit existing ones. You can also apply rules to them, for instance, you can include or exclude files that match specific criteria. Expert Mode also enables you to browse your computer's file system to select specific files or folders for backup, customize backup schedules, and set more advanced options like bandwidth throttling.

Depending on the amount of data to be backed up, the initial backup can take a long time to complete, sometimes days(!). However, by default Mozy waits until your computer is idle before doing any heavy backing up. After the initial backup, Mozy only backs up files that have been added or changed (i.e., differential backups for you techies out there), making subsequent backups much faster.

Automatic backups normally run invisibly in the background, but you can bring up an activity window while a backup is running, which includes two progress bars (one for the encryption encoding process and the other for the actual uploading of files), an estimated time to completion, and a slider control for adjusting Mozy's use of system resources on the fly (even with Mozy running at full speed, I didn't notice much of an impact on my system's performance). The History tab in Mozy's Configuration window displays information about all attempted and completed backups and restores.

If you need to restore data, MozyHome offers four file restore methods: the Restore tab allows you to restore files from Mozy's Configuration window; the Remote Backup virtual drive, which was created by default during installation, allows you to restore files using either the Windows Explorer or My Computer window; Right-click restore allows you to right-click on a previously backed-up file or folder and select Restore from the popup menu; and Web restore allows you to download or order DVDs of your backed-up files from Mozy's website. MozyPro adds an additional restore method called VSS Restore that allows you to restore VSS data such as Microsoft SQL Server, Microsoft Exchange Server, Active Directory, and the Windows File Replication Service.

Online backup services have sure come a long way since I last tested them. I thought the other two services I tested this time—Carbonite and Xdrive—were good, but Mozy was clearly the best of the three. It was the easiest to use and its website and help documentation explained everything in plain and friendly English as well.

With a backup option that is as convenient, cheap, and easy-to-use as Mozy, there really are no excuses left for not backing up your data.

## **7/2/08: Disable Your Screensaver to Save Energy**

One morning not long ago, I was eating breakfast and idly listening to NPR as usual when a familiar name caught my attention. A scientist at the National Renewable Energy Laboratory (NREL), where I used to work about 10 years ago, was basically explaining why computer screensavers were bad for the environment.

Frankly, before I heard the NPR story, I never gave screensavers much thought (I've always just used the default Windows or Mac screensaver), so it never occurred to me that they could actually be a bad thing. Sure enough, I did a little online research and ran across some very interesting information and statistics.

In case you didn't already know, screensavers have been around almost since the dawn of personal computing. In the early days, monochrome cathode ray tube (CRT) monitors were susceptible to "phosphor burn-in" if left displaying the same image for too long, eventually leading to a permanent shadow or ghost image on the screen. Screensavers were developed to automatically change the images on CRT monitors during periods of user inactivity, thereby saving their

screens from permanent damage.

Modern CRT computer monitors are much less susceptible to phosphor burn-in than older models due to improvements in phosphor coatings and also because the images they display are generally much lower in contrast than the stark text and graphics of earlier monochrome displays. LCD monitors, which have all but supplanted CRT monitors nowadays, are not susceptible to phosphor burn-in because their images are not directly produced by phosphors.

For these reasons, computer screensavers today serve no real practical purpose. With very few exceptions (SETI@home comes to mind), they have become nothing more than a form of decoration or entertainment. But not only are they obsolete, worse still, their continued use is actually harmful to the environment. You see, contrary to popular belief, screensavers do not save energy. In fact, those seemingly innocuous graphics zipping around your screen consume as much processing power as you actually doing work. And not only do screensavers needlessly draw power while they are running, but they may also prevent your system from going into a low-power sleep mode (referred to as “Standby” or “Stand by” in Windows) when not in use. A typical computer with a screensaver running can use well over 100 watts of power, compared with only about 10 watts in sleep mode.

How big is the problem? Well, figuring that a typical CRT monitor uses 60 to 120 watts of electrical power, depending on its screen size, the University of New Hampshire once estimated that if their 5,000 computers ran screensavers an average of 20 hours a week (including nights and weekends), the annual power consumed by those screensavers would cost \$28,000 dollars and produce atmospheric emissions of 750,000 pounds of carbon dioxide, 5,858 pounds of sulfur oxide, and 1,544 pounds of nitrogen oxide ([http://www.energy.unh.edu/Tips\\_ScrnSavrs.htm](http://www.energy.unh.edu/Tips_ScrnSavrs.htm)). Considering that there are around 600 million PCs in use today, we are talking some big, ugly numbers.

In fact, according to NREL, every time you leave on a computer when it is not in use, you are wasting energy ([http://www.nrel.gov/sustainable\\_nrel/energy\\_saving.html](http://www.nrel.gov/sustainable_nrel/energy_saving.html)). They recommend turning off your PC, monitor, and other peripheral devices “at night and during any prolonged absence such as weekends or vacation time.... Contrary to popular belief, turning equipment on and off does not shorten the life span of computers or related equipment.” (Please note that as an alternative to simply shutting down your PC, you can set it to hibernate, which stores whatever is currently loaded into memory onto your hard drive and then shuts down the PC. That way when your PC comes out of hibernation, it returns quickly to its previous state.)

During the day, NREL recommends limiting screensaver use and setting your computer’s power-management features to turn off your monitor after 10 minutes and your hard disks after 20 minutes. Studies have found that hard disks are not affected by frequent shutdowns and may actually last longer due to reduced heat stress and mechanical wear. (Please note that NREL’s recommended power management settings are generic and that you should adjust the settings to accommodate your own computing requirements. In particular, their recommended settings may not be best for frequently used public access computers or servers that must run all the time.)

Lastly, NREL recommends purchasing LCD monitors, which use significantly less energy than CRT models and are easier on the eyes as well.

## **5/5/08: File Compatibility Issues with Microsoft Office 2007**

In the past few months, I’ve received a growing number of calls from users who are unable to open certain Microsoft Word, Excel, and PowerPoint files, usually received as email attachments. A few of my

coworkers have also reported similar problems lately. All of these problematic files had one thing in common: their normal three-letter file extensions were all appended with an “x” (e.g., .docx).

In case you didn’t already know, the “x” indicated that these files were most likely created in Microsoft Office 2007 and saved in new default file formats based on the Extensible Markup Language (XML), an open standard. Microsoft calls this new open standard Office Open XML (OpenXML), which was designed to make it easier to move data and files between disparate applications and also to produce file sizes smaller than those saved in the older binary file formats (e.g., .doc, .dot, .xls, .ppt).

While I applaud Microsoft’s decision to move away from proprietary binary file formats to open standard, XML-based file formats, the change has caused a bit of grief for those who are perfectly content using earlier versions of Office, which based on my observations includes most of our member libraries, the CTLS office, and probably the majority of Office users everywhere.

Fortunately, Microsoft has provided the multitudes of pre-Office 2007 users with a relatively simple solution to file compatibility issues (other than biting the bullet and upgrading to Office 2007). Microsoft has released a Compatibility Pack that enables users of Office 2000, XP, and 2003 to open, edit, and save files using the file formats new to Word, Excel, and PowerPoint 2007. And for those who are using even earlier versions of Office or who don’t have Office installed at all, the Compatibility Pack can also be used in conjunction with the Office Word Viewer 2003, Excel Viewer 2003, and PowerPoint Viewer 2003 to view files saved in the new formats.

To download the “Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint 2007 File Formats,” visit <http://www.microsoft.com/downloads/>. Please note that Microsoft recommends you install all high-priority updates from Microsoft Update before downloading the Compatibility Pack.

If you currently use Office 2007 and frequently share files with others who haven’t upgraded or need to work on your files on another computer that doesn’t have Office 2007 installed, there are several things you can do to ensure compatibility with previous versions of Office.

For one, you can easily save individual files in the old formats. For example, if you are working in Word 2007, just select “Word 97-2003 Document (\*.doc)” from the **Save as type** drop-down list in the **Save As** dialog box.

You can even go a step further and save files in the old formats by default. For example, in Word 2007, click the **Office** button, then the **Word Options** button, and then select **Save** in the left pane. In the **Save documents** section, choose “Word 97-2003 Document (\*.doc)” from the **Save files in this format** drop-down list. Please note that when you save a file in the old format that was originally created in the new one, a message may pop up advising that some of the formatting and features that are only supported by Office 2007 programs will be lost.

Office 2007 also introduced a new feature called Compatibility Mode, which ensures that the files you create in Office 2007 don’t contain any features that are not supported by earlier versions of Office. Compatibility Mode is automatically turned on when you open a file that was saved in the old file format, when you convert a file from the new format to the old one, or when you configure Office 2007 to save to the old file format by default. In Word 2007, Compatibility Mode also turns on if you create a new document from an old-format template (.dot). For more information about Compatibility Mode, including

long lists of features that are impacted by using it, see <http://technet.microsoft.com/en-us/library/cc178998.aspx>.

Finally, Office 2007 features a compatibility checker to detect any features that are not supported by earlier versions of Office. To manually run the compatibility checker on a Word, Excel, or PowerPoint 2007 document, just click on the **Office** button, select **Prepare**, and then click on **Run Compatibility Checker**. Compatibility Checker will then display a list of any incompatible content in the document. Compatibility Checker also runs automatically when you save a file in the old format.

### **3/17/08: MaintainIT Project Releases New Free Cookbook on Public Computing**

The MaintainIT Project, a three-year project funded by the Bill & Melinda Gates Foundation to help identify best practices of technical support for public computers, has just published a new second “cookbook” that is packed with useful tips and techniques from public librarians across the country.

The new publication, titled “The Joy of Computing: Recipes for a 5-Star Library,” includes these topics:

- Setting Up a Wireless Network
- How to Avoid and Fix Wireless Networking Problems
- How Much Help Should You Provide Laptop Patrons?
- Wireless Acceptable Use Policies
- PC Reservation/Time Management Software
- Print Management
- Laptop Checkout Programs

The entire cookbook or individual chapters can be downloaded in PDF format from <http://www.maintainitproject.org/cookbooks>.

If you have not already done so, you can also download the first cookbook, titled “The Joy of Computing: A Cookbook for Small and Rural Libraries,” which covers topics such as technology planning, protecting and maintaining public computers, and technology training. Please note that if you downloaded a copy of the first cookbook prior to February 1, 2008, you are encouraged to download and print a replacement for page 32.

According to Chris Jowaisas of the Texas State Library & Archives Commission, who is on the advisory committee for the MaintainIT Project, the project is currently working on a third cookbook oriented towards an audience of tech and library staff in libraries serving 25,000-100,000 people.

For more information about the MaintainIT Project, including ways you can contribute to and participate in the project, go to <http://www.maintainitproject.org/>.

### **1/2/08: QuickTime Alternative**

In our September and November 2007 newsletters, I wrote about Real Alternative and Foxit Reader, which are alternatives to two prime examples of bloatware, RealPlayer and Adobe Acrobat Reader respectively. As I mentioned previously, bloatware is one of my pet peeves, so I decided to write just one more article about a leaner alternative to Apple's QuickTime Player for Windows: the simply named QuickTime Alternative.

As much as I like Apple products (my current home computer/music server is a tiny, virtually silent Mac mini that dual boots between Mac OS X Leopard and Windows XP Pro), many Windows users, myself included, feel that Apple's QuickTime Player for Windows has become rather bloated. The latest version, a 20.3MB download, uses two to three times more RAM than Windows Media Player 11 and inundates you with iTunes ads as well. If all you want to do is play the occasional QuickTime media content, like an online movie trailer (or perhaps the latest amusing Mac vs. PC ad), QuickTime Player sure seems like overkill.

QuickTime Alternative makes it possible for you to play QuickTime media content without having to install the bloated QuickTime Player. According to the Codec Guide website (<http://www.codecguide.com/>), the free QuickTime Alternative is a trimmed down version of QuickTime—the download size is 11.7MB—that contains only the essential components needed for playing QuickTime media content that is embedded in web pages.

Codec Guide says the advantages of QuickTime Alternative are:

- Quick and easy install
- Ability to make an unattended installation
- No background processes
- No unwanted stuff and other nonsense
- Smaller size

If you want to download and play QuickTime files on your PC, the QuickTime Alternative installation package also gives you the option to install Media Player Classic, the same open-source media player that is bundled with Real Alternative. Please note the installation package does not include any components for playing QuickTime files with Windows Media Player or other DirectShow-based media players. If you want to use Windows Media Player, Codec Guide recommends you download and install the K-Lite Codec Pack from their website, which contains all the DirectShow filters that are required to play QuickTime files. However, based on my experience with the K-Lite Codec Pack, I recommend you stick with Media Player Classic.

The latest version of QuickTime Alternative works on Windows XP, Server 2003, and Vista. For more information and to download it, go to [http://www.codecguide.com/about\\_qt.htm](http://www.codecguide.com/about_qt.htm).

## **11/1/07: Foxit Reader: An Alternative to Adobe Acrobat Reader**

I am not a fan of Adobe Acrobat Reader. The latest version is a big download, almost 31MB, and once installed runs slowly, requires frequent updates, and consumes large amounts of system resources. Moreover, it often slows to a crawl or even freezes if I move too quickly through a PDF document that is still loading in Internet Explorer or Firefox.

In our September 2007 newsletter, I wrote about Real Alternative, which is a great alternative to the bloated RealPlayer. Since bloatware is one of my pet peeves, I decided to write this month's article about a much lighter,

faster, and friendlier alternative to the ubiquitous Acrobat Reader: Foxit Reader.

Foxit Reader from Foxit Software is a free PDF document viewer that supports Windows 98, Me, 2000, XP, 2003, and Vista. According to Foxit Software's website, here are some of Foxit Reader's compelling advantages over Acrobat Reader:

**Incredibly small:** The download size of Foxit Reader is only 2.13MB, a small fraction of Acrobat Reader's size.

**Breezing-fast:** When you run Foxit Reader, it launches instantly without any delay. You are not forced to view an annoying splash window displaying company logo, author names, etc.

**Annotation tool:** Have you ever wished to annotate (or comment on) a PDF document when you are reading it? Foxit Reader allows you to draw graphics, highlight text, type text and make notes on a PDF document and then print out or save the annotated document.

**High security and privacy:** While other PDF readers often silently connect to the Internet in the background, Foxit Reader highly respects the security and privacy of users and will never connect to the Internet without users' permission.

In addition, the recently released Foxit Reader 2.2 offers a greatly improved text selection feature and many new features, including word capturing, advanced searching, minimizing to the system tray, and bookmarks synchronization.

I used Foxit Reader as my default PDF viewer for the past couple of months and found it to be an excellent alternative to Acrobat Reader. It launched noticeably faster and used less system resources than Acrobat Reader. It displayed PDF documents within Internet Explorer 7 without a hitch, loading fast and never freezing up. Unfortunately, Foxit Reader will not display PDF documents within Firefox, but users can get around this problem by installing the PDF Download add-on at <https://addons.mozilla.org/en-US/firefox/addon/636>.

For more information about Foxit Reader and to download it, go to [http://www.foxitsoftware.com/pdf/rd\\_intro.php](http://www.foxitsoftware.com/pdf/rd_intro.php).

## 9/10/07: A Real Alternative to RealPlayer

A long time ago, RealPlayer was a relatively small and benign application. Its current version, though, is a prime example of bloatware that pushes the line between software and spyware, consuming large amounts of system resources and installing all sorts of unwanted stuff onto your computer. By default, RealPlayer also reports users' viewing and listening preferences back to RealNetwork's servers. Unfortunately, other popular media players like Windows Media Player and QuickTime cannot play Real-formatted files, forcing most users to just bite the bullet and install RealPlayer.

Fortunately, a free application fittingly named "Real Alternative" ends the tough choice by letting users play RealMedia files without having to install RealPlayer. According to the Codec Guide website (<http://www.codecguide.com/>), Real Alternative supports all RealMedia formats (.ra, .rm, .rmvb, .ram, .rpm, .rv, .rp, .rt, .rnx, .smi, .smil, etc.), including streaming content and RealMedia content that is embedded in webpages.

According to Codec Guide, here are some of the advantages of Real Alternative compared to RealPlayer:

- Quick and easy install
- It's easy to make an unattended installation
- Proper uninstallation
- No background processes
- Use a player of your own choice
- Low on resources
- No advertising, no registration forms, nothing annoying

And here are a couple of its limitations:

.smi and .smil files only play the first part of a clip. This is only a problem when the clip consists of multiple parts. These files are not very common. These files do play correctly when embedded in a browser.

The RealMedia DirectShow splitter does not work with streaming content. You must use the included Media Player Classic to play streaming content.

Please note that Real Alternative is available in two versions: regular and "lite." The only difference between the two versions is that the regular version comes bundled with Media Player Classic, which is required if you want to play streaming RealMedia content, and the lite one does not. (Media Player Classic is a free, compact, open-source media player that has a similar look and feel to the old Windows Media Player 6.4, but it has lots of extra features, including the ability to play movie DVDs.) I have found that Real Alternative works best when it is installed with Media Player Classic, so I recommend that you download and install the regular version.

The latest version of Real Alternative works on Windows 2000, XP, Server 2003, and Vista with DirectX 7 or higher installed. For more information and to download it, go to [http://www.codecguide.com/about\\_real.htm](http://www.codecguide.com/about_real.htm).

## **7/9/07: Microsoft Releases Latest Version of Free Public Access Computer Protection Tool**

On June 22, 2007, Microsoft released Windows SteadyState, a free software tool that can make the lives of librarians easier by protecting their public access computers against accidental or malicious changes by patrons.

Windows SteadyState (WSS) supersedes the Shared Computer Toolkit (SCT) for Windows XP, which itself superseded the Public Access Computer Security Tool. Many librarians may be familiar with the Public Access Computer Security Tool, which came preinstalled on computers that were donated to libraries as part of the Gates Library Initiative in the late 1990s. Microsoft claims this new version is easier to download, set up, use, and maintain than its predecessors.

### **How Does It Work?**

WSS protects a computer in two basic ways. First, it restricts what a user can access on the computer,

allowing you to control which programs, settings, features, disk drives, and websites are available to each user. For example, you can restrict access to the computer's C: drive but allow access to a removable USB flash drive.

Second, WSS uses two different methods to wipe away any changes a user makes to the computer and remove any files they may leave behind. Once a shared user profile is configured and locked, all normal traces of the user, such as Internet history, cached web pages, or files saved to the Desktop, are deleted from the profile when they log off. Additionally, a feature known as Windows Disk Protection clears all changes made to the hard drive at each reboot.

### **What's New?**

As stated earlier, WSS replaces SCT and improves on it in many ways. According to a Microsoft FAQ, here are some of the main improvements:

**Easier to install** - The simplified setup process now includes a file-based Windows Disk Protection technology that lets you install SteadyState without changing your disk partitions.

**Easier to use** - A unified console lets you graphically control all your settings and options within a single interface, including the ability to export user profiles to other computers.

**More powerful** - More options are available to restrict what programs and features users can access. New default security levels (high, medium, low) make it easier to control the many options.

**Easier to update** - SteadyState now supports Windows Update technology, so you can push updated user restrictions to your shared computers at the same time that you're pushing updates to other programs like Microsoft Office and Internet Explorer.

**More scalable** - For server-based networks, the new group policy support for Windows Disk Protection means it can be managed in an Active Directory environment.

### **Upgrading from SCT**

If you are currently using SCT, you cannot upgrade directly to WSS. You first have to uninstall SCT and the User Profile Hive Cleanup Service. However, most of the shared user profile restrictions that you configured with SCT will be retained after you uninstall it, and they will be recognized by WSS and reflected in its user console.

Unfortunately, if you created unallocated space on a hard drive in order to use the version of Windows Disk Protection that came with SCT, WSS will not reclaim that space. If there is a lot of extra space on the hard drive, you can just leave it as is. But if you are running short on disk space, you will need to use a third-party utility like BootIT NG or PartitionMagic to reclaim the unallocated space.

### **Initial Test Results**

After testing WSS on several computers running Windows XP Professional with Service Pack 2 (SP2) installed (Windows Vista is not supported yet) and Microsoft Office 2003, I found it to be much easier to download, set up, use, and maintain than its predecessors, just as Microsoft claimed. However, this new version still has some of the same shortcomings as SCT and what I believe are a few minor bugs or oversights by its designers.

For instance, when you select the **High restrictions** option on the **Windows Restrictions** tab under **User Settings** (which is the appropriate option for most public access computers), the **Start Menu > Programs** menu in the shared public profile (named "Patron" in my case) is still too cluttered. Unwanted shortcuts

remain, including Command Prompt and Address Book, while desired shortcuts like Microsoft Office, Paint, and Calculator are missing. As with SCT, I had to login as an administrator, navigate to the “C:\Documents and Settings\Patron\Start Menu\Programs” directory, manually delete unwanted shortcuts, and then copy-and-paste desired ones from the “All Users” profile. Microsoft should have added another tab to **User Settings** that lets you more easily customize the Start Menu shortcuts for the shared user profile.

One of the minor bugs I found in WSS involves the **Session Timers** option. On the **General** tab under **Session Timers**, you can select the **Always display the session countdown** check box to configure a notification to appear telling users when their session is about to end. The session timer notification remains on the screen throughout the session, which many of your patrons would probably appreciate. According to the WSS handbook, the notification can be moved but it cannot be minimized or turned off by the user. Despite all efforts, I could not budge the notification from its default location in the lower right corner of the screen. If left on, the notification could block parts of your patron’s displayed documents or web pages, something they definitely would *not* appreciate.

For more information about Windows SteadyState, including links to download the tool and to additional resources, go to:

<http://www.microsoft.com/windows/products/winfamily/sharedaccess/default.mspx>

### **3/1/07: CTLS Introduces New Remote Support Tool**

Thanks to a grant from the Bill and Melinda Gates Foundation, CTLS has just purchased a 1-year subscription to LogMeIn Rescue. This is an advanced remote support tool (see <http://www.logmeinrescue.com/>) that should significantly improve the TANG Specialist’s time to resolve technical support issues and reduce travel time and costs. Because LogMeIn Rescue was purchased with funds from the Staying Connected Grant Program, a grant to help public libraries in rural or less wealthy communities sustain their public access computing capability, the tool must be used primarily to support public access computers.

LogMeIn Rescue offers a number of advantages over other remote control products that I have used in the past, such as RealVNC, Symantec pcAnywhere, and Microsoft’s Remote Desktop Connection. One major advantage is that LogMeIn Rescue is web-based and requires no pre-installation of software. It also uses secure, end-to-end 256-bit SSL encryption, the same security levels used and trusted by major banking institutions, which is built into Internet Explorer and Firefox. In short, I no longer have to worry about pre-installing software on remote computers or adding and configuring additional ports and services on library firewalls. LogMeIn Rescue truly offers on-demand, anywhere-to-anywhere technical support.

LogMeIn Rescue is also incredibly easy to use, both for remote users and for me. I can connect to a remote computer in 30 seconds or less by using one of two methods: 1) by directing the remote user to [www.logmein123.com](http://www.logmein123.com) and then entering a unique 6-digit PIN code; or 2) by sending the remote user an email with a unique direct-connect URL link. Afterwards, the remote user clicks on ‘Run’ a couple of times to install the small LogMeIn Rescue Applet and then clicks ‘OK’ to grant me access to the computer. The remote user does not require Administrator rights on the computer to run the Applet. After the remote

support session has ended, the Applet automatically removes itself from the computer.

Once I am connected to a remote computer, I can easily chat with the remote user using the White Board function, transfer files between computers, collect detailed, real-time system diagnostics, and reboot and then reconnect to the computer automatically, even if it is left unattended. And I am not limited to one remote session at a time: I can conduct up to 10 concurrent remote sessions with a tabbed console interface that lets me toggle easily between sessions.

Basically, LogMeIn Rescue will enable me to provide better technical support to all of our member libraries. In particular, I will use it to assist libraries in installing, configuring, and troubleshooting issues with software that was purchased with funds from the Staying Connected grant.

## **2/1/07: Hardware Requirements for Windows Vista: Microsoft vs. Reality**

As I discussed in the January 2007 CTLS Newsletter, which you can download from our website, the minimum hardware requirements to run Windows Vista will be much steeper than any previous Microsoft operating system. Here is an excerpt from my article "Introducing Microsoft Windows Vista":

According to Microsoft, just to install and run the core features of Windows Vista with the basic user interface, a PC must have at least an 800 MHz processor, 512 MB of RAM, and a 20 GB hard drive with a minimum of 15 GB of free space. To experience the "premium" features of Windows Vista, including the... Windows Aero interface, requires a PC with at least a 1 GHz processor, 1 GB of RAM, 128 MB of graphics memory, and a 40 GB hard drive with a minimum of 15 GB of free space.

First, I suggest you ignore the first set of minimum requirements. An 800 MHz processor and 512 MB of RAM does not even meet my minimum recommendations for Windows XP systems. In addition, the fancy Aero interface is a major attraction of Vista. Not only is it nice to look at, but Aero actually makes it easier to navigate in Vista.

That leaves us with the second set of minimum requirements, which is more in line with modern PCs. Unfortunately, it appears that Microsoft may have also understated these requirements, which a number of sources say are unrealistically low. In particular, a recent white paper published by hardware analysis firm iSuppli concluded that Microsoft understated Vista's minimum hardware requirements by quite a lot.

The white paper, entitled "Compute Systems Cost Analyzer - Sorting Out the Requirements for Windows Vista," states that a much more realistic expectation is for consumers to plan for either a 3 GHz single-core processor or a 2 GHz dual-core processor for their desktop systems. A 1.5 GHz processor may be suitable for notebooks. The paper also recommends 2 GB of RAM.

Perhaps the one area most likely to need upgrading before you install Vista is the graphics memory. Once again, Microsoft appears to have understated the minimum requirements. If you want to run the Aero interface (trust me, you *really* do want to run it), here are Microsoft's minimum graphics requirements for Vista:

Support for DirectX 9 graphics with a Windows Display Driver Model (WDDM) driver (a

graphics driver architecture that is new in Vista)  
128 MB of dedicated graphics memory  
Pixel Shader 2.0, 32 bits per pixel capability

DirectX 9 was introduced by Microsoft in December 2003, so if your graphics card is more than three years old or so, it will probably not work with Aero.

David DeJean, a writer for InformationWeek, recommends a dedicated graphics card with at least 256 MB of memory instead of Microsoft's recommended 128 MB. Citing a test from ATI, a major graphics card manufacturer, DeJean says the reason is WDDM: "If you try to run anything more demanding than the Windows Basic interface on a graphics card with less than 256MB of graphics memory, Vista will allocate 128MB of system memory for graphics, which may impact overall system performance."

### **The Bottom Line**

While it is clear that Microsoft may have understated Vista's minimum hardware requirements, in reality, most new PCs purchased in the last couple of years should have little trouble running the new OS, perhaps needing a simple RAM boost or a better graphics card. Older and less capable PCs may still run Vista, but they will probably have to do so without the fancy Aero interface.

## **1/2/07: Introducing Microsoft Windows Vista**

As you may have heard by now, on January 30, 2007, Microsoft plans to release a new operating system named Windows Vista. In contrast to Windows XP, which was initially released in 2002 and basically just an update to Windows 2000, the new operating system represents an entirely new version of Windows.

The new operating system includes many new features and improvements, far too many to list here. Highlights include new security features for better protection from viruses and other malware (short for *malicious software*), enhanced file searching and organization, streamlined backup and restore protection, and much better power management and performance than previous versions of Windows. Undoubtedly the most noticeable new feature is a stunning, elegant new user interface called Windows Aero, which offers spectacular visual effects such as glass-like chrome on floating windows and a translucent Start Menu and Taskbar.

Microsoft will offer no less than five different editions of Windows Vista in the U.S.: Home Basic, Home Premium, Business, Enterprise, and Ultimate. Each edition is focused on the needs of a specific type of user and offers a different set of features. Most public libraries will probably be interested in the Business edition, which corresponds almost perfectly with Windows XP Professional, the most common desktop operating system in libraries today.

Of course, all the enhanced functionality and graphical improvements in Windows Vista come at a price—the minimum requirements to run it will be *much* steeper than any previous Microsoft operating system. According to Microsoft, just to install and run the core features of Windows Vista with the basic user interface, a PC must have at least an 800 MHz processor, 512 MB of RAM, and a 20 GB hard drive with a minimum of 15 GB of free space. To experience the "premium" features of Windows Vista, including the aforementioned Windows Aero interface, requires a PC with at least a 1 GHz processor, 1 GB of RAM,

128 MB of graphics memory, and a 40 GB hard drive with a minimum of 15 GB of free space. Also, please note that Windows Vista ships on a DVD, so to install the operating system, a PC must have a DVD drive.

If a PC is already running Windows XP and you want to see if it can run Windows Vista, just go to <http://www.microsoft.com/windowsvista/getready/upgradeadvisor/default.msp>, then download, install and run the *Windows Vista Upgrade Advisor*.

For more information about Windows Vista, see Microsoft's official *Windows Vista Home Page* at <http://www.microsoft.com/windowsvista/>. And for an excellent, thorough review of Windows Vista, see *Paul Thurrott's SuperSite for Windows* at <http://www.winsupersite.com/reviews/winvista.asp>.

## **10/31/06: Internet Explorer 7 vs. Firefox 2: Battle of the Browsers**

On October 24, 2006, the web browser battle intensified as Mozilla, a global group of users dedicated to building free software, released version 2 of its up-and-coming Firefox browser, now used by about 15 percent of those on the Web. Its release came just days after Microsoft released version 7 of its leading Internet Explorer (IE) browser, which is used by over 80 percent of Web surfers.

Firefox 2 offers no radical changes compared to version 1.5, which came out about a year ago. Version 2 now offers built-in protection against phishing websites—malicious sites designed to trick users into handing over valuable, personal information—but most other changes simply refine many of the same features, such as tabbed browsing and RSS newsfeed support, that are new to IE 7.

So what's new to IE and Firefox? Improvements include:

**Upgraded Tabbed Browsing** - Firefox popularized tabbed browsing, which lets you open webpages in separate tabs of a single browser window, allowing you to jump between them quickly and easily.

In Firefox 2, each of those tabs now has a convenient close button. In addition, you can retrieve a tab if you close it by mistake, rearrange tabs, and access all open tabs via a drop-down list button.

Tabbed browsing is new to IE 7, and this new feature is actually superior to Firefox's approach in some ways. For instance, you can click on the "Quick Tabs" button to see thumbnail images of all your open tabs. Clicking on a thumbnail will take you to that tab. You can also add a group of open tabs to your Favorites.

IE 7 also includes a nifty session-saver option: When you close the browser, you can select an option to open the same tabs the next time you use IE.

**Improved Security** - Both IE 7 and Firefox 2 now offer built-in protection against phishing websites and better protection from spyware.

IE 7 now features a "Delete Browsing History" option that clears temporary files, cookies, history, and

saved form data and passwords, either all at once or separately, something you could already do in Firefox 1.5.

Microsoft also improved ActiveX handling in IE 7 and changed the underlying architecture of the browser to reduce potential areas of attack for hackers.

**Enhanced Search Engines** - IE 7 and Firefox 2 both include built-in search windows, but now the latter includes an autocomplete feature that suggests search terms based on what you type in the search box. A great feature, but it only works with Google, Yahoo and Answers.com, at least for now.

**Better RSS Support** - RSS feeds offer a great way to quickly check news and updates from your favorite websites. RSS support is new to IE 7 and upgraded in Firefox 2.

Firefox has always been a basic RSS reader, but Firefox 2 offers a range of new subscription options. For example, you can now add a RSS feed to a personal Bloglines, Google Reader or My Yahoo! webpage.

IE 7 includes many other new features, such as a bright new interface, quick page zooms and improved printing. Likewise, Firefox 2 offers additional new features, including some that were previously available through optional add-ons, such as spell checking and the ability to resume a browsing session exactly where you left off if Firefox crashes or has to restart.

### **The Bottom Line**

So which browser should you use?

If you are a satisfied Firefox 1.5 user, upgrading to version 2 is a real no-brainer. You'll gain a number of useful features and improved security, and you won't be thrown off by any major interface changes.

Confirmed IE 6 users have a similarly easy choice: IE 7 offers a huge improvement over IE 6, and its major security enhancements alone make it a must-have upgrade. Its user interface is very different from IE 6, though, so I highly recommend you take the quick welcome tour to get acquainted with it. Regardless, if you don't download IE 7 and install it soon, Microsoft plans to push it out as a critical Windows update sometime in November.

## **9/27/06: Using Yahoo! Mail with CYBERSitter**

Several of the other regional library systems in Texas have TANG specialists just like me. Sharing information with these other TANG specialists has been a very valuable and helpful resource. Many of the IT problems that CTLS members encounter in their libraries have been experienced before by other public libraries across the state.

Here is a particularly useful article about using Yahoo! Mail with CYBERSitter, which was published in the Technical Assistance Bulletin, May 2006, by Mark Skinner of the Big Country Library System in Abilene:

### **CYBERSitter and Yahoo! Mail Fix**

If you use CYBERSitter content filtering software, you may have received complaints from patrons that

they are unable to send messages from their Yahoo! Mail account. Here are the instructions on how to fix this problem:

1. Open the CYBERSitter control panel
2. From the left side menu, click on the User Files button
3. On the right side screen, click on the Allowable Sites tab
4. Enter the following as allowable sites:

[yahoo.com]  
[mail.yahoo.com]  
[opi.yahoo.com]  
[edit.yahoo.com]  
[yimg.com]

5. Click the Save button
6. Close CYBERSitter
7. Restart your computer

Now, Yahoo! Mail should work correctly. Thank you to Nancy Mayo in Colorado City and Rhonda Castillo in Coleman for helping solve this problem!

## **9/1/06: Make Your Own PDF Files for Free - UPDATED**

As my predecessor Marvin Perez wrote in a prior TANG Tech Tip, a document that has been converted to a Portable Document Format (PDF) file is usually smaller—sometimes much smaller—than the original document and “therefore easier to send in an email message or post on the Web. You can create a PDF file from anything you can print, regardless of the application or version. Best of all, PDF files are viewable by anyone that can download the free Adobe Acrobat Reader program.”

In short, converting a document to a PDF file reduces its size and also captures the fonts and formatting of the original document, preserving its appearance and allowing it to be viewed and printed on any computer regardless of its platform (e.g., Windows, Mac OS, Unix, Linux). Commercial products like Adobe Acrobat, Nitro PDF, and PDF Converter enable you to edit PDF files and add support for more advanced features like enhanced security and multimedia capabilities, but if all you want to do is simply convert your documents to PDF, there are a number of free PDF converters available that you can download off the Web.

In his original article, Marvin recommended two good examples of free PDF converters that are still available: Pdf995 and PDF Online. Now I would like to add my own example, one that I have used for a

long time with great results: CutePDF Writer.

CutePDF Writer is actually very similar to Pdf995. Both utilities require you to download and install a Postscript-to-PDF converter (such as the recommended Ghostscript software) and a separate printer driver. Both are very easy to use and convert documents to PDF in much the same way. For example, to convert a Microsoft Word 2003 document to PDF using CutePDF Writer, you open the document in Word, click Print, select "CutePDF Writer" from the list of available printers, click OK, select the destination for your converted PDF file from the dropdown list and give it a name, and then click Save. It's that quick and easy.

This is, however, one noticeable difference between the two free PDF converters: Pdf995 pops up a sponsor page in your web browser each time you use it and CutePDF Writer does not. So if the last thing you need are more annoying popup ads, give CutePDF Writer a try.