

The End Of An Era

January, 2004, marks an important milestone for Microsoft customers. In January, Microsoft will end official support for many popular products, with no further security fixes to be released. These products include Office 97 and its components (such as Word 97 and Excel 97), Outlook 98, Windows 98 and Windows 98 Second Edition, Internet Explorer 6 on Windows 98/98SE, Exchange Server 5.5, Windows XP, and other products. Windows XP with Service Pack 1 will still be supported, and Microsoft recently extended support for Windows NT 4.0 Server through December 2004, though it, too, was scheduled to end.

No More Updates

What does this mean for users? For starters Microsoft has no plans to issue further security updates or hotfixes (bug fixes) for unsupported operating systems or application software. We also expect most new programs from Microsoft will not run on Windows 98; for example Office 2003 requires Windows 2000 or Windows XP. We expect other companies to eventually follow suit in dropping support for Windows 98, as their ability to obtain support from Microsoft dwindles.

After January, users will not be able to call Microsoft for technical support, even on a paid basis...they must use the online self-help support resources, which Microsoft will make available for at least one year after paid support and security update support ends. In early 2005,

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Eliminate Junk E-Mail

Everyone can agree nowadays that unsolicited commercial e-mail (a.k.a. *UCE*, or *spam*) has become a serious problem, soaking up valuable computing resources as well as human productivity. In extreme cases, users must wade through hundreds of junk e-mail messages per day. Fortunately there are ways that users can combat spam, while we all wait for either Internet e-mail standards or the legal system to mature to the point where junk e-mail is no longer a viable option.

Origins

Unsolicited e-mail dates back to at least 1978, when DEC announced a new computer by sending a message to all ARPANET addresses on the west coast (ARPANET was a precursor to the Internet). The term "spam" appears to have originated in reference to a skit by the British comedy troupe Monty Python, in which a group of Vikings dining in a restaurant repeatedly sing, "Spam, spam, spam," annoying other patrons and making conversation difficult. The term has therefore come to mean e-mail, USENET or message board posts, or other electronic communications, that drown out normal communications. Hormel has actually taken legal steps to protect its trademark, "SPAM" (note upper case) but does not object to the use of "spam" to describe UCE.

The sad fact is that the economics favor the senders of UCE. It costs little in terms of computing resources to send an e-mail message, however the recipients' mail servers must accept and store all the messages, which take up massive amounts of disk space. One of our web hosting partners' data centers recently estimated they block al-

most two *billion* messages per month by blocking mail from systems such as open relays. An open relay is a mail server which – usually accidentally – is configured to forward all e-mail sent through it from anywhere in the world. UCE senders search the Internet for such systems and use them to send mail until the owner discovers and corrects their error.

Eradication Methods

Currently no standard exists for authenticating the "from" address of a message. Many suggest this capability is necessary, and free e-mail account giant Yahoo! has just recently proposed such a solution. This would also prevent address *spoofing* (someone else sending mail using your domain name), which is very easy to do today. Another suggestion is to require a computer to perform a small computation for each sent message, unnoticeable to most users but extremely limiting to someone trying to send out thousands of messages.

Aside from manually deleting UCE messages, users can attempt to filter out UCE via software. Such software can run on the server or on each workstation. We prefer the filtering to be performed on each workstation, since server-based filtering often requires users to check a "spam" folder periodically via a web browser, an inconvenience. Also it can be tailored to each user rather than a company. However any filtering effort has two concerns: *false positives* (mail incorrectly marked as spam) and *false negatives*. For example, users would not want to accidentally filter out e-mail from an important customer, however they would also desire as little UCE in their inbox as possible.

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As false positives have a much more dramatic business impact, it becomes necessary to regularly check the messages filtered out as UCE to ensure no important e-mail is lost. *Note:* if someone suddenly stops answering your e-mail, they may be incorrectly filtering out your messages!

Currently there are two main methods for filtering UCE via software. One is to use a "blacklist," which the program uses to look up the sender of a message to see if that address has been recorded as sending UCE. Mail arriving from these addresses is blocked. The down side is that UCE senders can easily change the "from" address on their messages to a random string, defeating the lookups. Also, what one person perceives as UCE may be a valid message to others. Users typically keep a "whitelist" of known good addresses as well.

The other method looks at the content of each message, using *Bayesian statistics*. Starting from a clean slate, the program "learns" what a person considers UCE or valid e-mail. From then on each incoming message has a calculated ranking as to whether it is valid. The down side to this method is that users must correct the program's analysis for the first few days as it learns and accuracy increases.

Suggested Solutions

ITS has had good results using two free programs, which are listed on ITS StartCenter (teamITS.com/start) under the Internet Software link. K9 uses Bayesian statistics to analyze incoming e-mail. The other, MailWasher Free, primarily uses the blacklist/whitelist method. It can also "bounce" UCE messages as undeliverable, in hopes that the sender will remove your address from their list. Both do require some minor reconfiguration of users' mail programs as well as minor training in the procedures used. Alternatively, Microsoft Outlook 2003 includes a form of Bayesian statistical filtering.

Novell Purchases SuSE Linux

Networking giant Novell entered the Linux world with a bang in late 2003, purchasing German Linux distributor SuSE Linux AG for \$210 million in cash. The move increases Novell's long term viability, as its networking software has steadily lost market share to Microsoft's marketing machine and the rise of Unix-based Internet servers. In fact Novell now has the opportunity to replace Red Hat as the leading Linux based developer in the United States, since SuSE's product is already well-regarded.

Novell's immediate plan is to add its own enterprise networking services such as file and printer sharing and Nterprise to SuSE's Linux distribution. Novell says NetWare 7 will work on both the NetWare and Linux kernels, giving customers a choice of server platforms. Left unclear is the longer term plan for NetWare as its own operating system. Some predict

that Novell will eventually convert entirely to Linux to gain the additional server and client-side development already being done for the Linux and Unix platforms by thousands of programmers worldwide, much like Apple has done with MacOS X.

Novell's move follows their purchase of open-source developer Ximian in August. Ximian is a leading Linux desktop solutions company, whose leading products include the Gnome graphical desktop environment and Mono, a platform designed to allow programs written for Microsoft's .NET platform to run on Linux, Unix, and other systems. Other applications include software to connect to Microsoft Exchange and GroupWise.

The combination of SuSE Linux and Ximian's software gives Novell a complete solution to compete with Microsoft's Windows platform.

Humor

No Smoke

by unknown

Tech: "Hello. How can I help you today?" **Customer:** "There's smoke coming from the power supply on my computer." **Tech:** "Sounds like you need a new power supply." **Customer:** "No, I don't! I just need to change the startup files." **Tech:** "Sir, what you describe is a faulty power supply. You need to replace it." **Customer:** "No way! Someone told me that I just had to change the system startup files to fix the problem! All I need is for you to tell me the right command." (Ten minutes later...) **Tech:** "Well, we don't normally tell our customers this, but there's an undocumented command that will fix the problem. Add the line "LOAD NOSMOKE.COM" at the end of the CONFIG.SYS file and everything should work fine." (Five minutes

later...) **Customer:** "It didn't work. The power supply is still smoking." **Tech:** "Well, what version of Windows are you using?" **Customer:** "Windows 98." **Tech:** "Well, that's your problem. That version of Windows doesn't include NOSMOKE. You'll need to contact Microsoft and ask them for a patch. (When nearly an hour had passed, the phone rang again...) **Customer:** "I need a new power supply." **Tech:** "How did you come to that conclusion?" **Customer:** "Well, I called Microsoft and told the technician what you said, and he started asking me questions about the make of the power supply." **Tech:** "What did he tell you?" **Customer:** "He said my power supply is not compatible with NOSMOKE."

Tips

Microsoft Word Formatting Tips

This issue we gathered several tips for Microsoft Word users!

Control word wrapping: To prevent two words from being separated at the end of a line, use a non-breaking space between the words. *Control-Shift-spacebar* enters a non-breaking space. To prevent a hyphenated word from being split at the end of a line, use a non-breaking hyphen: *Control-Shift-hyphen*.

Control page breaks: Have you ever wanted Word to stop breaking text across pages, such as keeping a heading with its paragraph, or keeping a bulleted list together? Select the text then click *Format/Paragraph*. Use the *Line and Page Breaks* tab to select *Keep Lines Together* to keep the selected paragraphs on the same page. The *Keep With Next* box will keep the selected paragraph(s) on the same page with the next paragraph.

Superscript and subscript:

Instead of using the Format/Font dialog box, Word provides hot keys to control superscript (CTRL+Shift+=) and subscript (CTRL+=) formatting of the current word or selected text.

Spice up underlining: Word 2002 and later provides several types of underline formatting. Instead of using the underlining toolbar button, click *Format/Font*, and use the Underline Style dropdown to select a new underlining pattern, such as dashes or wavy lines.

Special characters: To insert special characters like copyright or trademark symbols into a document, use Windows' Character Map program, accessible via the *Start/All Programs/Accessories/System Tools* folder. Select your font, then click on a symbol to magnify it. Click *Select* to add it to the Characters to Copy field, and click *Copy* to copy that field's contents to the clipboard to paste into Word.

Q & A

Is there a quicker way to copy and paste text instead of using the Edit menu?

Yes, two other methods exist. Windows programs use hot keys as shortcuts to those menu items. Listed next to each menu option, they are CTRL+C (copy), CTRL+X (cut), and CTRL+V (paste...think of the editing symbol for "insert this text here.")

Also, many programs allow you to select text, then use the right mouse button to click on that text or field to access the copy/cut/paste commands via a popup menu.

When I run ScanDisk and Defrag on my computer, why do they keep restarting and never finish?

The Windows 95, 98, and Me versions of these tools require exclusive access to the hard drive. If another program (even Windows itself) writes to the hard drive for any

reason during a scan, the program starts over so that it is looking at the current file information. When this happens repeatedly this is usually a sign there is a program running that is interfering with the tool. Close any programs whose icons are in the system tray (next to the clock) by right clicking on each one. Use the Task List (press CTRL+ALT+DEL once) to view running programs. The tasks Explorer and Systray are Windows itself; end any others you find using the End Task button. You will need to redisplay the Task List after each one. If ScanDisk and Defrag still will not complete, boot into Safe Mode by restarting, and holding down the CTRL key as the PC begins to boot.

The Windows 2000 and XP versions of these tools are more tolerant of running programs and generally do not demonstrate these problems.

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then, we could all face the possibility of no support whatsoever for these products.

Future Planning

Given the frequent security updates Microsoft has issued for Windows, Internet Explorer, and even Office and other programs, we feel our clients should strongly consider migrating their older PCs to Windows XP. Remaining with Windows 98 almost invites trouble, since Microsoft would have no plans to fix any future security holes that are discovered in Windows 98 or Internet Explorer on that platform.

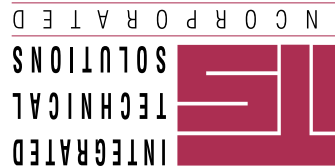
The result is an opportunity for organizations to replace aging hardware and outdated software, improving staff productivity in the process. Likely any PCs running Windows 98 are three to six years old by now, and out of warranty as well.

Let us say for example that a user whose PC has a Pentium II 300MHz), Windows 98, and a 15-inch monitor were to upgrade to a new PC. Yes, there is some expense to do so, however there will be productivity gains. A new PC would probably run at least five times faster, between the faster CPU, motherboard, memory, and hard drive. A 17-inch LCD monitor (about equal to an 18-inch CRT) would not only save power but eliminate a lot of time spent scrolling around spreadsheets, web site pages, and other documents, by virtue of its higher resolution – a monitor running at a resolution of 1024x768 has over 60% more screen area than one set at 800x600. Plus, Windows XP runs multiple programs much better than Windows 98, which had a limited pool of "resources" to allocate to programs.

Using the calculations in our previous article, "Time Is Money – But How Much?" one would expect a mere 15 minutes per day of time savings for a \$40,000 employee to result in a \$1,250 cost savings (productivity increase) per year.

FIRST QUARTER 2004

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