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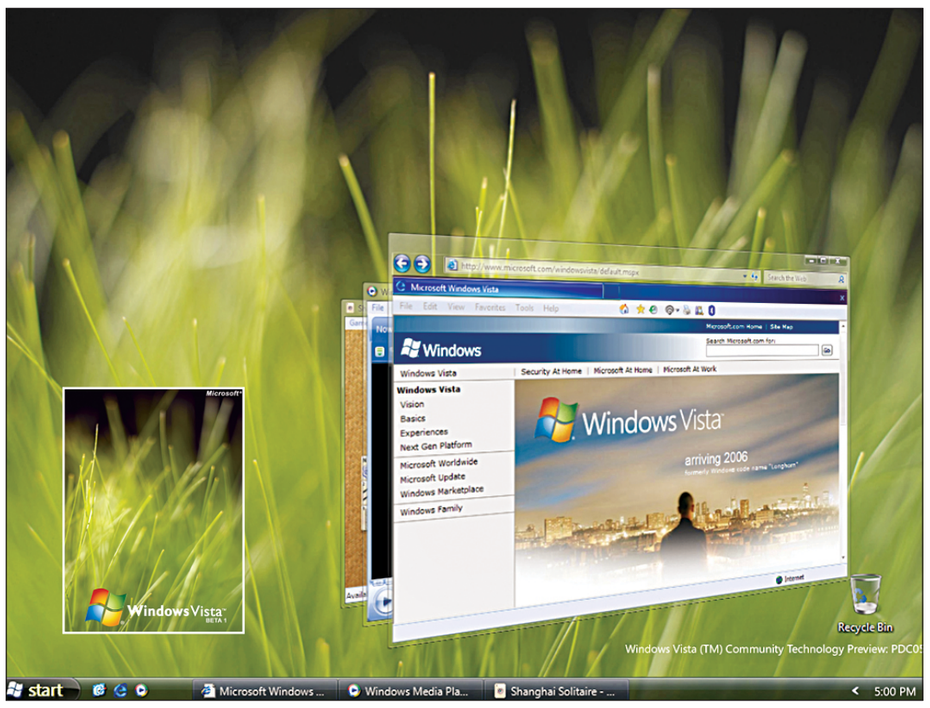
ZX Spectrum

The ZX Spectrum is a home computer released in the United Kingdom in 1982 by Sinclair Research Ltd. Originally dubbed the ZX82, the machine was later renamed the ZX Spectrum by Sinclair to highlight the machine's colour display, compared to the black-and-white of its predecessor, the Sinclair ZX81. The Spectrum was the first mainstream audience home computer in the UK, similar in significance to the Commodore 64 in the USA; the C64 was the main rival to the Spectrum in the UK market during the early 1980s.

TECHVIEWS

Vista pros and cons

Ahmed Ashiful Haque



MICROSOFT'S brand new operating system is coming out early next year, and for many interested users, it's now time to take a proper look at what the system offers and decide whether an upgrade is necessary.

While Windows Vista is an ambitious total overhaul of Windows XP, in the end there's no big gotta-have-it feature or functionality, unless you're a big fan of Aero, its considerably improved and more elegant interface. From a user perspective, there are literally thousands of mostly small advances, but the sum of the parts isn't greater than the whole. Yet Vista is clearly a better operating system than XP.

The decision to upgrade to Microsoft Windows Vista will depend largely on what the new operating system can do for you and what hardware you have to run it on. Microsoft has a page listing hardware required to run Windows Vista, and the Beta 2 of the system is available for a download right now. Of course, it's still early, and Microsoft could still change things,

but from what we know so far, here are some of the biggest strengths and weaknesses of Windows Vista.

Why you'll like Windows Vista:

It looks stunning

Computers you see in the movies never run XP, they run slick-looking user interfaces. It's mostly eye candy, but it's really nicely done eye candy. Vista's user interface is actually very slick and can be considered better looking than even the Mac OS X. This is how computers should look in the 21st century. After you experience the beautiful new interface, you'll never be able to go back to the old XP look.

It's about security

Windows XP was a good operating system of its time, but times have changed and PC users everywhere are now plagued by viruses, malware and security issues.

Microsoft took the security issues pretty seriously when developing Vista and it shows. Windows Vista has an impressive list of new security features built right into the system: new firewalls and anti-spyware features, tighter user role management and drive encryption technology called "BitLocker", and that's just the start. In fact Vista is so feature rich it may change the landscape of the lucrative desktop security market forever. Microsoft did a lot of things right with Vista security that would make it difficult for malicious software to propagate using the operating system. Vista is much more stable and secure than any previous version of Windows.

One of the biggest vulnerability points has been Microsoft's IE browser. While the just-released IE7 addresses a lot of security issues, IE7 running on Vista takes things to the next level. Running in protected mode, the browser is totally isolated from the rest of the operating system and actively protects against malicious code. This alone would have been worth an upgrade if other perfectly capable browsers like Firefox didn't exist.

The simplest way of searching and sorting

Forget the old system of folders and directories. Microsoft has integrated search throughout its new operating system, and you'll quickly come to wonder how you manage to live without it. You can search, for example, for all documents you wrote, and then save the search as a virtual file folder for later reference without having to physically relocate or make copies of all those files. Media content was given a high priority when developing Vista too. Vista makes it really easy to browse, navigate, tag and play all the content that's important to you.

Built-in diagnostics

Ever faced the nightmares of when a very important program refuses to run, or the whole system crashes without a warning? Dreadful event like these will, thankfully, be a thing of the past when you're using Windows Vista, according to Microsoft.

Vista tells you more things now; from explaining why an application won't run to warning you that there are driver conflicts that prevents your system from shutting down. For example, Vista will listen to your hard drive and report any problems, giving you ample warning to back up your data. Vista will also take care of basic tasks that Windows users should, but never do anyway like defragmenting the hard drive. The users don't notice a thing while Vista takes care of things in the background.

Better help

From what used to be only a few sentences about a problem or a task you want to perform, help in Vista is now changed into a interactive, innovative solution-centre with more options available than ever. For example, you can initiate a remote-assistance session so that someone you trust can take over your PC remotely and diagnose a problem or perform a task for you. You can also go online and search Microsoft's knowledge base for any particular problem you're facing.

Better performance

If you've got more memory in your PC, it'll mean applications can run without creating slow swap files on the hard drive. With USB memory sticks (and other types of portable memory) becoming more and more common and inexpensive, Microsoft has decided to give you the option to harness this type of memory from your USB memory sticks to speed up your PC. When combined with SuperFetch, this technique delivers significantly faster application loading. ReadyBoost works with USB 2.0 drives, Secure Digital cards and Compact Flash cards. And while all of these memory options are slower than RAM, in most cases faster than your hard disk. Also, finally, there's a new feature called Low-priority Input/Output that should keep you productive: in Windows Vista, user applications will get higher priority with system resources than antivirus or defragmentation processes.

Of course, it isn't only good news. There are plenty of things in Vista that you're not exactly going to be fond of.

Will your current hardware run actually Vista?

Get ready for the frustration. All these goodness comes for a steep price. Unless your PC was bought very recently, chances are that your PC won't be able to handle the nicer, sleeker features of Vista. It'll be able deliver core Vista experiences such as innovations in organizing and finding information, security, and reliability, but you'll miss out on the stylish Areo glass interface, sleek animations in the taskbars, and a desktop that looks and feels almost better than a Mac. Most of Vista's new features need a powerhouse to run. High-end powerful processors are a must; a cool gigabyte of RAM in your PC is more of a necessity than a privilege in Windows Vista. And for the first time, get prepared to buy high-end graphics cards just for smoothly running the desktop interface. (But trust me, if you can afford it, the fun and satisfaction of using the Aero glass interface in all its glory is worth the added expense. And once you use the new desktop, you can never accept XP's old blue look.)

Still, old users who want to upgrade to Vista won't get to enjoy the nicer features of Microsoft's sleek new operating system.

Overprotective-ness

Vista is so worried about security, it can seem pretty overprotective at times and this got Microsoft a ton or negative press. The User Account Protection feature, for example, while trying to protect the user from rogue software installs forces users to answer a series of pop-up messages, making the whole process a lot longer than it should be. Worse, whenever you are prompted to respond, the whole desktop goes dark while the pop-up message remains on the screen, preventing you from doing anything else. While this feature can be valuable if rogue spyware attempts to install without your permission, good Internet behaviour will do as much. For most of us, the frequent appearance of User Account Protection on common tasks will be security overkill.

Compatibility issues

Not having all the necessary drivers or not having software compliant with a new operating system is to be expected in the beta of a new operating system, and Vista suffers from that too at times. Even in the final Beta 2 of Vista, testers found a few common drivers missing. That shouldn't be the case anymore when Microsoft releases the operating system, but it's still a concern.

All in all, is Vista the right choice for you? It's a bit hard to tell. Don't get me wrong, but other than its stunning looks, Vista doesn't exactly have a gotta-have-it-no-matter-what feature in it. Still, if you've got the hardware to get the most out of the operating system, and is OK with all the changes Vista will bring in the way you work, Vista is certainly worth it. However, if you're happy with the current Windows XP or have older hardware that won't run Vista properly, you might want to wait a while till Microsoft sorts out the few remaining problems.

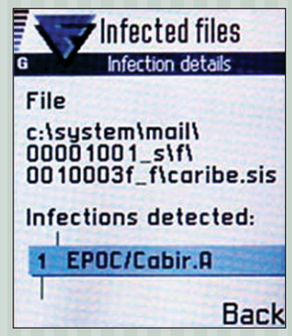
TECHFOCUS

Fighting cell phone viruses

Edward Apurba Singha

INTERLOPERS always desire a safe harbour in order to execute their notorious activities. PC or network without adequate protective measure are easily victimised by the blueprint of viruses makers. Attacks are severe and the destructive power is soaring day by day. Nowadays like traditional PCs, cell phones are not impervious to virus infection. Ordinary cell phones are not under the risk at this moment but the smart phones are prime target of the intruders.

Like computer virus, cell phone virus is a malicious program or harmful executable file that infects a device and then replicates itself to other devices. A computer virus or worm spreads through unsolicited email attachments and file downloads, a cell phone virus on the other hand transmitted through MMS message, Bluetooth and file downloads. Resemble to email message MMS attachment contains the virus. Generally, a virus that spreads via MMS searches the phone's contact list and sends itself to every phone number stored there. Bluetooth is another means to spread virus between cell phones. When a Bluetooth enabled cell phone is set to discover mode it may get virus from other infected Bluetooth enabled phones. Content downloads from different web sources also contribute to spreading viruses.



Name	First detected	Attacks	Means	Impact
Cabir. A	June 2004	Symbian Series 60 phones	Bluetooth	Not severe
Skulls. A	November 2004	Various Symbian phones	Internet download	Disable all phone functions except sending/receiving calls
Commwarrior. A	January 2005	Symbian Series 60 phones	Bluetooth and MMS	Send MMS to everyone in phonebook
Locknut. B	March 2005	Symbian Series 60 phones	Internet download	Crashes system ROM, disable all phone functions, insert other malware into phone
Fontal. A	April 2005	Symbian Series 60 phones	Internet download	Locks up phone in startup mode, disables phone entirely

Cell phones running the Symbian operating system are vulnerable to virus attack. The first cell phone virus named Cabir appeared in 2004 infected only a small number of Bluetooth enabled phones. Fortunately, the mission was not successful and the attack caused no severe consequences. The large number of proprietary operating systems in the cell phone world hinders the mass infection. The virus masquerades as applications such as games, security patches, add-on functionalities, pornography and other free stuffs. It also wipes out the actual subject and creates dilemma. Most cell phone viruses are not able to install automatically and need user intervention to install the particular program. It is indeed a major setback for the proliferation of cell phone viruses.

The Commwarrior virus emerged in 2005 utilised two ways such as Bluetooth and MMS to reproduce itself. Once a cell phone user gets this virus and install it accidentally the virus respond instantly by sending itself to the Bluetooth phones in the vicinity. At the same time sends infected MMS messages to every phone number in the address book. Other cell phone viruses do the same job when they capture a safe place to run. But the worst case scenario is sometimes the virus brings adverse impact and damage the cell phone entirely.

Important statistics regarding the cell phone viruses are presented below:

The ideal way to protect a cell phone is to adopt some precautions same as we do in case of computer viruses. Never open any suspicious MMS message and delete it without hesitation. Disable the Bluetooth discoverable mode, which keep the phone hidden from others. Create protective shield by installing proper software. Recently many companies developed security software for cell phones. You can take the chance of free download or in some cases purchase the specific product. The software may simply detect and then remove the virus or it may protect the phone from getting certain viruses. An anti-virus version of Symbian operating system only allows the phone's Bluetooth connection to accept secure files. Aside from these, always visit the security sites such as F-Secure, McAfee, Symantec to know the updated information and prepare yourself to fight against the cell phone viruses.

The author is a computer engineer

TECHNEWS

A robot invention with a leg to stand on

AFP, *Washington*

A US scientist has created a robot that can find a way to keep working on its own after suffering damage, an invention that could prove useful for robotic space missions in distant planets, according to a study.

Joshua Bongard, a University of Vermont engineer whose research article appeared in Friday's Science Magazine, pulled off one of a homemade robot's four legs for his experiment.

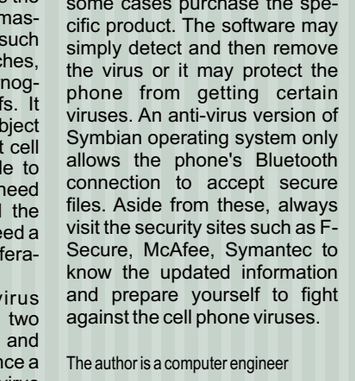
The robot was programmed to assess the damage by moving in playful-looking sequences allowing it to find the problem, Bongard said.

Once the damage was identified, the robot created a new way to move without the missing limb, allowing it to continue its mission.

"There is a need for planetary robotic rovers to be able to fix things on their own," Bongard said in a statement.

"The research is essential for Nasa who plan to continue using robots for planetary missions. Robots on other planets must be able to continue their mission without human intervention in the event they are damaged and cannot communicate their problem back to Earth," he said.

Bongard conducted the research for the National Aeronautics and Space Administration (NASA) and the US Department of Energy.



This handout image courtesy of Cornell University shows a self-modeling robot.

PHOTO: AFP

PHOTOTECH

BROWSING IN THE RAIN

Japan's Keio University doctoral student Takashi Matsumoto displays the prototype model of the image or net browsing umbrella "Pileus" to make rainy days fun and to get information under the umbrella, at the university's advanced technology exhibition in Tokyo on November 23. The web images are downloaded from the Internet and projected from a mobile projector mounted on the grip of the umbrella.

PHOTO: AFP

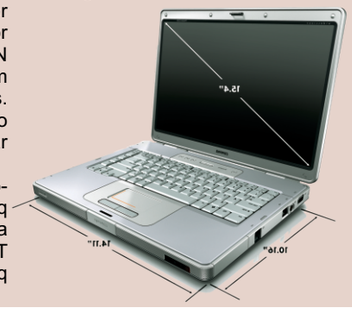
TECHNEWS

CSL Introduces HP notebook

StarTech Desk

Computer Source Limited (CSL) has introduced the HP Compaq Presario C301TU notebook in the Bangladesh market, says a press release.

Powered by 1.6 GHz Intel Celeron M Processor 420; the Compaq Presario C310TU includes Intel 945PM chipset, 256 MB DDR2 memory, 60 GB (5400RPM) hard disk and DVD/CD-RW combo drive.

With its 15.4" WXGA Bright View wide-screen display, the C310TU offers the user better viewing for work or entertainments and WLAN & integrated 56K modem offers mobility to the users. The Compaq Presario C310TU has a one-year limited warranty.

As part of a special promotion each Compaq Presario C310TU has a FREE gift of a Philips DECT phone. The Compaq Presario C310TU has a price tag of Tk. 51,900/-.