MBTS TekJournal

Vol. 1 Nbr. 4 Technical innovation and information in plain English May 15, 2002

Bits & Bytes

It seems to be human nature to need a little push every once in a while to try something new. I am no different so I guess I must be human. Whew! Anyway, my next task involves the PDF or HTML format for this little paper. Either way I would like to begin e-mailing this to everyone on my client list and that is where I need your help. I need you to send me an E-mail so I can ensure that your current address is on file. With a little luck, in the next month or so you will be reading this on-line.

TekQuestions

How many types of computer viruses are there?
According to Symantec, there are three types of computer threats: Viruses, Trojan Horses, and Worms.
Viruses: Programs that spread by attaching themselves to other programs on a users computer. When the infected program is run damage may occur on the machine. Most viruses are not created to do damage. Viruses intended to do damage have a destructive payload. They typically trigger only when certain criteria are met; a specific date for example in the cases of Chernobyl or Michelangelo.
Trojan Horses: These are programs intended to damage only one computer. They do not spread to multiple files on a computer, but it does have a destructive payload. It usually deletes a users hard drive, corrupts operating system files, or e-mails sensitive information back to the virus writers computer. Once a Trojan is on your system, your computer may be controlled remotely by other computers over the Internet.
Worms: A Worm is a program that can spread itself from one computer to another. Melissa, Love Letter, SirCam, and Klez are high profile worms. These programs use E-mail to spread themselves quickly via the Internet.
Jokes: A Joke Virus usually causes harmless or unexplained behavior on your computer. Some of the more common trick the user into thinking their hard drive is being formatted, or display an unexpected screen saver.
Hoaxes: A Virus Hoax is a forwarded E-mail foretelling of a newly discovered virus that cannot be found under conventional methods. These are generally harmless to your computer unless they tell you to look for a certain file, which will always be found, and instruct you to delete it. These files generally affect the operation of your system. Always delete these e-mails and never forward them.
What is a "Speed-Step" Processor? It was designed to maximize battery life by slowing down the processor when it's not needed. Support for this technology is not built into any Windows OS, save XP; you'll need the utility from Intel.com to have full control over how fast (or slow) your processor runs. Unless, again, you're running Windows XP (which supports it OOTB). So, the maximum megahertz for your notebook is (for the sake of argument) 800. To identify what speed the processor is running at, tap WinKey + Pause to pull up the "My Computer" Properties sheet. There, you'll find the "true" speed of the processor. Beneath it, you'll see the speed at which it's currently running. Let's say you don't care about prolonging battery life, though. If you want your laptop to always run at maximum speed, thereby bypassing the Speed-Step technology, change your current Power Scheme to "Always On." You can do this quickly by left single-clicking the battery icon in your System Tray. If that icon isn't there, enable it through the Power Options applet in your Control Panel.

TekNotes

Viruses are becoming more commonplace and therefore a good Antivirus program is a must. But that alone won't necessarily save you. Windows 98 and beyond have a feature called "Windows Update" which is available from the Start Menu. Critical updates should be downloaded and installed regularly to safeguard against any malicious viruses from corrupting your system. Patches are released from Microsoft regularly to fix oversights found in the code of the operating system. To ensure you always get notified of new updates you should also download and install the "Windows Critical Update Notification" software available at that site.
The latest series of viruses, W32.Klez.h, W32.Klez.E, and W32.Elkern are variations of the Chernobyl virus from four years ago, and systems which had the updates applied would not have been affected.

MBTS TekJournal

Vol. 1 Nbr. 4 | Technical innovation and information in plain english | May 15, 2002

Surf's Up

The normal household has lots of products generally purchased for a specific use. Did you know that Bounce can repel mosquitoes? Or that Listerine can cure acne? Find out more http://www.wackyuses.com/

Welcome to FAMOUS NAME CHANGES. On this site you will find out who the stars were before they were stars, and a few not so well known surprises too. http://www.famousnamechanges.com/html/welcome.htm

Here is a site that will help you understand your computer better. It also has downloadable freeware for profiling your system, seeing what programs are running in the background, and you can even teach your computer to talk, sing, and dance. There is a newsletter too! http://www.karenware.com/powertools/ptprofiler.asp

Specials

Intel P4 1.6 GHz Office Workstation

Mid Tower ATX case with 300 watt power supply, Via P4MA Intel Socket 478 Motherboard with built in Video, LAN, & Sound, 256MB DDR RAM, Floppy, 20GB 7200 rpm ATA 133 Hard drive, CD Writer 32x10x40, Internet Keyboard, Optical Mouse, Daytek 755DF 17 inch Flat Screen monitor, Windows XP Professional **$ 1,400.00**

Norton AntiVirus (disk only) **$ 40.00** CD-R Sleeve of 25 **$ 20.00** Optical Mouse (PS/2 - USB) **$ 30.00**

Build Your Own System

Now that we have a case and power supply, we need the system's foundation: the Motherboard.

The first question is what is the system to be used for? Business workstations don't need high end graphics, Servers need disk space and lots of RAM, Gamers want great Video and Sound, etc.

Next you must select the CPU manufacturer. Intel PIII and P4 processors require different sockets and AMD processors won't fit on an Intel socket. Intel has been around forever, but AMD offers more speed for the same or less money. Generally you would also consider an upgrade path, but the next generation of processors coming in about 12 months will probably need new motherboards anyway.

The chipset on the motherboard control the features and functions available to your system. The primary role is determining how much memory and what processors can be accommodated. Major manufacturers of chipsets are Intel and Via. The chipsets can be upgraded by software available from the manufacturer to enhance the system and accommodate for future growth. If you are having a problem with your current system not accepting a sound card, video card, larger processor, etc. there may be a "fix" available by upgrading the software contained n the chipset.

Expansion and memory slots are also to be considered in buying the right motherboard. You will require one AGP slot for the video card, and one PCI slot for Sound, Modem, LAN, and other additional cards. Therefore, unless options are built into the motherboard to handle these functions there should be at least 3 to 4 PCI slots for expansion. There are currently 3 types of memory used in computers today: DDR RAM, SDRAM, and RDRAM. RDRAM is exclusive to Intel P4 processors and as such is more expensive than other choices. It has an operating range of 400MHz which matches the current specs of the Intel P4. SDRAM operates at 66/100/133 MHz and is found in most systems today. With new motherboards it can be used for Intel Celeron/PIII/and sometime P4 but is not recommended for P4. It also is used with AMD Duron/Athlon/Athlon XP processors. The RAM of choice is becoming DDR which stands for Double Data Rate meaning it can perform two processes during one clock cycle unlike SDRAM. DDR has been adopted by Intel and AMD as being the next standard in memory, but RDRAM is still hanging on.

I do not recommend a motherboard with built in functionality unless there is the option of replacing it in the future. For example, to reduce cost a motherboard can have a built in video card, sound, cad, LAN connection, etc. Unless the board also has an AGP slot to offer the option of a different video card, don't accept it. If there are not enough PCI slots to accommodate new cards for built in devices, don't accept it.

When it comes to manufacturers of motherboards, there probably isn't one ideal that stands out beyond the rest. The major manufacturers today include Asus, Gigabyte, ECS, Tyan, Intel, and Via. Each manufacturer creates many different motherboards for different situations. It is up to the builder to select he proper board to meet the end users requirements and thereby build a system which is stable, has the required features, and allows for future growth.