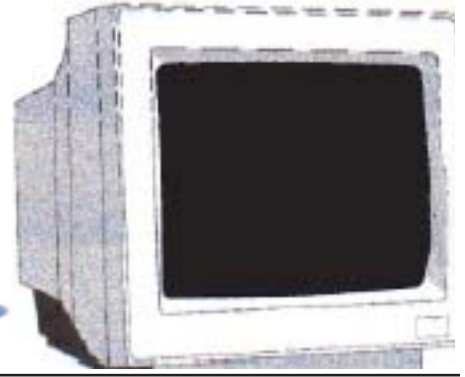


CVAUG Monitor



Cumberland Valley Apple User Group Newsletter WWW.CVAUG.ORG

July 2004

A Word From The President

It has been yet another exciting month in the Apple world. Let's get to it.

Apple's Worldwide Developers Conference Brings Some News

On Monday Apple kicked off their Worldwide Developer's Conference (WWDC) in San Francisco. Some of the announcements made during Steve Jobs' Keynote on Monday included new Apple monitors and a preview of Mac OS X 10.4 "Tiger".

Apple wowed the audience in the Moscone Center with the unveiling of three new flat panel monitors for Apple's Macintosh computers. The smallest of the new displays measures 20" and has an optimal resolution of 1680 x 1050 pixels. The next monitor is 23" and has an optimal resolution of 1920 x 1200 pixels. That's very impressive.

But wait... I did say there were three new monitors. The third monitor is 30" diagonally with a native resolution of and astounding 2560 x 1600 pixels. To put things in perspective this monitor is larger than many mid-sized consumer televisions. All the monitors include two FireWire ports, two USB 2.0 ports

**No Special Presentation
Planned for This
Month**

The new video card is the NVIDIA GeForce 6800 Ultra DDL which has 256 MB of on board memory and is so large that it blocks the PCI card slot that is next to the



and an industry standard Digital Visual Interface (DVI) connection perhaps signaling the end of Apple's proprietary Apple Digital Connection (ADC) port which carried video, USB and power to Apple flat panel monitors with an ADC port over one cable. Now there is still one cable exiting the back of these new monitors, but near the end the cable splits to a separate video, FireWire, USB and power connection. This means that the two smaller of the new monitors can be used on non Apple computers with a DVI video connector. The 30" monster display requires a special video card to be installed in the computer which must, by the way, be a G5.

Advanced Graphics Port (AGP) slot in the G5. This card by its self costs \$600. That's nothing when you consider that the 30" Apple display that many people will be buying it for costs \$3300. By the way the 20" display costs \$1300 and the 23" display costs \$2000. The new monitors all have Apple's aluminum look and each can be taken off its desk mount and hung on a wall using a standard VESA wall mount.

Steve Jobs also gave a demonstration of the mysterious Mac OS X 10.4 update known only as "Tiger". Some key parts of the update were Spotlight, Automator, Dashboard, and a new version of

iChat AV to name a few. Spotlight is the new Find feature that is deeply rooted in the OS. It finds files based on file name, file type, file content and more. Typing a find phrase like "pictures of Aunt Kay less than three months old". Instantly all the files on your hard drive are compared to those requirements and matching files are listed in a new window or highlighted in an open window. Automator is a new version of AppleScript (Apple's task scripting programming language) that is almost completely visual so you don't need to learn a programming language. It is best suited for repetitive tasks like taking images from a digital camera, scaling them down to a set size, then uploading them to a web site.

Dashboard is a program that lets you install "widgets" that are fairly simple to make (for programmers) underneath the screen. A single keystroke brings these individual windows to the front for viewing. Some widgets include Stock Tickers, Weather Information Windows, World Clocks and MUCH more.

iChat AV has given its users what they have been asking for. Multi user chats. Until Tiger, voice chats have been limited to one on one chats over the internet. Now you can (provided your network connection is good enough) have a voice chat with up to nine other people. The video chat has been updated too. Now you can have a video conference with three other people. This new feature wouldn't be worthy of Apple's style if it were not for the fact that as you add video conference participants their images move aside on a

virtual "stage" who's floor reflects the picture above it as a glossy



floor would. Its truly beautiful to see in action.

This kind of video would not be available with current video compression standards so Apple has developed a new Video Compressor & Decompressor (CODEC). H.264/AVC is a messy name for a CODEC that is absolutely remarkable. It can fit High Definition (HD) video at a resolution of 1920 x 1080 pixels over a 7-9 Mbps (Megabit Per Second) connection. That means that a "better than DVD quality video over a good Cable Modem broadband connection. The version of QuickTime that ships with "Tiger" will be built around the new H.264/ADC standard as will all the new DVD HD home console units due out in the near future.

There is much more in the Keynote that I did not go over here. If you would like to see the Keynote via a streaming video feed available on the internet point your browser to: <http://stream.apple.akadns.net/> Mac OS X 10.4 Tiger should be released in the first half of 2005 and will be priced at \$130.

FireWire Goes Wireless

By TVTechnology.com

Article link submitted by Wayne Younkings

You may have seen news last week of WiMedia's endorsement of the Multi-band OFDM Alliance (MBOA) UWB PHY and MAC technical specifications, paving the way for wireless USB, wireless 1394 ("FireWire") and IP. Also last week, the 1394 Trade Association approved a protocol adaptation layer (PAL) for running IEEE 1394 (FireWire) over IEEE 802.15.3a UWB links. The IEEE 802.15.3a process has been stormy, with competing proposals based on OFDM from MBOA and proposals from Motorola and others based on impulse UWB. The WiMedia endorsement gives the OFDM UWB a boost and it appears to be the closest to being implemented. The 1394 PAL will work with either system.

The impact of this technology is clear -- video and files can be transferred without wires from camcorders to computer editors, TVs or other devices equipped with wireless FireWire (another oxymoron to join the ranks of "wireless cable"). However, don't expect this technology to deliver full data rate FireWire connectivity at any significant distance. The best document I could find describing the MBOA system was an IEEE submission [Multi-band OFDM Physical Layer Proposal Update](#). The Multi-band OFDM System Parameters in this document specify a multipath tolerance of 60.6 nanoseconds at

all data rates and information data rates up to 200 Mbps (mandatory) and 480 Mbps (optional). All of these information data rates use the same channel bit rate of 640 Mbps with 100 tone OFDM/QPSK modulation. The only difference is the forward error correction coding rate and the spreading rate. The link budget in the proposal uses distances of 10 meters for 110 Mbps, 4 meters for 200 Mbps and only 2 meters for 480 Mbps. Note that these data rates are bits per second, not bytes per second, so the range for a standard DV camcorder data rate would be around 3 meters using the optional 320 Mbps information data rate. According to the Proposal Update, the FCC is still working to resolve this interpretation of its rules to determine if this system complies with Part 15 rules. Note that Ultra-wideband, or UWB, does, as its name implies, use a large chunk of spectrum. FCC UWB rules require a minimum 500 MHz bandwidth! For more information on this interesting technology, refer to the [Multi-band OFDM Alliance web site](#) and the [IEEE 802.15 WPAN High Rate Alternative PHY Task Group 3a](#). For many more links with information on both the technology and the competing UWB standards, do a Google search on "[IEEE 802.15.3a](#)".

New Business from the Minutes of Sat June 5th 2004

By Dieter Protsch (Sec)

Planned Move to new Location.

President McFarland suggested that any move to a new location be postponed until after the summer school recess and vacation time. A vote for a move should be delayed until a later date. No objections noted.

Addendum: Gregg had tested connection from across the street to the planned new location, a reason for the contemplated move. Cost is still unresolved. Presently we only give a donation for using the room once a month. Membership would like to know the cost first before a decision is made. A vote was taken to let Pres. McFarland to make a decision, provided it does not exceed the present cost to CVAUG. Display

for CVAUG banner during the meetings can be easily handled. (Attached to a Van is one option). Website down. Gregg was informed our renewal was coming up, yet even after our payment of \$11.- it was still deactivated.. After Gregg's complaint the site was reactivated the following day. Website is paid annually each May. Field Trip Update. Bill had no luck so far contacting (via e-mail or telephone) the manager to fix a date for the visit the Herald Mail. New Members. CVAUG welcomed two new members: Dave Thompson and Andrea Struble. Summer Picnic. No firm decision has been made for either a picnic or a swap in Fall. Laura questioned Gregg who stated that he is still in the process of obtaining a proper place.

If you sat a monkey
down in front of a
keyboard, the first
thing typed would be a
UNIX command.
-- Lye, Bill