

Media Made Easy October\November 2005 Newsletter

News and Events:

- ?? As mentioned in our feature topic cable card support for high-definition recording and playback through computers is definitely coming next year!

<http://www.microsoft.com/presspass/press/2005/nov05/11-16CableLabsPR.msp>

- ?? Apple finally got with the program and delivered a video capable iPod. Retail prices are \$299 for the 30GB model and \$399 for the 60GB model. This makes them competitive with the competition such as Archos, Creative Labs and Sony PSP. The screen is a little small at 2.5" for our tastes. They obviously were focused on keeping these units as small as possible.

<http://www.apple.com/ipod/ipod.html>

- ?? CBS and NBC are now offering video on demand through the Comcast On Demand services. Shows can be purchased for 99 cents. I guess they are aiming for people who don't own a VCR, DVR or any means of recording. NBC is also finally putting the nightly news online for viewing at their www.msnbc.com website.

- ?? New online spotlight providers are now available for Media Center users. Check out akimbo and MTV Overdrive.

- ?? Cisco has announced plans to purchase Scientific Atlanta for \$6.9 Billion. Scientific-Atlanta is the largest manufacturer of cable set top boxes. This move may signal that Cisco intends to clash with TiVo and Microsoft over the future of the digital entertainment hub. Check out this Q&A - it will give you something to chew on.

http://newsroom.cisco.com/dlls/2005/ts_112205.html?CMP=ILC-001

- ?? Rollup 2 created some issues for users of TweakMCE (a tool for customizing your screens etc.). Here's the link for version 2 to support rollup 2.

<http://www.microsoft.com/downloads/details.aspx?FamilyId=3400190A-511A-4A3A-9B89-524511A76F58&displaylang=en>

- ?? A new article on setting up Media Center with your home audio receiver for surround sound.

http://www.microsoft.com/windowsxp/using/mce/expert/connect_av.msp

- ?? Brightcove is entering the video serving industry and has ambitious plans to connect to all DVR platforms and media hubs. Check out this entry at Om Malik's blog.

<http://www.gigaom.com/2005/03/01/brightcove-the-new-platform/>

- ?? And under the oh yeah category - TiVo announced plans to offer every flavor of technology and platform under the sun (too many to even put in this newsletter - they win the hype award). XBOX 360 is out and offers media center extender with component output for HDTV resolution via wireless or ethernet.

September's Topic Update

We have now had the opportunity to build and test machines running the rollup 2 update covered as our feature article in the September newsletter. The upgrade to the Sonic DVD burner appears to allow around one and a half hours of DVD quality video per DVD. This will help with your half-hour show recordings and very short movies but won't help you much with hour long shows at full DVD quality.

The upgraded performance of the libraries is definitely worth the effort of upgrading to rollup 2. Although it still takes some time when you first access the libraries such as My Music, once the album art is loaded you will notice drastic improvements in response times. This only whets our appetites for the improvements to be seen with the next version Windows Vista.

Be aware of two things when upgrading - you will need to load the .Net version 1.1 service pack 1 prior to installing rollup 2. Once you have completed the rollup be sure to go to the Microsoft site and download the fix updates for both the .Net service pack and the rollup 2 (yes there are already bug fixes). All of the packages can be found on the microsoft website under downloads and updates.

November's Feature Topic - High Definition Development Is Underway!

Ding Dong! The Witch Is Dead. Which Old Witch? The Wicked Witch. Ding Dong! The Wicked Witch Is Dead.

We are dancing in the aisles here at Media Made Easy with the announcement that cable card support will be available this time next year in a Media Center PC near you [or purchased at an incredible introductory price from our website :)]. Microsoft and Cable Labs have completed their due diligence and Microsoft DRM has been selected as the means to bring high definition cable card technology to PC-based electronic devices and computers. We realize we just dropped enough jargon on you to make your head pound...never fear, we will explain it all starting now.

The Background

High Definition broadcasts have been mandated by the FCC so that all broadcasters must broadcast in High Definition by 2009. High Definition refers to the resolution of the picture in the broadcast signal. The broadcast signal is then converted by some device into a picture displayed on your standard or high-definition television display. The conversion device is typically a cable or satellite set top box provided by your cable or satellite company. Starting in 2005, cable card devices began being offered by these same providers. The cable card replaces the set top box with a much smaller device that plugs into your high definition display. The cable card tunes the signals and provides decryption for premium programs that have been scrambled by companies such as HBO.

So what is so great about cable cards? Cable card technology allows you to maintain a digital signal from the time the broadcast is sent from your cable or satellite provider until it is converted to pixels on your display (pixels are the points of light you see on the screen). Older technology was always converting digital signals (literally zeros and ones representing video pictures) into analog signals and then back again. Something was always lost in the process and the pictures you ultimately view suffered from the process. Now HDTV broadcasts are delivered with the best possible picture using a much smaller device - now that is good technology!

The Issue

The reason cable cards haven't reached the PC has to do with digital rights management (among other things we won't go into here). Digital rights management is a term that refers to the scheme protecting copyrights. The motion picture studios, television studios, cable content providers, music industry and many others have been battling against illegal capture and sharing of their content. The news has been full of court battles with companies like Napster, who allowed individuals to post copies of songs, movies and more to servers where anyone could download them and enjoy them without paying a dime.

Illegal copying and distribution of copyright materials scared the heck out of the content provider and artist communities. They have been fighting for ways to protect the content from illegal practices on all fronts. We have discussed the pros and cons of their approaches in other newsletters but today we will focus on cable cards.

Cable cards addressed digital rights management by designing a closed box system. Once the audio and video leave a cable card (to your display/receiver/whatever) the signals can't be copied. This has been done using hardware specifications - the most popular is called HDMI. You will see HDMI cables in your local electronics stores. HDMI encrypts everything and would be too difficult for the average person to hack in order to record programming coming from a cable card.

The fear of putting cable card technology on a PC is that you would be entering into an open system (a computer) without any means of protecting the usage of the content or making illegal copies.

The Solution

Microsoft and Cable Labs (the company that licenses cable card technology and oversees testing) have worked out a system to protect the content providers and mollify the cable and satellite companies. Their solution involves adding strict file management on any content coming through the cable card. Again the fear was that once the content became files on a computer, people would be copying and sharing them without paying anything to the people who create and deliver the content.

Microsoft digital rights management scheme puts a wrapper around all types of content files (music, recorded television, DVD's, etc.) to protect these files from illegal copying and distribution. The technology is flexible enough to let users have legitimate access to content and make some limited copies of the files but restrict unlimited access to the original content. The schemes with cable cards will likely be very similar to what you see being done in the music industry.

When you buy a song and download it from iTunes, Napster, etc. the price you pay comes with restrictions on your usage. You can make a limited number of copies...you can't move it to another PC necessarily...you can download it to your portable player...and so on. It is flexible enough to meet your legitimate usage needs but protects illegal copying and distribution. We believe that the vast majority of consumers are happy with this type of system and it works well.

The cable card support on PCs will work in such a fashion and should give consumers access to digital entertainment with the best possible quality. Finally high definition support without all the messy cabling and antennas and so on!

First Generation

The first generation cable card products will be available for the holiday season in 2006. Like the cable cards already in usage, the first devices will be one-way. This means that they will only

deliver standard programming for watching and recording. You won't be able to order pay-per-view or other services through the cable card itself - no interactions will be possible. This isn't a big issue for a Media Center PC since all of these services are already available through online spotlight without paying anything to the middle-man (the cable or satellite company).

Conclusion

We are very excited to see that Media Center PCs will be able to enjoy all of the advantages of high-definition video and recording in the near future. Microsoft has done a great thing for consumers - we only wish we didn't have to wait for it! The future is bright for the digital entertainment hub concept now that a big piece of the puzzle has been solved.

Tip for November

Would you like to know all of the keyboard shortcuts for use with Media Center? Go to this link for a complete list.

<http://www.microsoft.com/enable/products/keyboard/keyboardresults.asp?Product=42>

What's new from Media Made Easy

We've been hard at work addressing home theater design tips and have put it all together into a design guide at <http://www.mediamadeeasy.net/HomeTheaterDesign.htm>

Have questions, comments or ideas for us? Please email us with request for topics for the next newsletter. We want to get you the information you've been looking for.

mediamadeeasy@bellsouth.net

You can find us on the Internet at <http://www.mediamadeeasy.net/>

You can call us at (912) 537-3230.